HOW TO DRAW MANGA

Sketching Manga-Style

Vol.1 Sketching to Plan



Plan Using the Frog in the Can

This brand-new volume offers a brand-new "sketching to plan" tin can crammed full of the fundamentals of *manga* sketching as well as suggestions and ideas to help the reader improve.

This book is a condensed can of artwork, jam-packed with a wide range of styles, ranging from realistic renditions to stylized "abstracted" and "exaggerated" renditions.

Now that is *Sketching Manga-Style*!

HOW TO DRAW MANGA:
Sketching Manga-Style Vol. 1
Sketching to Plan
by Hikaru Hayashi, Takehiko Matsumoto, Kazuaki Morita

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Table of Contents

Chapter 1: Sketching While Planning 5

Differences between Standard Sketching and *Manga* Sketching 6

A Look at the *Manga* Sketch Frontline Part 1 8

Drawing a Female Character Standing 8

Drawing a Close-up of a Female Character's Face 12

A Look at the *Manga* Sketch Frontline Part 2 16

Drawing a Male Character Standing 16

Drawing the Figure in Reverse 20

Manga Sketching Forms the Foundation of Planning 22

Chapter 2: The Fundamentals in Sketching a Face *Manga*-Style 23

The Basics of Sketching a Face Layout (Using Circles and X's) 24

Reduction of the Head Rendered Using a Circle and X Layout 26

The Steps in Drawing a Face 28

Drawing the Same Face 29

Drawing an Assortment of Faces 30

The Basics in Drawing the Head 36

Conceiving of the Head as a Solid 36

The Basics in Drawing the Head 38

The Face's Musculature, and Expressions 41

Drawing Facial Expressions Based on Muscle Movement .. 42

Chapter 3: The Fundamentals in Drawing a Figure *Manga*-Style 45

The Backbone Forms the Base of Composition 46

The Backbone Travels the Length of the Torso 47

The Backbone Is the Source of Movement 48

Adding Arms and Legs after Completing the Torso 49

The Steps in Drawing a Figure 50

Guideline Defining the Backbone from the Front 56

Drawing a Standing Pose Using the Backbone and the Axial Line 57

Using the Axial Line to Draw a Front View Standing Pose with Presence 58

Standing Poses and the Center of Gravity 60

Noting the Spacing between the Feet When Drawing 60

The Body's Structure 64

Major Body Parts and Their Names 64

Muscles Affecting the Exterior Contours 66

Rendering Exterior Contours 69

Distinguishing the Genders 72

Figure Drawing 73

Proportional Differences 76

Makeup of the Primary Joints and Movement 80

1. Basic Neck Structure and Movement 80

2. Basic Spine Structure and Torso Movement 88

3. Basic Shoulder and Arm Connections and Movement 96

4. Basic Leg Structure and Movement 104

5. Basic Hand and Finger Structure and Movement 108

6. Basic Leg Structure and Movement 112

Chapter 4: From Sketch to Design 117

The Fundamentals of Stylization 118

Character Design Techniques Using Stylization 120

Stylized Face Design 122

Stylized Figure Design 126

Techniques for Designing Distinctive Characters 130

Thin and Trim Build 130

Powerful, Muscular Builds 132

Grotesquely Muscular Build 134

Slender Female Characters 136

Friendly Super-Deformed (Ultra-Stylized) Characters ...138

The Reality behind Key Poses 140

Composition Technique: Imagining a Box 144

What Constitutes a Three-Dimensional Figure? 144

Placing a Figure in a Box 146

The Steps in Drawing a Figure from a Box 148

Techniques in Dressing Characters 150

The ABCs of Drawing Clothes 150

The Reality behind Dressing Characters 155

Drawing Dynamic Poses 158

Cover Character Designing Frontline 165

Coloring Characters 169

Coloration Improvement Techniques 172

The Improved Palette 173

Improved Finished Artwork 175

Artists Discuss the True Nature of *Manga* Sketching 178

These are the techniques that allow the artist to make fiction seem real. (Matsumoto)

The essence of *manga* and *anime* is portraying something totally fictitious or fantastic to make it seem real. (Morita)

Excerpts from a Tête-à-Tête Interview

Conventional sketching techniques lead toward realism as a style. *Manga* and *anime* do not employ "realism" per se, but rather are worlds of "realistic" versus "stylized" artwork. The realistic styles differ from reality. Rather than observing the actual object and sketching it, in order to render the subject realistically, the artist must devise a way of drawing it to make it look convincing. This is what we describe in the book as "super *manga* sketching."



Artwork and Production:	Takehiko Matsumoto and Kazuaki Morita
Production Assistant:	Takumi Takahashi and Haruki Takahashi
Production Support:	Rio Yagizawa
Cover Artwork:	Kazuaki Morita
Cover Design:	Hammerz Co., Ltd.
Layout and Text:	Takehiko Matsumoto, Kazuaki Morita, and Hikaru Hayashi (Go Office)
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Chapter 1

Sketching While Planning



Sketching is a basic exercise in painting. To capture the subject's form, the artist typically draws while looking at a plaster figure, a still life arrangement, or human model positioned right in front of him or her. Sketching consists of carefully studying the subject. In contrast, *manga* sketching consists of drawing without viewing the subject.

Manga artists do occasionally use photograph or figure models as reference while *sketching manga-style*. However, the artist's task when working in a *manga* or *anime* context is essentially to produce a large volume of high-quality artwork within a limited time. Consequently, *manga* sketching is a technique where the artist produces artwork in an environment that does not consistently allow him or her to use a sample or reference when drawing. This technique was achieved through the artist devising his or her artwork while using logic and experience.

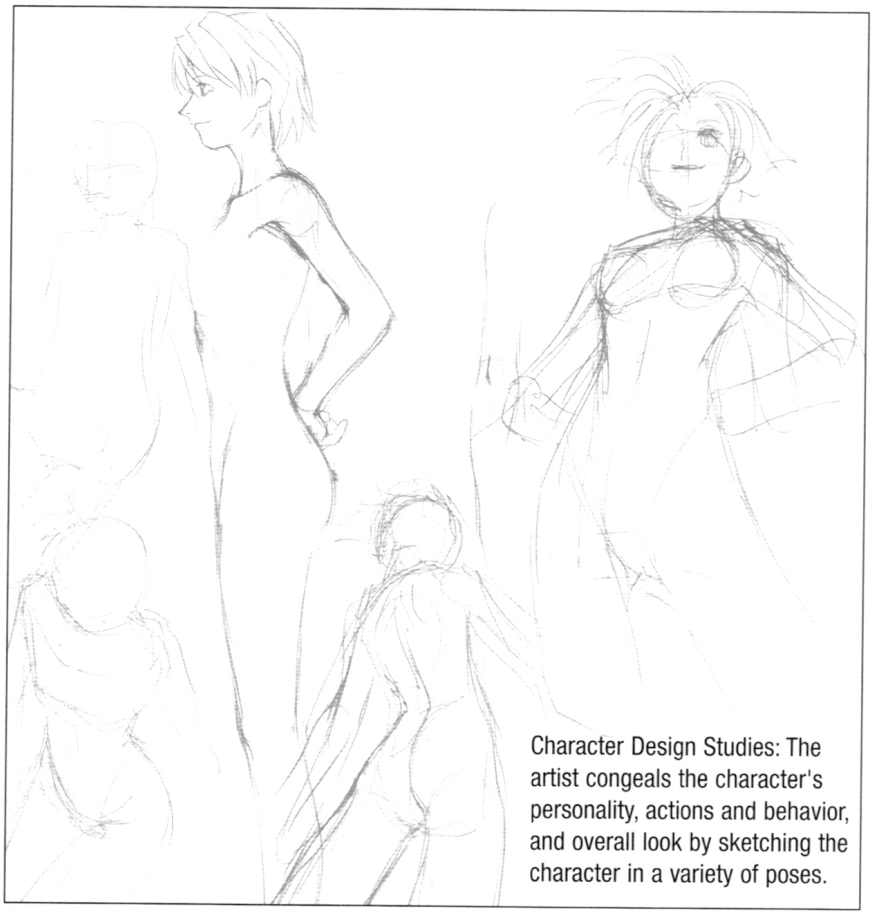
It is possible that the origins of *manga* sketching may be traced to children's drawings. However, that *manga* sketching entails incorporating a variety of experiences as well as basic artwork techniques such as the head-to-body ratio make it a true art form, rendering comparisons to "children's drawings" inappropriate.

Let us now take a look at actual *manga* sketching, where an artist gives birth to something out of nothing.

Differences between Standard Sketching and *Manga* Sketching

The sketchbook contains a wide variety of sketches: character studies, doodles, sketches of scenes from TV or movies, studies drawn using pictures from photography collections as reference, etc.

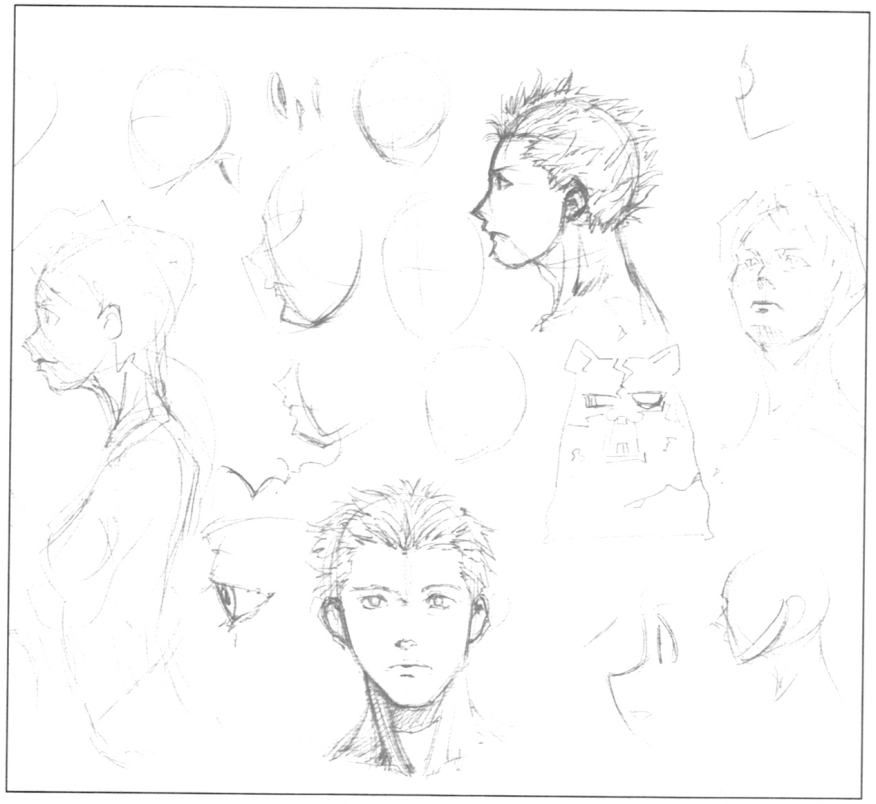
Samples from a Professional *Manga* Artist's Sketchbook



Character Design Studies: The artist congeals the character's personality, actions and behavior, and overall look by sketching the character in a variety of poses.



Action Study: Abundant use is made of *manga* techniques like special effect lines and hatching to suggest speed.

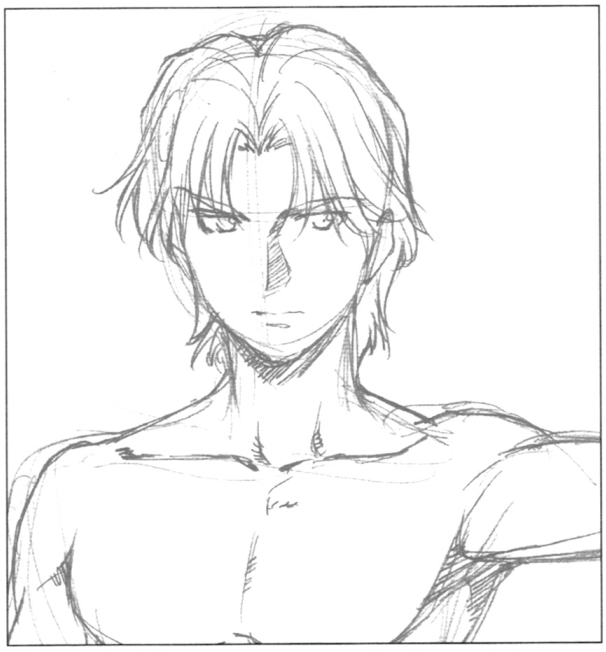




Manga Doodles: Sketching favorite *manga* and *anime* characters and scenes constitutes another important exercise in drawing for the artist. Building experience in drawing expands the artist's range of skills.

Not only is it helpful to create a careful rendition of a selected, target subject, but producing an abundance of casual doodles and sketches also proves beneficial. If you constantly and copiously sketch subjects that capture your interest, your *manga* sketching skills will improve.

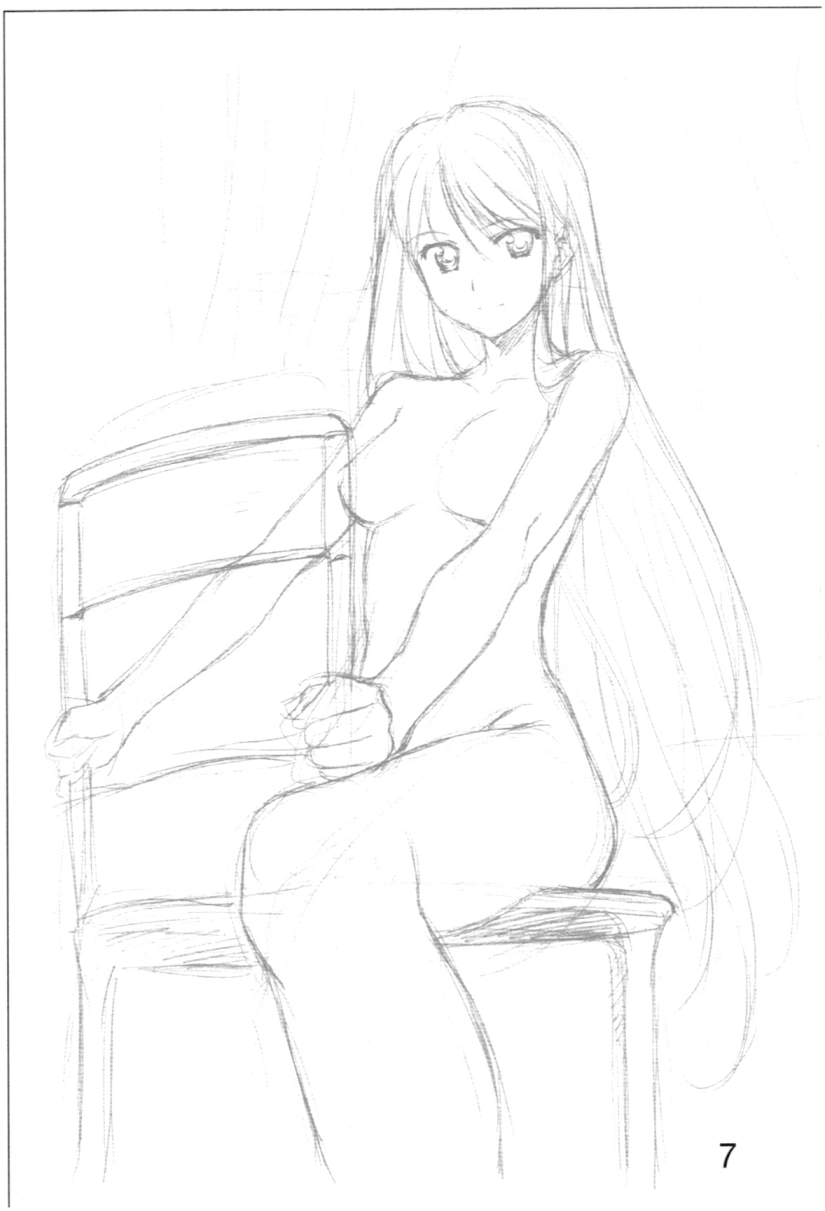
Action Scene: These sketches are studies of motion and composition. If you happen to notice a visually striking, key scene or pose while watching a TV drama or movie, etc. take the opportunity to practice drawing it. Even a sketch of the figure's outline or the general composition will prove helpful in producing your own work.



This is a carefully rendered study copied from a photography book or other reference material. If a background appears in the reference material, include the background in your study as well as the subject.



Facial Feature Study: Make a point of drawing ample studies of the iris, pupil, and eyelashes, etc.

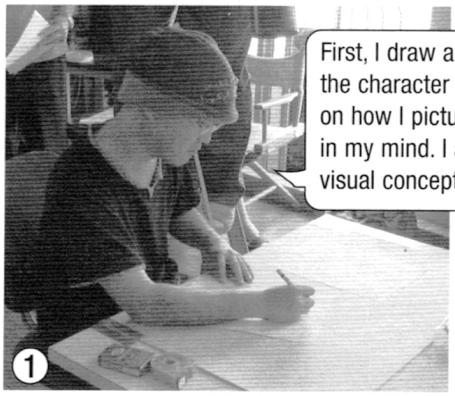


A Look at the *Manga* Sketch Frontline Part 1 From Kazuaki Morita's Desk

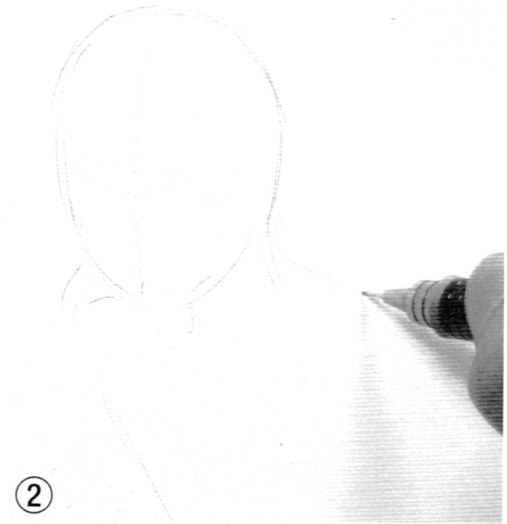
This section takes a close look at how an artist uses *manga* sketching to render a character when drawing. (Akira Hayashi)

Drawing a Female Character Standing

Morita sits at his desk and immediately starts to draw



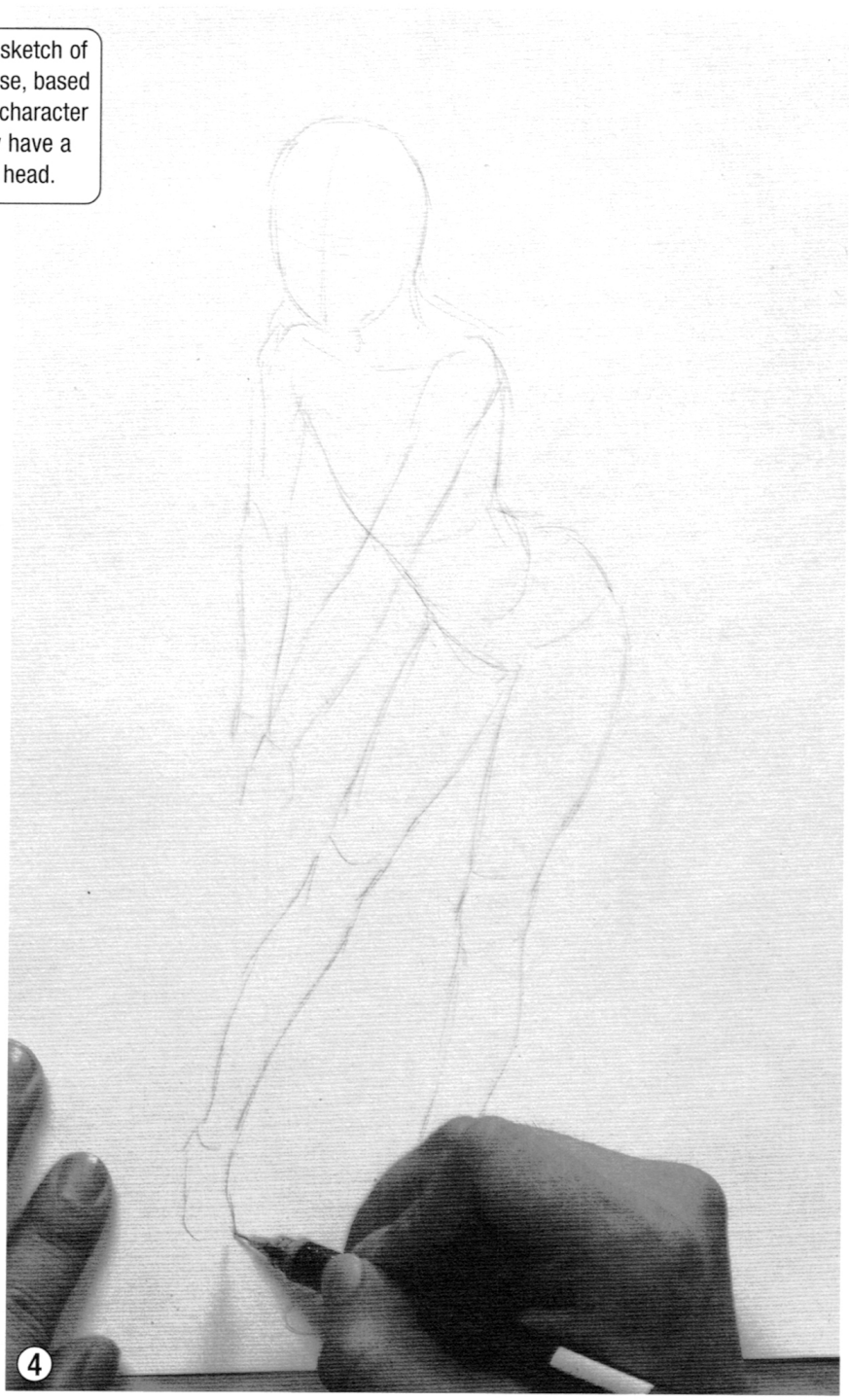
Drawing a Rough Sketch
This refers to producing a rough sketch generally showing only outer contour lines. The figures on this page show Morita's rough sketch.



The head and the upper body rapidly take form. The only one who knows how the head will look and what the pose will be is Morita, who is drawing the sketch. We observe in silence.

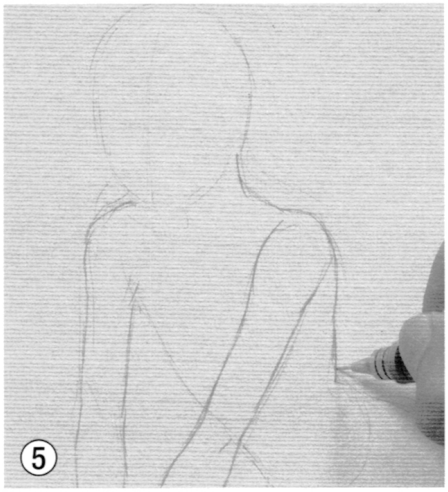


Morita continues to move his mechanical pencil.

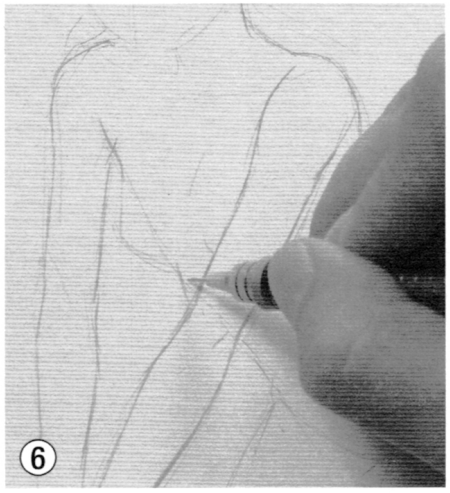


But then within the span of a few seconds, a full figure takes form on the paper. Not once does Morita use an eraser. He produces the drawing almost immediately using solely his mechanical pencil.

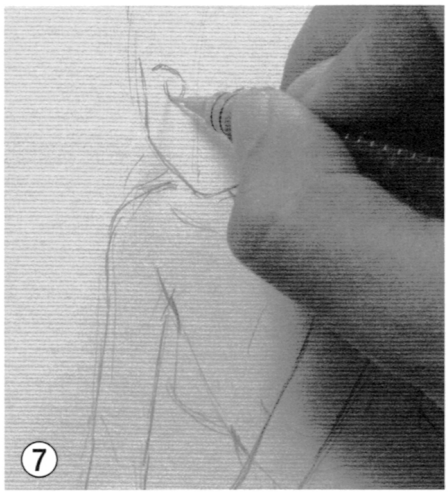
In the blink of an eye, an enchanting face and beguilingly curved figure appear.



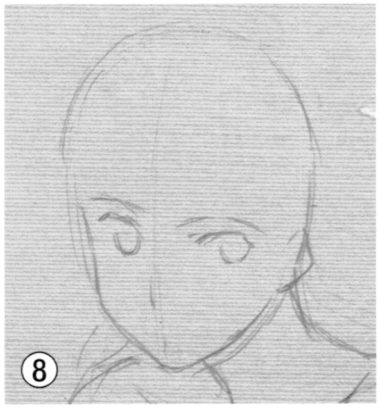
Here, Morita traces over lines he has already drawn in order to make lightly penciled strokes more visible. In *manga*, this can be considered akin to inking.



Morita adds breasts to the previously board-like chest. At this point, the artist is free to choose the sizes and shapes of the breasts.



Without even once using an eraser, Morita swiftly adds in the eyes as the face's exterior contour takes shape.



The bald head looks odd to the neophyte.



"The head looks like an egg. Since all that I've really drawn is the head's layout, I can adjust the shape as I add the hair."
We are able to observe Morita adjust the size of the head's rear region.

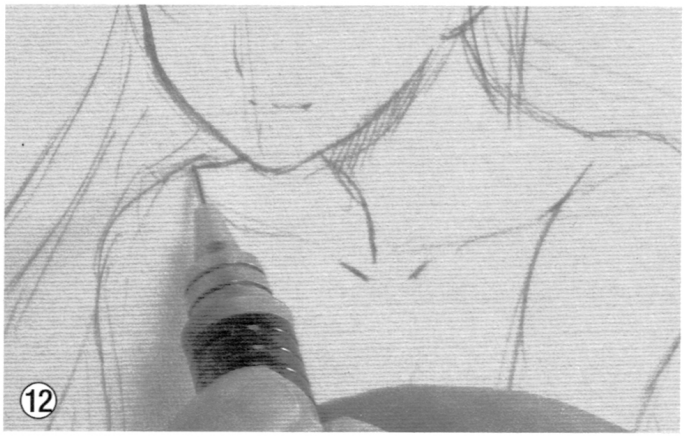


Moving the pencil's tip, Morita adds the character's supple hair.
"If the hair comes out well, then the entire composition becomes imbued with movement, which makes the character look more appealing. The hair is vital to portraying a character."
Perhaps having a congealed concept of how the character should look made the hair so critical to the composition.

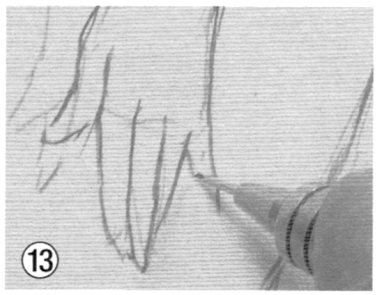
"In *manga*, what follows from this point on is in theory similar to inking."



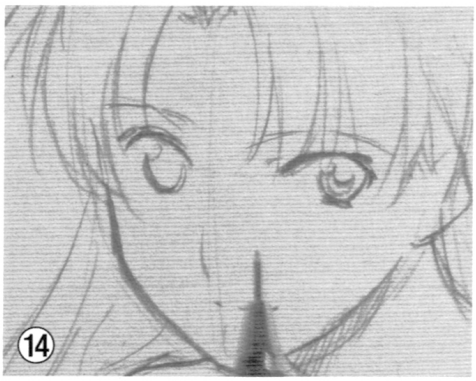
Upon hearing me whisper, "Oh, it wasn't finished yet?" Morita responded, "If you manage to draw the lines carefully at the under drawing stage to approximately this extent, then you should be able to go through the contour clean-up stage without much hassle." Professionals are always thinking about the next step, regardless of their particular occupation.



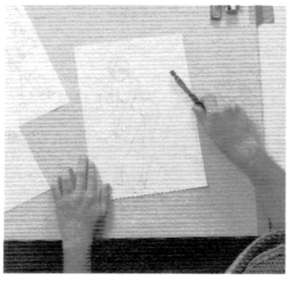
It surprised me that Morita essentially drew the contours three times. First, he sketched the contour layout, then he traced the contours, adjusting them, and then he adjusted them once again. Finally, after five minutes had past since starting, Morita completed the under drawing.



"Having the fingers arc back makes the hands look attractive and charming in a girlish way. It is extremely difficult to maintain an even thickness for all the fingers, so I take extra care when drawing them.



Adding the eyelid contour and the iris and pupil heightens the sense that the character is alive. "It certainly looks much more finished now, doesn't it?"



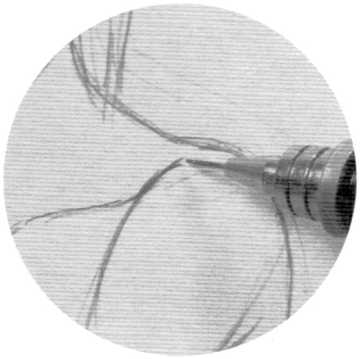
"All right."
"Is it finished?"
"Well, for now it is."



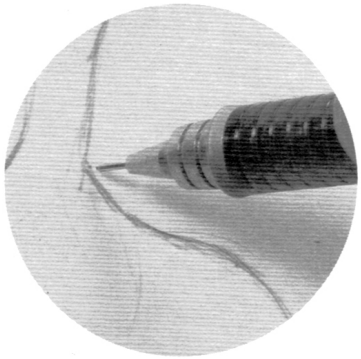
Morita draws the hair last and adds lines to the irises. The under drawing is finally complete, and approximately ten minutes have passed since Morita started drawing.

"Once I have completed what in *manga* we call the 'under drawing', I step back and take a look at the composition and then add corrections."

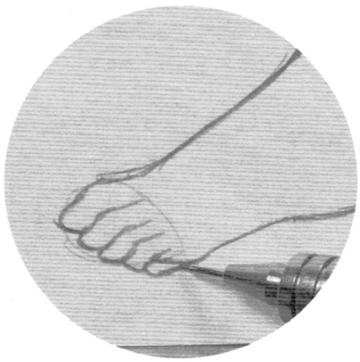
Key Points in Adding Finishing Touches



"When drawing the shoulder, leaving a gap between the contour coming down from the neck creates the illusion of roundness."



"When drawing the waist, allowing the stroke from the upper portion to cut through the contour gives the torso a sense of volume."

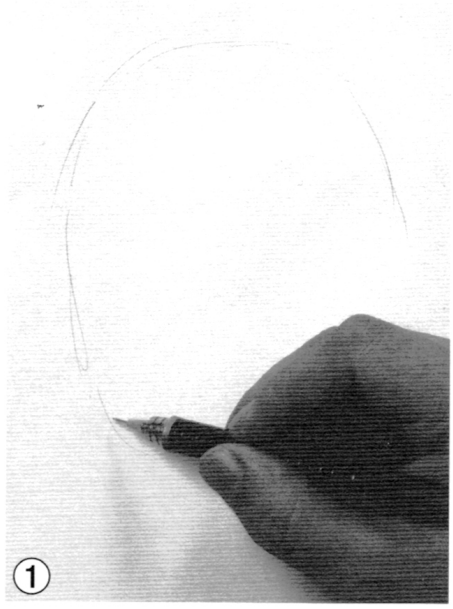


"While the toes might seem like a minor detail, failing to draw them properly will ruin the entire composition, so I take extra care with them."

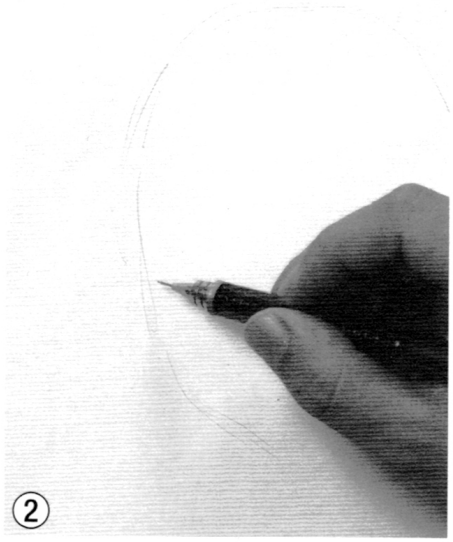


"You didn't once use an eraser, did you?"
"I will. I'm planning on adjusting the waist and the legs."
Morita reports that he normally repeats the steps of correcting and redrawing. The entire process takes between an hour to a half day to complete. "It would be misleading if the readers thought I only spent ten minutes on each drawing," explains Morita.

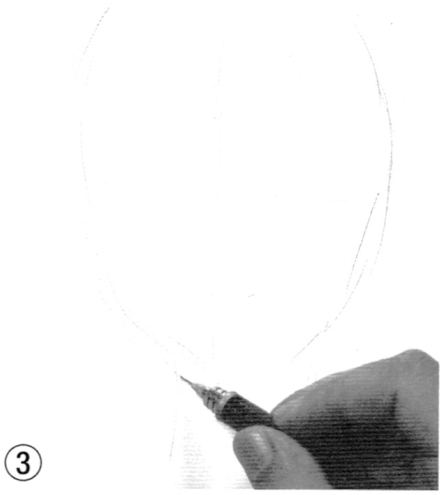
The Steps to Completing the Face's Contours



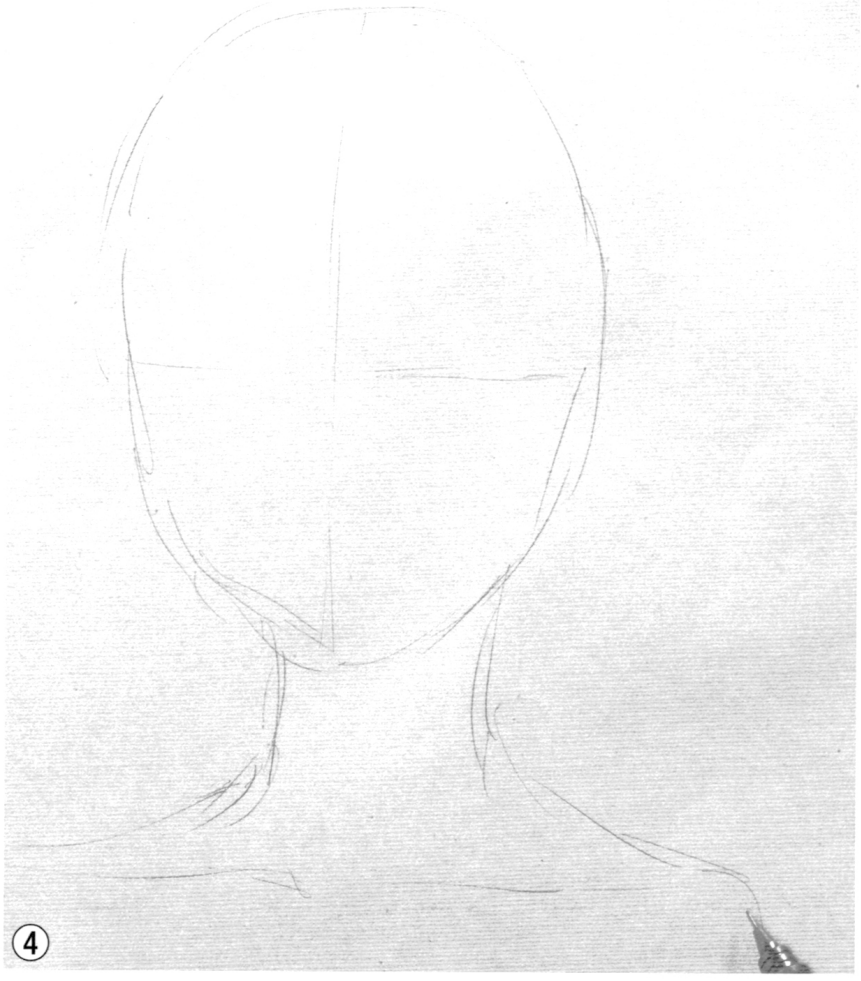
Using extremely light strokes, Morita draws a circle, which becomes the face's layout.



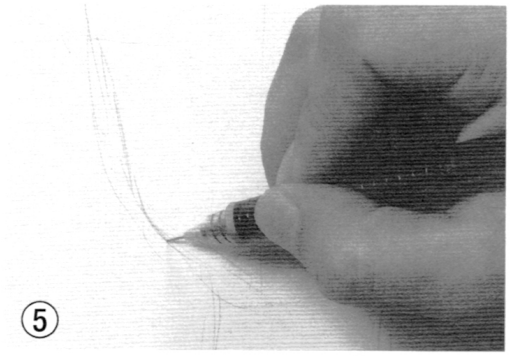
Little by little, Morita builds up pencil strokes.



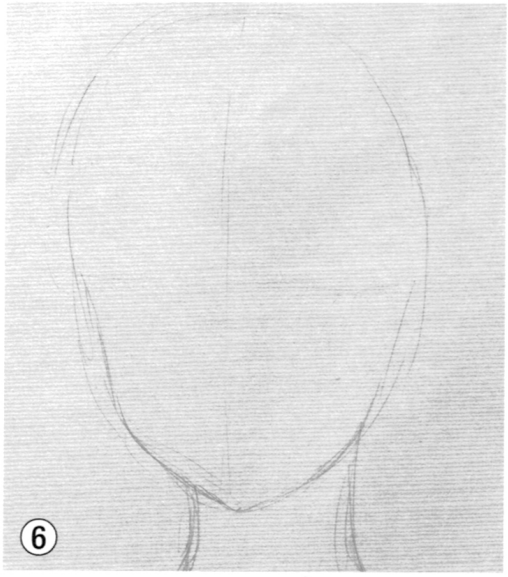
Morita draws a faint cross on the face and then adds a layout for the neck.



The face's exterior contours are almost finished.

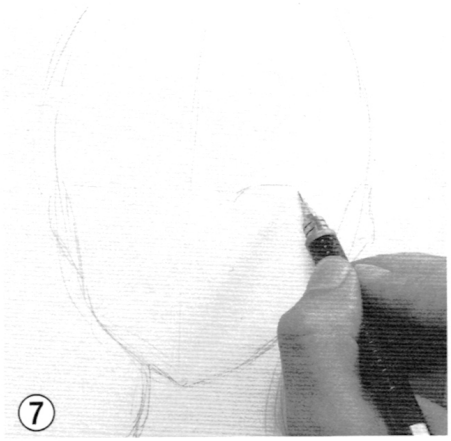


Morita adjusts the contour from the cheek to the jaw.

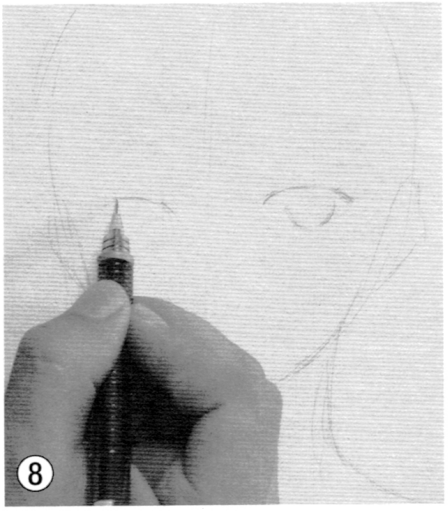


Morita traces the neck's contours while adjusting the face's shape.

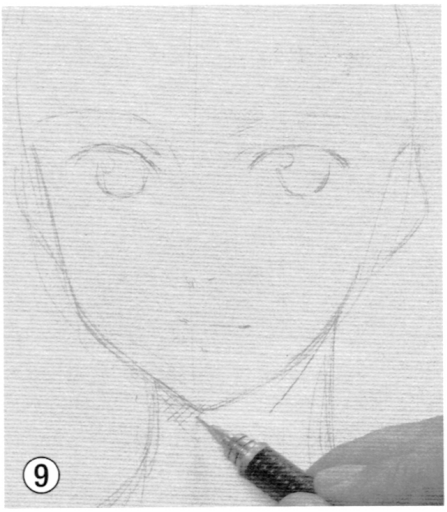
Drawing the Facial Features and the Hair Layout



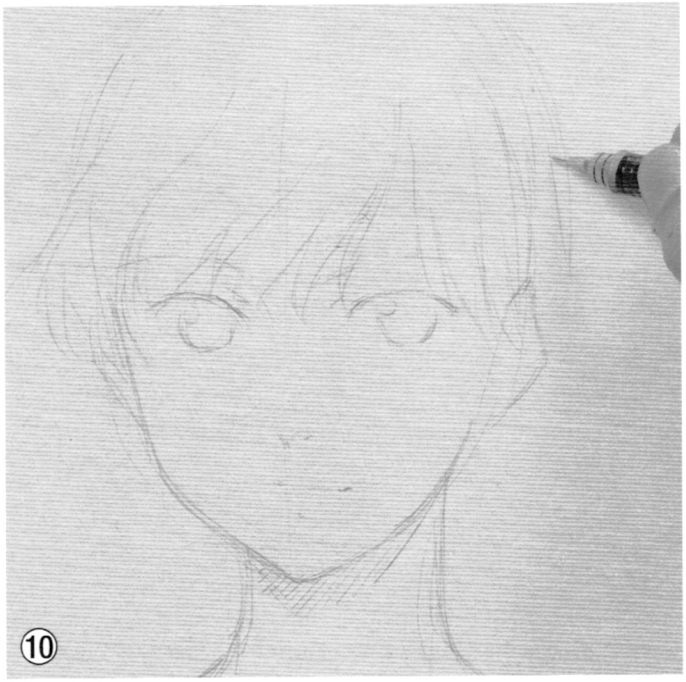
At this stage, you should use slightly darker strokes than when drawing the face's layout. Avoid applying too much pressure, and use strokes that can be easily erased.



Morita draws the contours of the left eye, while paying careful attention to the right eye's size and shape.



Morita cleans up the face's contours.

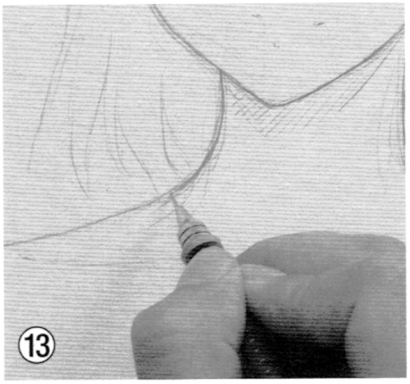




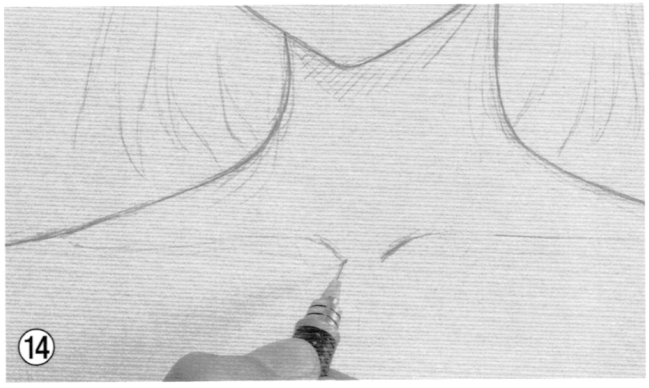


The impression the character generates changes greatly according to whether the hair covers or does not cover the forehead, so the bangs should be drawn while checking the effect on the character's appearance.

Adjusting the Neck's Contours

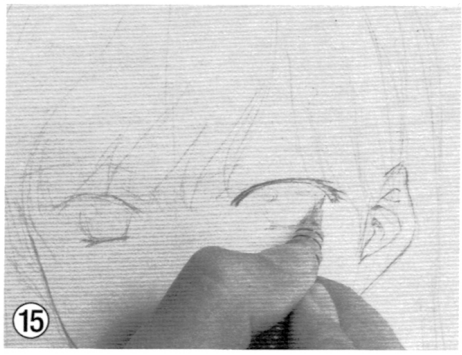


Morita draws precise shoulder contours while carefully adding the hair.

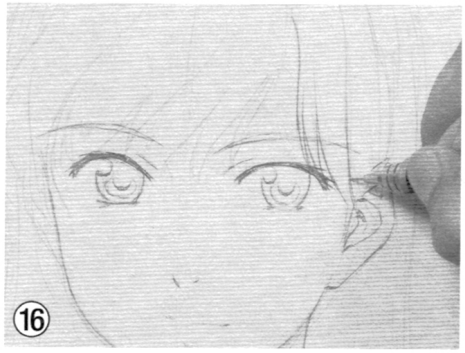


The clavicle gives the character a sense of three-dimensionality.

The Steps to Completing the Face's Contours



Thickening and darkening the upper eyelid's contours accentuate the eye and strengthen the impression projected by the character.



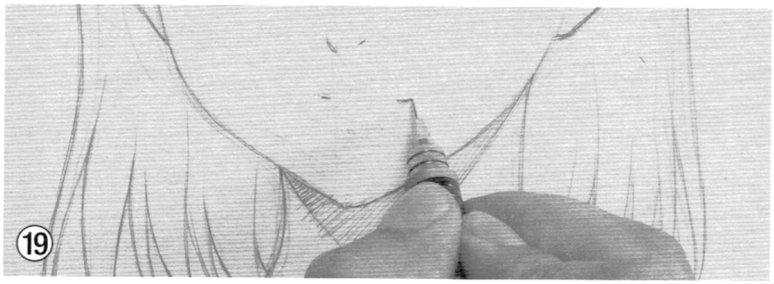
Here, Morita reinforces the hair's contours starting with the bangs just as when he sketched the layout.



Adding shadow underneath the chin gives the head a sense of three-dimensionality.



Try to draw the exterior contours of the pupil approximately the same thickness as the upper eyelid. This creates the sense of round eyeballs and gives the character a clearly defined gaze.

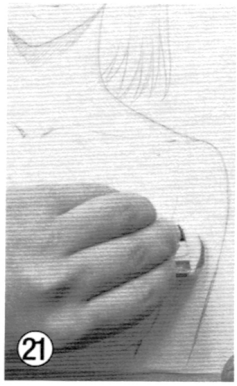


Take care to avoid making the mouth's contours too thick. Clearly delineating the corners of the mouth creates the appearance of a tightly closed mouth.

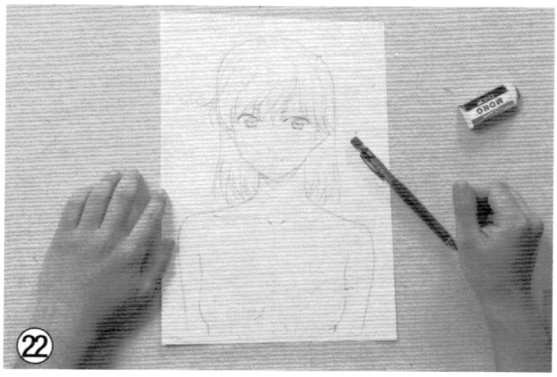
Drawing the Figure's Interior Contours



The chest should be drawn as needed.



When a layout line is making the composition appear sloppy and is becoming distracting, erase the line taking care not to erase the final outlines and contours.



Morita has finished the under drawing.

Completed Under Drawing

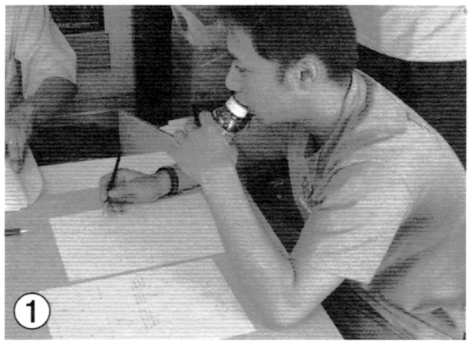
The layout lines still remain. When producing your own under drawing, make an effort to draw particularly light lines in the layout stage so that the final outlines and contours will stand out in the under drawing stage.



This section takes a look at how another artist approaches drawing at his desk. The reader should take note of commonalities in the drawing capacity afforded by *manga* sketching.

Drawing a Male Character Standing

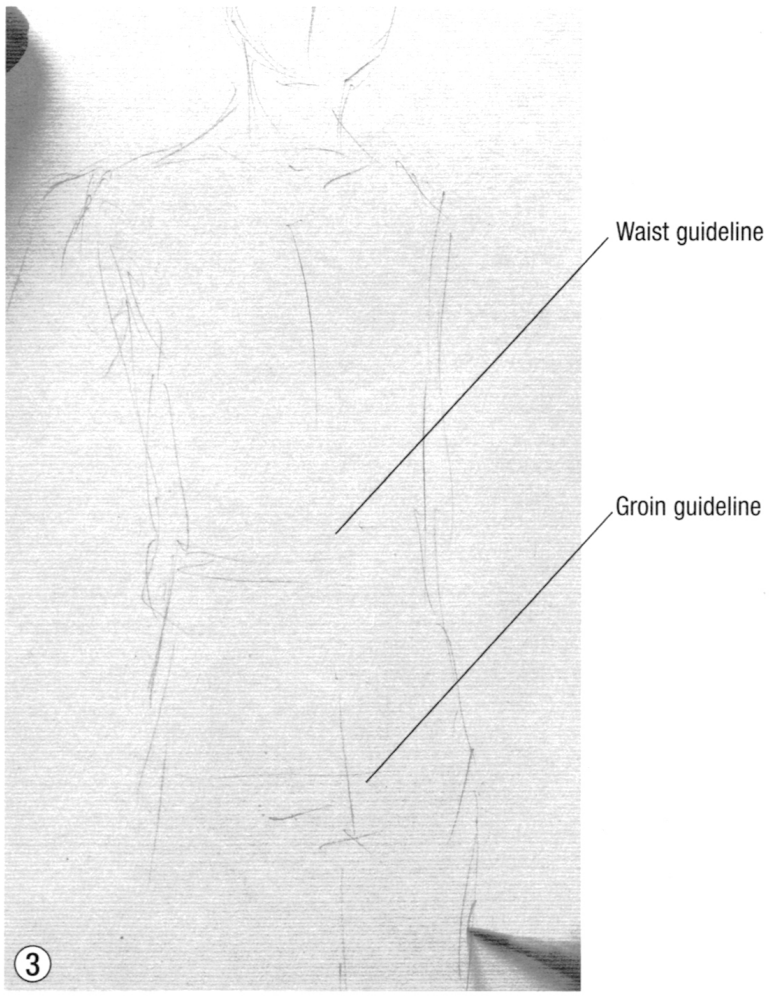
"First, I do a little thinking."



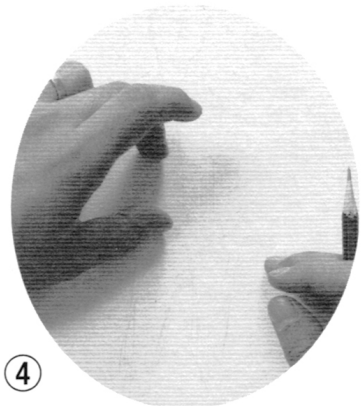
Matsumoto carefully considers how to approach the drawing. While relaxing, he summons his power of concentration, as would a martial artist. I am left wondering when he will start drawing.



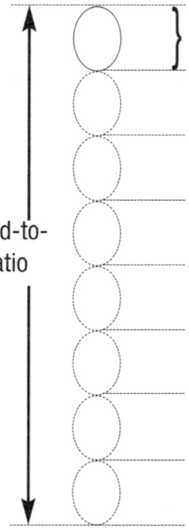
After deliberation, Matsumoto slowly picks up his pencil and begins to sketch a layout of the head and the shoulders. Matsumoto layers one fine stroke upon another, and as his hand moves to build up the form, I begin to see the upper body of a human figure emerge.



Matsumoto draws the figure's contours in a highly sketchy manner while adding informal guidelines to establish the positioning of the waist and groin.

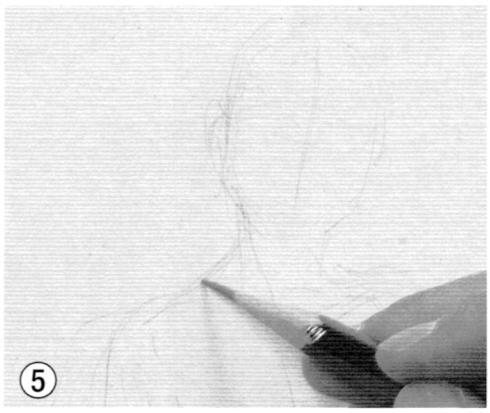


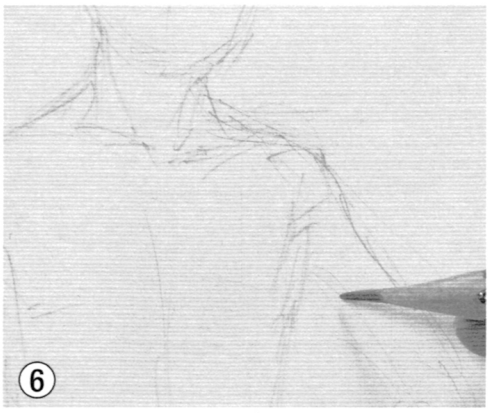
Matsumoto casually uses his fingers to check the figure's overall proportions. While I watch him absentmindedly, he makes a number of other indiscernible movements.



As it turns out, Matsumoto had been double-checking the figure's proportions based on how he planned the character's head-to-body ratio. "I make rough approximations while I'm drawing, but the concept of the head-to-body ratio is essential to drawing."

"Lines Sought" "Lines Drawn"

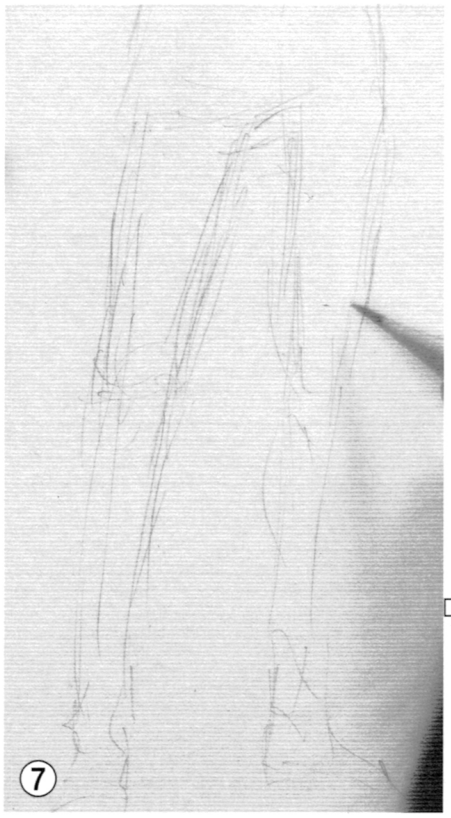




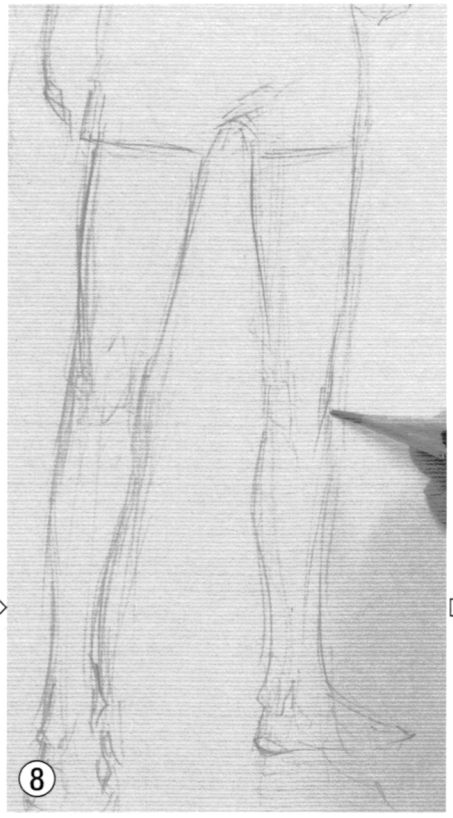
"I refer to these as my hesitation lines. Really what they represent is my seeking the perfect positioning of the line that will appear in the final drawing," asserts Matsumoto. Upon hearing this, Morita comments, "So, there are lines we use to seek and lines we ultimately draw. Strictly speaking, the two are impossible to distinguish. The lines form as we draw."

The character's full figure gradually takes shape as Matsumoto weaves his internal vision onto paper. The images below show the actual transformation.

Watching the Legs Actually Take Shape



The layout sketched in the first stage

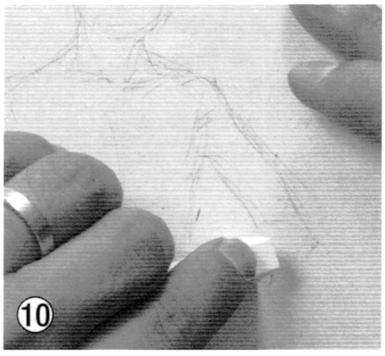


The legs in an intermediate, formed state

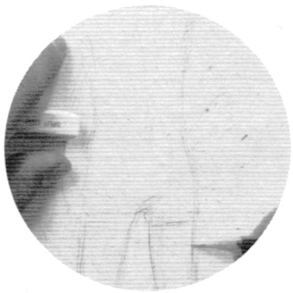


An almost completed under drawing of the legs

"Why are you erasing it?"

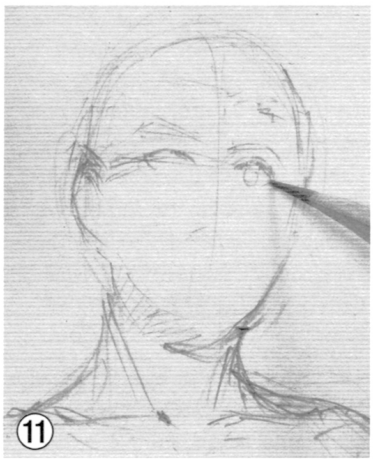


"Because the hands aren't positioned properly."
Upon drawing the forearm and hand extending from the upper arm, Matsumoto unceremoniously erases them. Artists make split-second decisions based on extensive experience. It is then that I notice another detail.
"You hold the eraser with your left hand?"
"Yeah. This way, I don't have to put down the pencil. I just got used to doing it."

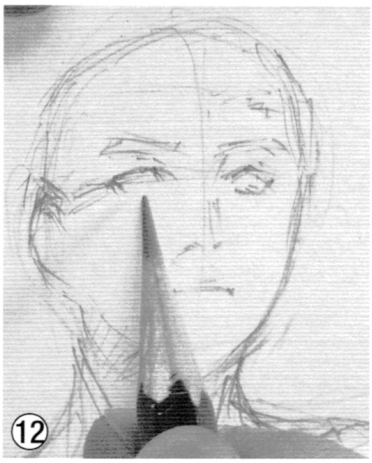


For those who are actually right-handed, holding the pencil in the right hand and the eraser in the left speeds up the drawing process. Having to put down the pencil and pick up the eraser means that a break occurs in the drawing process. Not having to make the switch allows the artist to maintain momentum.

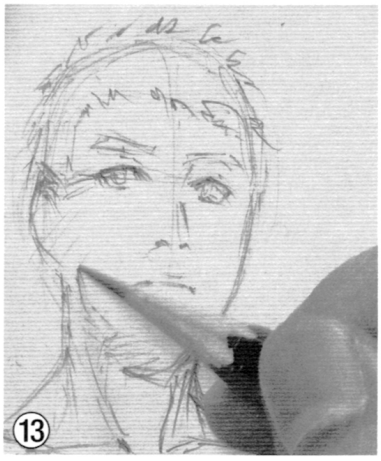
"The following is the process by which lines sought evolve into lines drawn."



"Some artists start with the nose or mouth, but I always begin with the eyes."

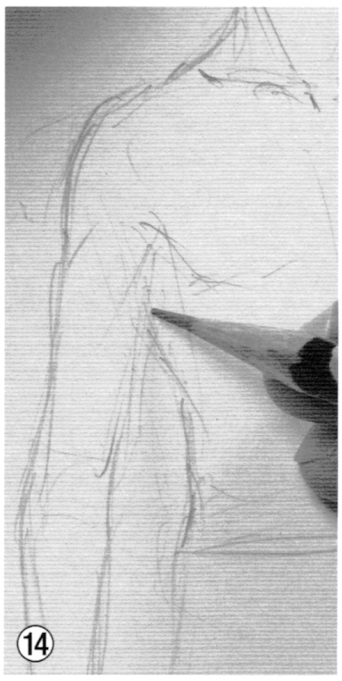


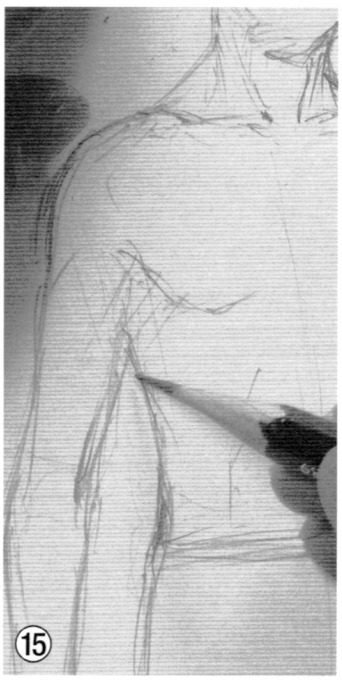
Matsumoto draws the second eye using the first eye as reference. "It's vital that the artist maintain awareness to ensure the right and left sides are balanced."



"You prefer not to draw the jaw's contour line?" "Using hatching to shade the underside of the chin seems more effective for generating the feel of looking at the face from a low angle."

Series of Images Showing the Figure Develop

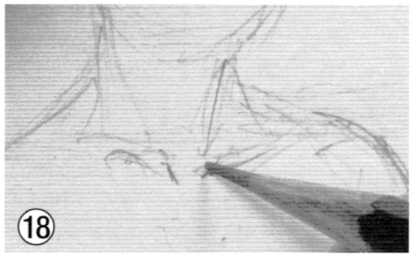




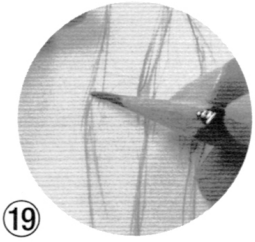




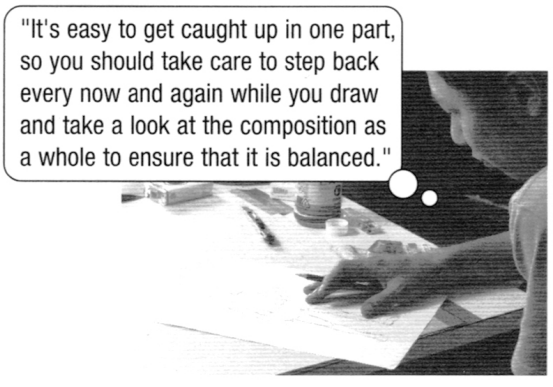
The above are a time-elapse series of images showing Matsumoto build up the inside of the arm, the underarm, and the arm itself extending all the way down to the hand.
"While the arm and hand are both body parts, visualizing the arm as connected to the torso when drawing does result in a more reliably satisfying figure."



"I maintain awareness of how the neck and shoulders connect when I draw the clavicle. This bone is not something that merely sits below the neck. It really forms the linchpin of the upper body."

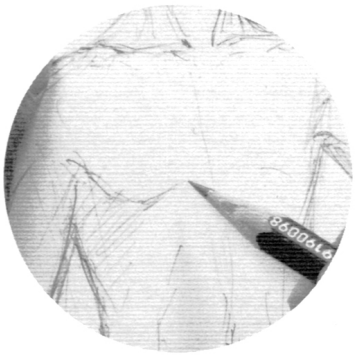


Matsumoto later goes back add emphasis to the elbow. "This constitutes the final touch for the figure."

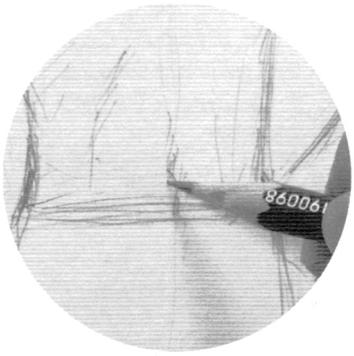


Completed Under Drawing

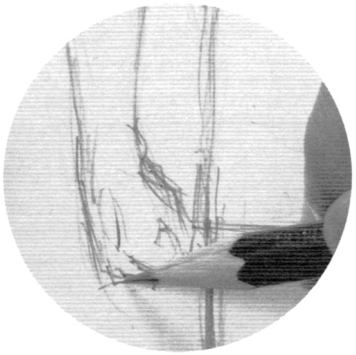
Key Points in the Finishing Touches



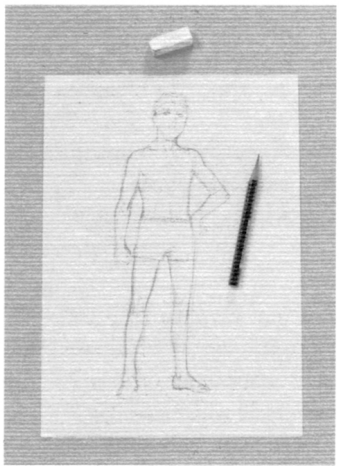
Shadows rendered in hatching.



Using dark strokes creates the look of a taut abdomen.



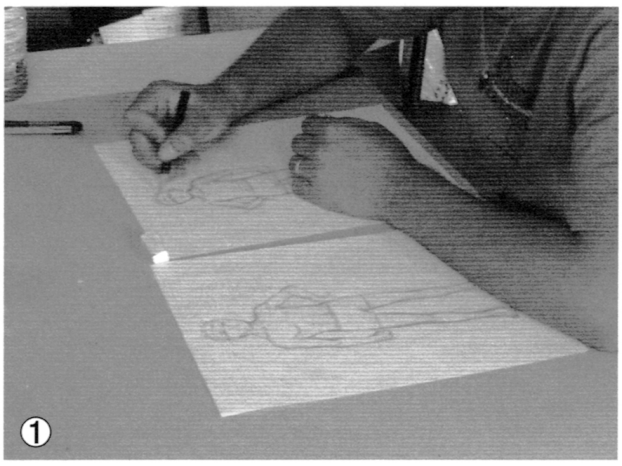
"Since this is a male character, accentuating the angular look of the fist's knuckles results in a more satisfying image."

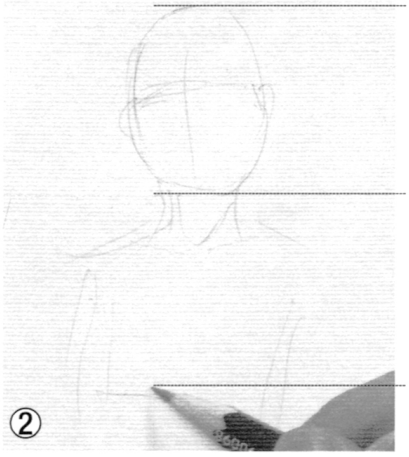


Final Image

Drawing the Figure in Reverse

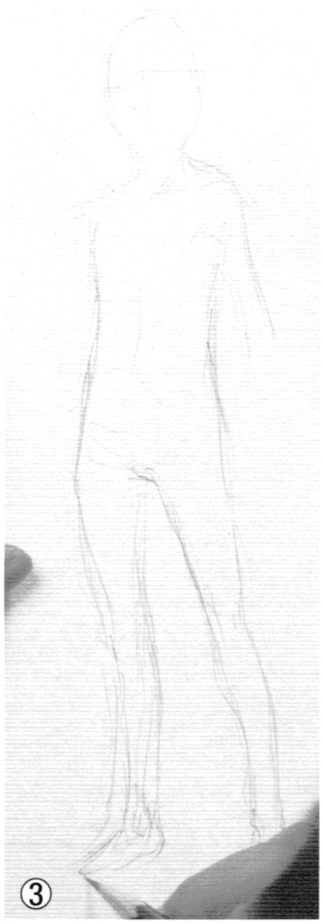
Manga sketching is an artistic technique entailing the creation of something from nothing. This time, we show how an artist uses a reference source (a model) to create something from something. On this page, Matsumoto will use the standing male character drawn in the previous section to create a mirror image of that figure.



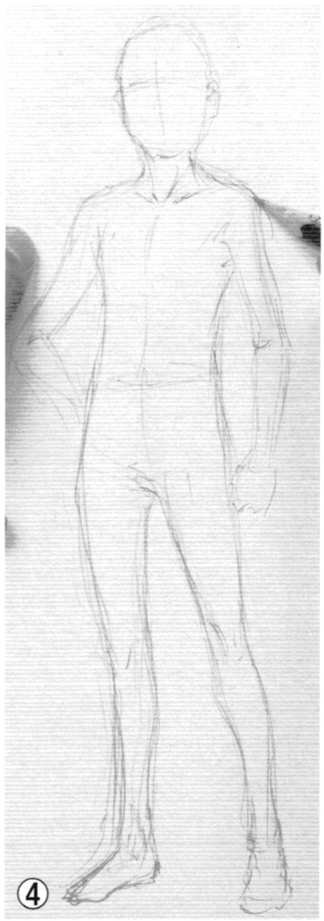


While sketching the figure's layout, Matsumoto draws light guidelines denoting the positions of the chest, waist, and groin.

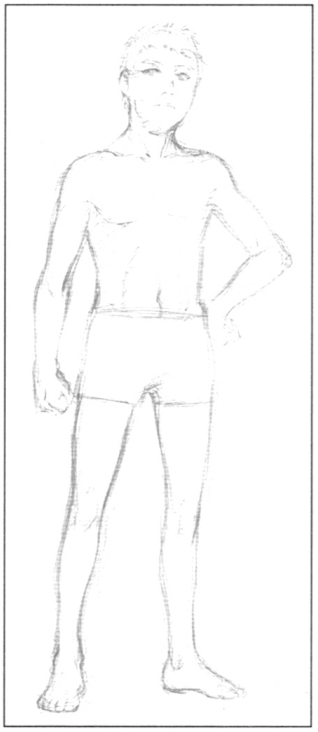
"When sketching the layout, the artist should spend about 80% of the time looking at the overall figure."



Here, Matsumoto produces a layout of the overall figure. Since he has a completed drawing to use as reference, the pose is already determined, and the drawing progresses rapidly. At this stage, Matsumoto devotes approximately 80% of the time paying attention to the overall figure and the other 20% noting the individual parts.



Matsumoto draws the arms while adjusting the lines. Since he has already completed the layout, he now spends 80% of his attention devoted to where to position the various body parts.



Original drawing (approx. 40 minutes to completion)



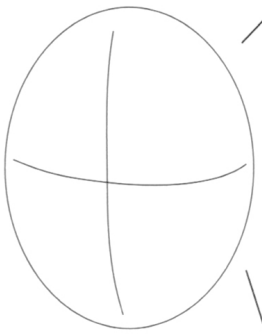
Completed reverse image (mirror image): The reverse image is composed at a slightly higher angle than the original drawing, and the figure seems more stably balanced (approximately 10 minutes to completion).

Manga sketching is a technique that allows artists to breathe more life into their characters. Using a layout to capture the figure provides the advantage of enabling the artist to produce the sketch even more rapidly when an original drawing or other form of reference material is available.

Using Circle and X Layouts for Close-ups of the Face as Well as the Full Figure

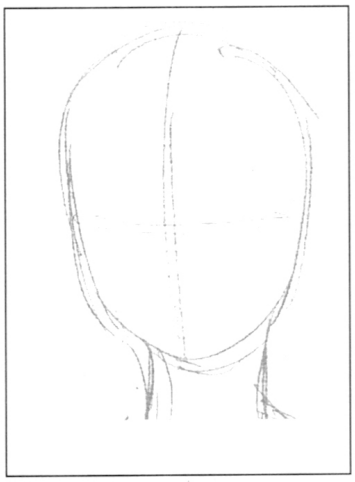
Both Takehiko Matsumoto and Kazuaki Morita started their drawings with layout sketches. A circle and X layout is the type used for the face, and this form of layout is fundamental to *manga*-style sketching.

Circle and X Layout: Basic Element in *Manga* Sketching



The above figure shows a face layout portrayed in a general sense using circles and crosses (i.e. X's).

Close-up of the Face



Here, where the eyes will be positioned, marks are added as guides for determining the their size.

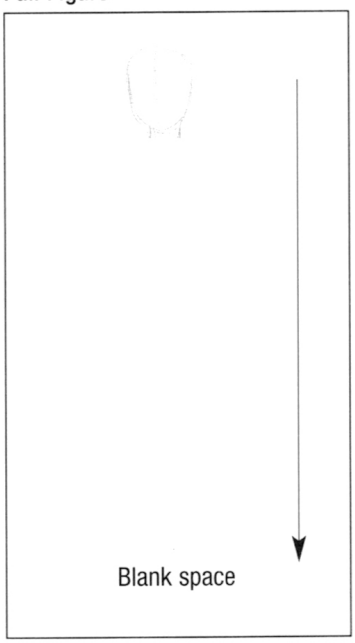


This allows the artist to produce a close-up of the face that fits on the sheet of paper.

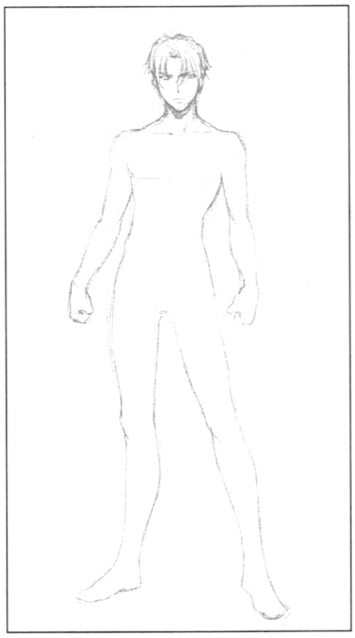


(Matsumoto) "I feel pressure being photographed while I draw. My occupation is more behind-the-scenes work. Artists like myself compete through figures moving in an animated film or computer monitor that we have drawn. Artists labor to produce satisfying artwork. I see it as a way of improving and hope that, likewise, the reader will also find the struggle a step to becoming a better artist."

Full Figure



Here, the circle and X layout establishes a size for the face that allows the entire figure to fit on the sheet of paper. (The above image shows a character drawn at a 1:6~1:7 head-to-body ratio.)



The head-to-body ratio may be altered, reducing the size of the body relative to the head. This would allow for a larger head while still ensuring that the full figure fits on the page.

When drawing a full figure image, the trick is to sketch first the head's layout, taking into consideration the character's desired build and head-to-body ratio (i.e. figure proportions).



(Morita) "I second what Matsumoto said. I take a fairly matter-of-fact approach to my artwork, so my work pace tends to appear rapid. But I don't want to give the impression that I just crank out my drawing. I am constantly drawing a wide variety of subjects, and my artwork is the product of repeated trial-and-error, toil, sweat, and tears.

Both Takehiko Matsumoto and Kazuaki Morita are outstanding artists who have been engaged in character design for *anime* and games as well as have been involved in the artistic process from *genga* (drawings reflecting key scenes in a sequence of cells or motion) production to artwork direction. Matsumoto and Morita were classmates attending the same junior high and high schools and chronicle a history of rivalry dating back some 20 years. Both boast experience in producing *manga* manuscripts and are receiving attention in a field that cultivates talent as well as effort.

Manga Sketching Forms the Foundation of Planning

What is generally referred to as "sketching" involves looking at the subject and drawing it. Therefore, "sketching," emphasizes one's powers of observation. However, *anime* and *manga* characters are stylized. Even when based on an observed subject, such characters are not rote, unadulterated recreations of the artist's observation but rather formed according to the artist's descriptive ability coupled with expressiveness.







The field of commercial artwork, which includes *manga* and *anime*, was never based solely on the artist's sketching ability. However, the talent to sketch has gradually grown less of a basic requirement as time passes. In addition to talent in sketching, the abilities to stylize a character, to give a character different looks, and to imbue the character with versatility in movement have become desired skills for an artist. *Manga* sketching is a production technique that meets these demands.



All artists, even professionals, hesitate and change their minds while producing artwork, including single-panel works. Hesitation might be considered a condition toward improvement. Perhaps you, the reader, will find that if you are able to master *manga*-style sketching, you will boost your own ability to create a new world that reflects your personal style.

Chapter 2
The Fundamentals in Sketching a Face *Manga*-Style



Manga sketching is not a special technique but rather an extremely common tool artists use to draw.

This chapter begins by teaching how to draw a face. The most fundamental of these basic techniques is the circle and X layout. Those who have only a passing knowledge of *manga* and *anime* will still recognize this technique.

All *manga* sketching originates from this basic circle and X layout.

The Basics of Sketching a Face Layout (Using Circles and X's)

"Seeking lines" Give Birth to the Character
The character takes shape as the artist layers stroke upon stroke, including those of the circle and X layout. The artist plans while drawing and draws while planning. Many "seeking lines" become layered one on top of the other as a result. However, these lines function as guides in drawing the face's contours and individual features.



Circle

+

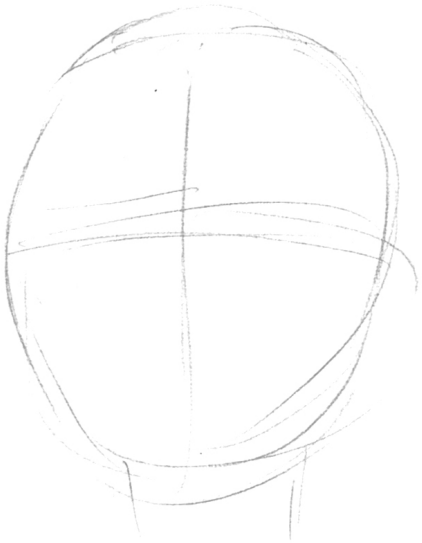


Cross

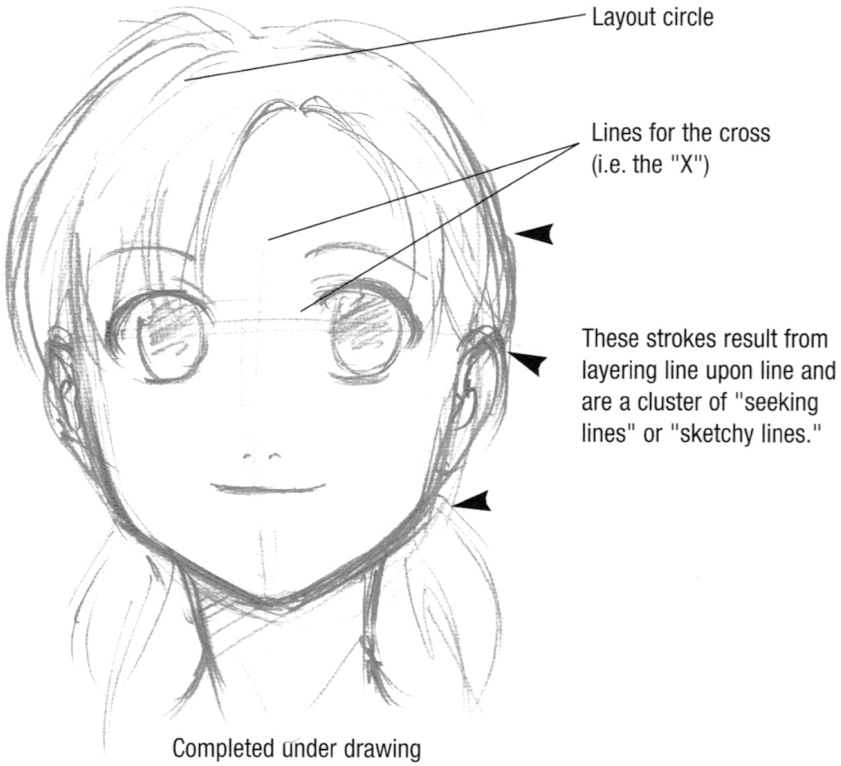
=



Circle and X



To the left is an extremely general circle and X layout. This is sufficient for an initial layout.

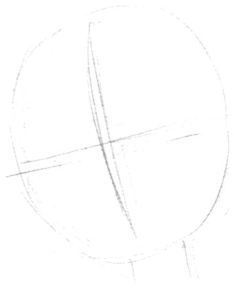


Completed under drawing

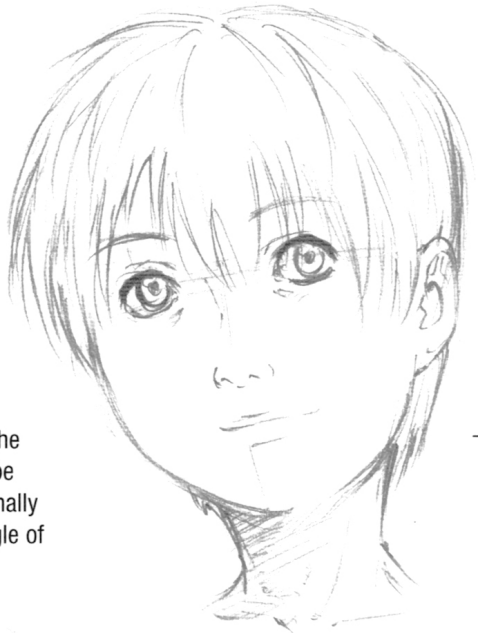
Use care when drawing these general, layout lines. They assist in the creation of the final character.

Common Methods of Stylizing a Character

Facial features, including the eyes, nose, ears and the shape of the face may be divided into four general categories, according to the degree of stylization.

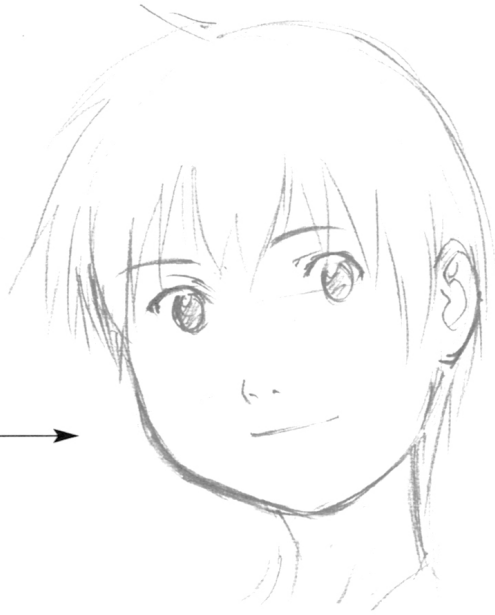


Circle and X Layout
This is common to all faces.

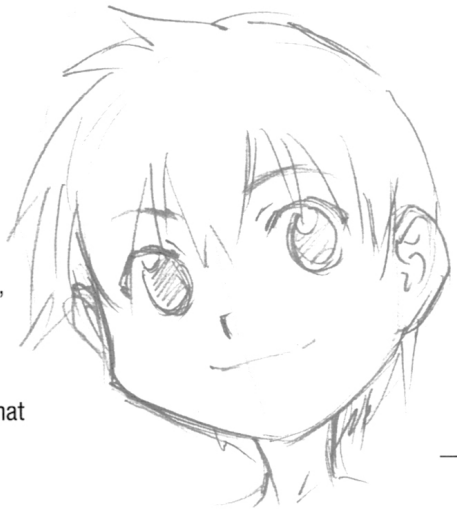


In a realistic drawing, the second ear would not be included if it were normally obscured from that angle of composition.

Realistic Rendition with Minimal Stylization
This style is used for realistic drawings, realism *manga* with dramatic plots, etc.

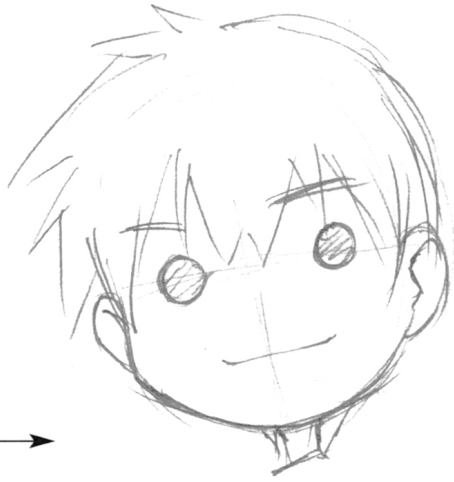


Slightly Abstracted Version
This style appears in *shonen manga* (*manga* targeted to boys), *seinen manga* (*manga* targeted to young, post-adolescent men), ladies' *manga* (*manga* targeted to women), etc.



In a manga-style rendition, the second ear might be included; although, realistically speaking it would be obscured from that angle.

Abstracted and Stylized Version
This style appears in *jido manga* (*manga* targeted to young children), *shonen manga*, and four-panel *manga*.



Highly Abstracted Version
This style appears in four-panel *manga* and in solitary panels or drawings, etc.

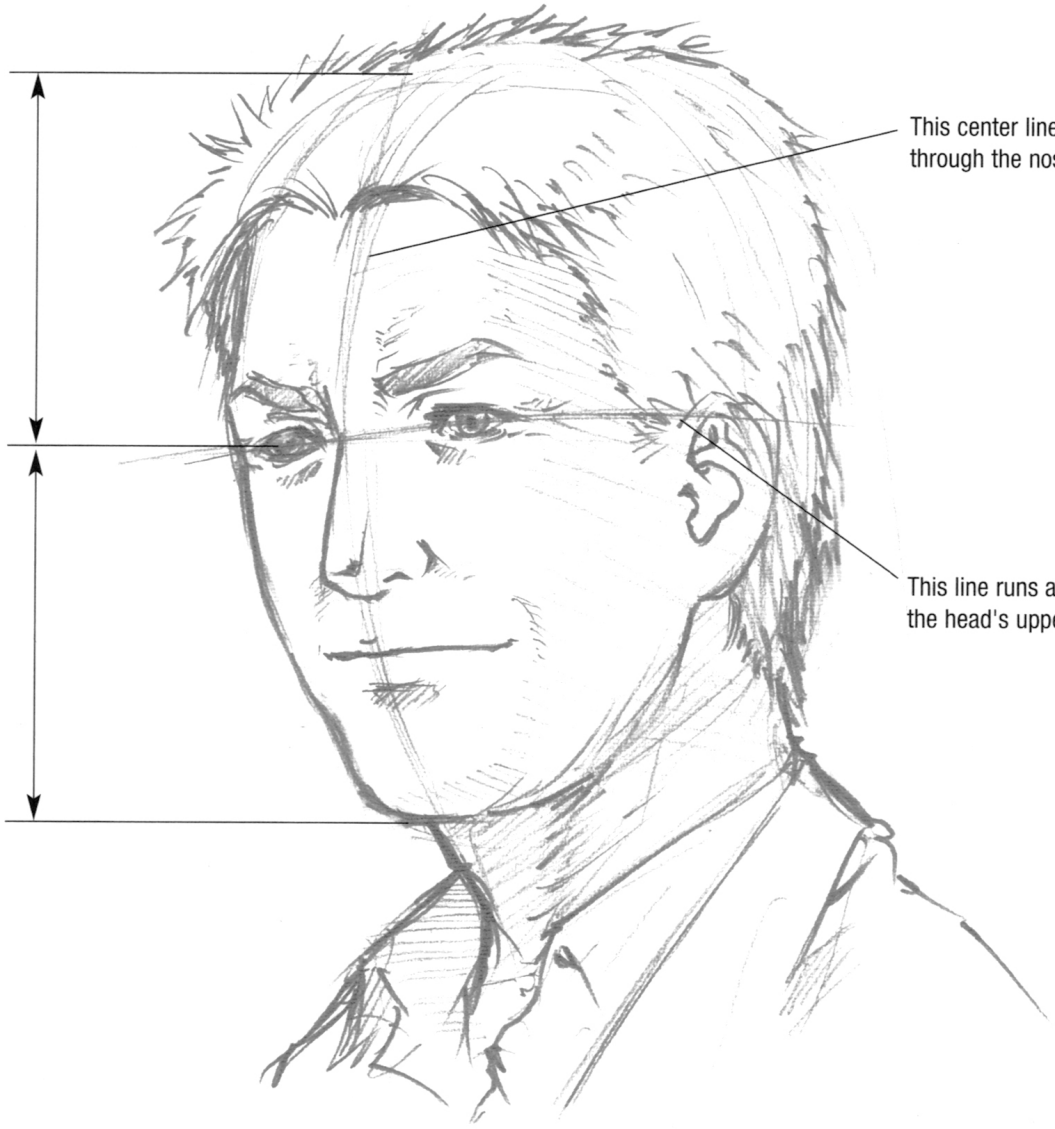


Simplifying or abstracting a character allows for infinite variations and constitutes the most basic and effectives technique for portraying an emotional expression in an easily recognizable way.

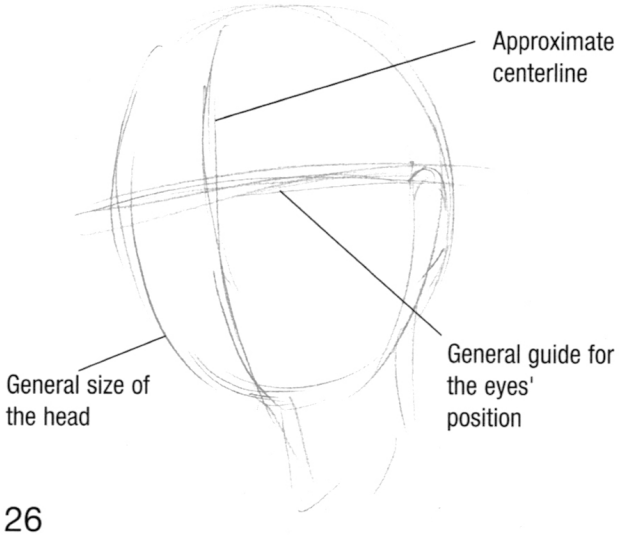
Reduction of the Head Rendered Using a Circle and X Layout

Starting from a General Sketch

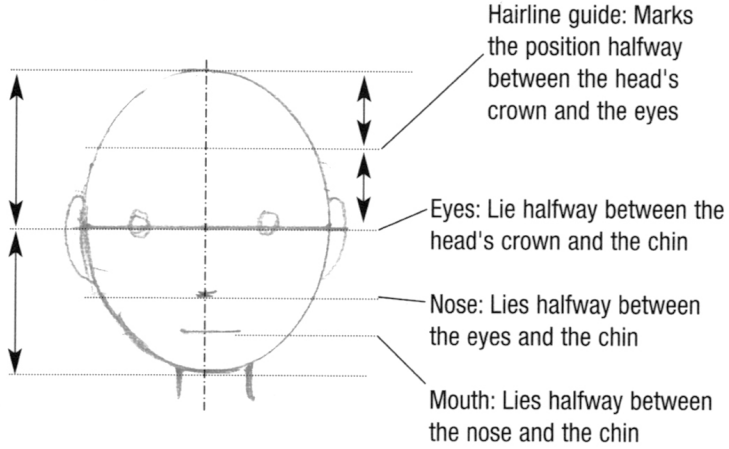
The head (rendered using a circle and X layout) constitutes the foundation determining the head's size and direction it faces.



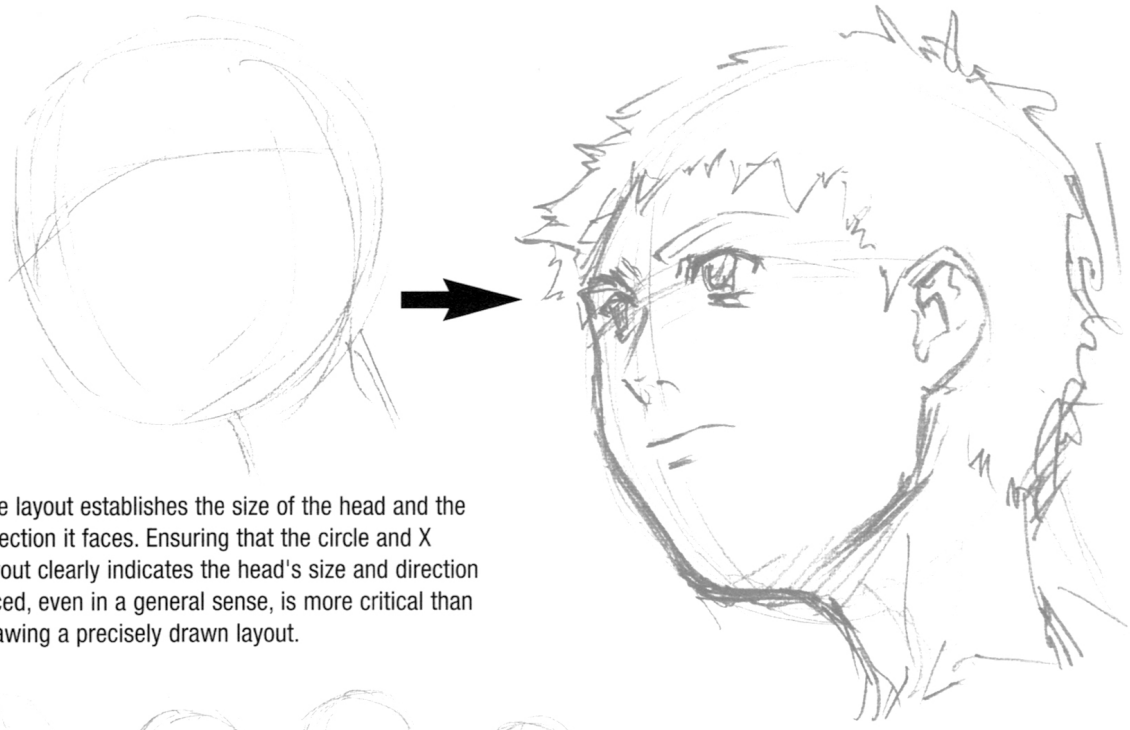
The Circle and X Layout Functions as a General Guide



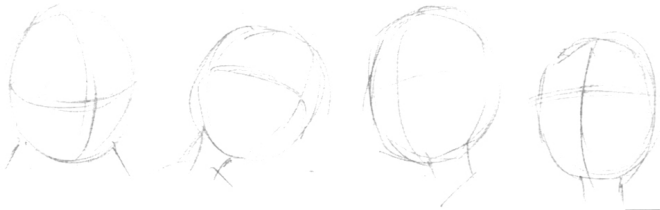
Ref. Fig.: Facial Feature Guidelines



The Circle and X Layout Determines the Direction Faced



The layout establishes the size of the head and the direction it faces. Ensuring that the circle and X layout clearly indicates the head's size and direction faced, even in a general sense, is more critical than drawing a precisely drawn layout.



Circle and X layouts effectively indicate the head's size and direction faced even on a small scale.



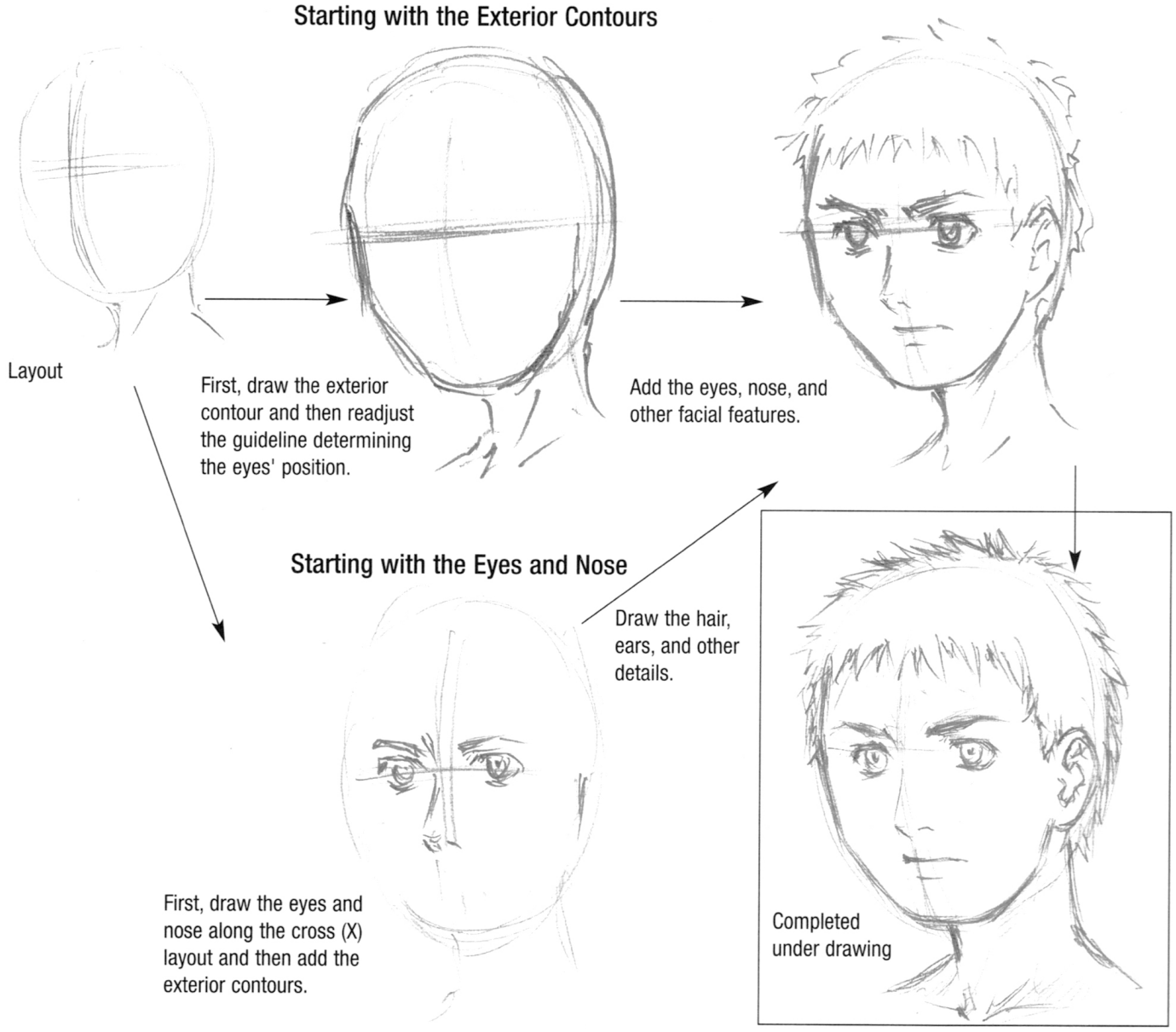
Drawings that include the body tend to be more common than those of just the face. Panels of two or more characters also frequently appear. Sketching a figure layout and then designing the panel is essential to producing a comprehensible composition.



Panel designs that incorporate figure layouts are key to determining whether the composition will work or needs tweaking.

The Steps in Drawing a Face

Once you have drawn a layout, it does not matter if you begin the formal under drawing from the outside (the exterior contours) or the inside (the facial features).



Adjusting the Shape of the Face from the Initial Layout Circle



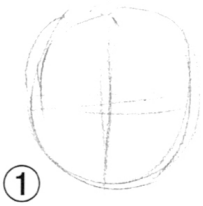
This example illustrates how to draw a character with an oblong face.

Technique A



Start with an oblong layout.

Technique B



① Start with a round layout.



② Add the chin and adjust the eyes' guideline.



③ Adjust the layout to reflect the desired face shape for the character.

Faces come in a range of shapes: circle, triangle, and rectangular. In addition to determining the character type, you as the artist must also decide what face shape to give the character. A variety of face shapes will expand your production range when it comes time to modify or design a character.

Drawing the Same Face

Drawing the Same Character from a Variety of Angles

Decide
-the silhouette line represented by the circle,
-the shapes of the eyes, nose, and other features,
-where to position the features along the cross (X), and
-the proportions
according to the individual character.



Front View
This angle constitutes the foundation for the position and size of the eyes, the volume of the hair, etc.



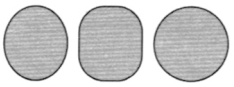
Low Angle
The layout of the head aligns almost perfectly with the hair's silhouette contour.



High Angle
The top of the head should occupy a greater portion overall than the face.

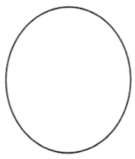


3/4 View Facing the Left
The eyes become narrower in width.



Three Common Face Layouts

Using an oval, a rectangle, or a circle for the face's layout allows the artist to produce an abundant array of character-types.



1. Oval Layout: Multipurpose



As the most common layout, the oval may be used in a wide range of characters, from ultra-stylized *manga* characters to realistic renditions.



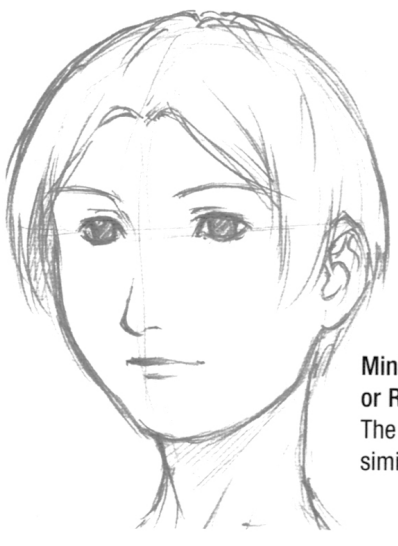
Ultra-stylized: *Manga* Character
The eyes are large and the nose is de-emphasized. The neck should be slender.





Ultra-stylized: *Anime*, Shonen Magazine Character
The eyes and nose have a definitive shape and the eyes are moderately small.





Minimally Stylized: Realism *Manga* Character or Realistically Rendered Figure
The eyes are drawn at a size proportionally similar to reality. The nostrils are included.

Assorted Oval Heads

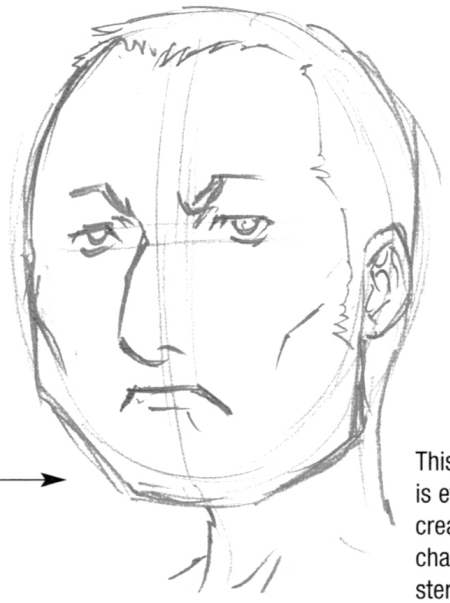


Oval Layout

Oval Layered with Additional Geometric Forms

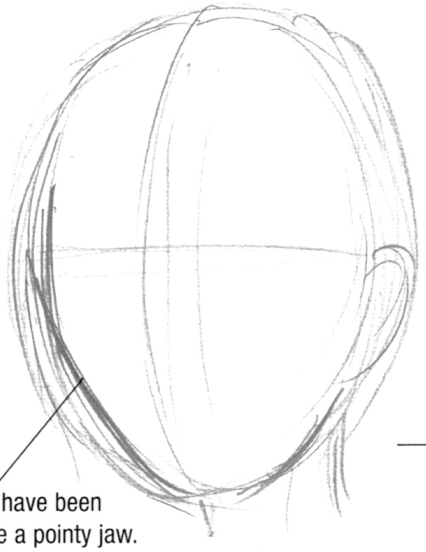


Here, a rectangular jaw was added to the original oval.



This face shape is effective for creating a character with a stern visage.

Tapered Oval

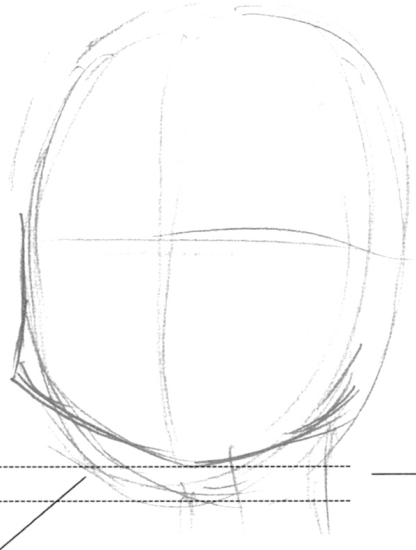


Here, parts of the oval have been whittled away to create a pointy jaw.



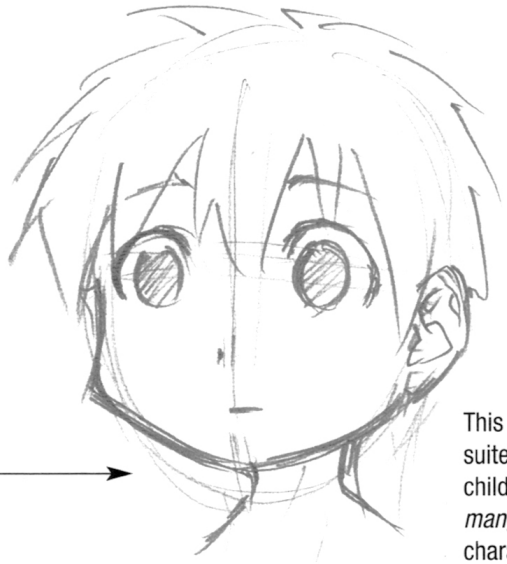
This face shape works well when creating a bony or gaunt look.

Truncated Oval



The entire face should be shorted with this face shape.

Original oval layout



This face shape is suited to creating children and *manga*-esque characters.

2. Rectangular Layout: Effective for Realistic Renditions and Large-boned Characters



Rectangular faces are suited to realistically rendered male characters (from post-adolescent males all the way to old men) and large-boned characters. Giving the character a slender neck allows the artist to create a middle-aged woman or model-esque woman with defined bone structure.

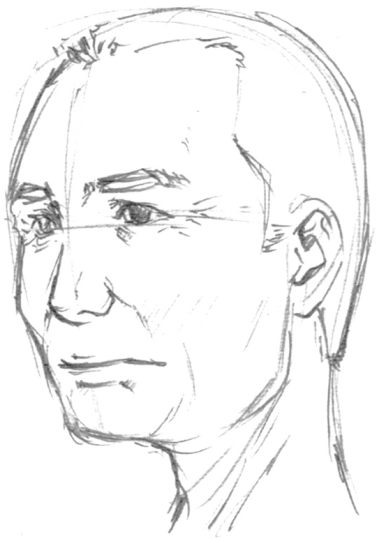
Manga-Style Character
The facial features are stylized.





Example of face with highly abstracted facial features

Realistic Renditions

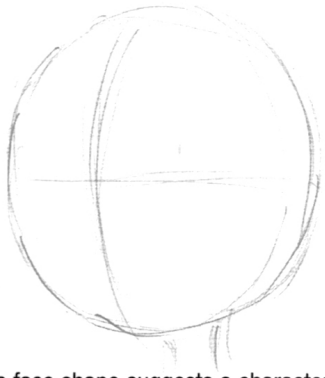








3. Round Layout: Effective for *Manga*-Style Characters



This face shape suggests a character that has been stylized right from the start with the head's silhouette. Effective with highly stylized *manga* characters, this layout is suited to roundish characters, children, and infants.

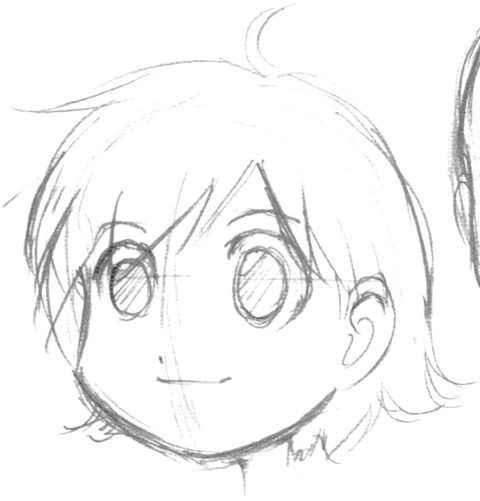


Illustration or Single Panel Composition
The eyes are dots. The nose has been omitted. The neck is exceedingly thin.



Using distorted proportioning creates a unique *manga* character.







***Manga*-Style Character**
Big eyes, a de-emphasized nose, and slender neck generate a cute, lovable look, making it an ideal style for *shonen manga*, *jido manga*, and four-panel *manga*.

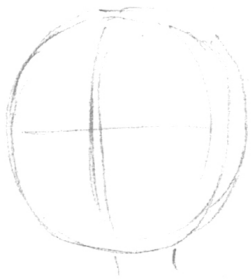


***Manga*-Style Character with a Dash of Realism**
The eyes are small and the nose has been clearly delineated. The face's proportioning is also realistic. Round layouts prove effective with chubby characters, such as this one.



Highly Realistic Toddler or Infant
Toddlers and infants have roundish heads in reality. Consequently, merely drawing realistic eyes and nose produces the appearance of a lifelike character.

Overweight Character



An almost perfectly round layout



Use an ellipse to add a sagging double chin.



Final drawing of a plump character



In the case of female characters, an almost perfectly circular layout may be used without modification to create the appearance of a chubby character. The trick is to minimize the neck.



Enlarging the eyes and giving the head a slender neck transforms the character into a child.



The same atmosphere is retained even when the eyes and mouth are made exceedingly small.



The figure should be drawn so it appears the torso comes up right to the underside of the chin. The neck should be de-emphasized.



On overweight characters, skin folds tend to form at the back of the neck.

Infants



Use a round layout for babies regardless of the angle of composition.



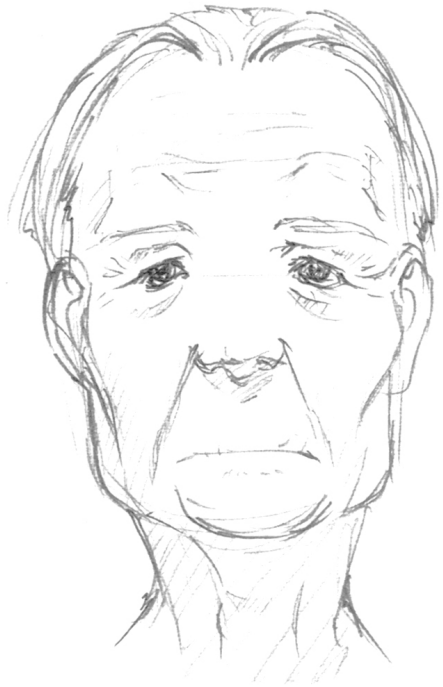


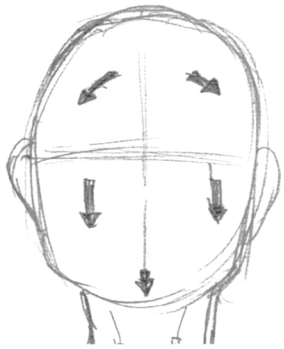




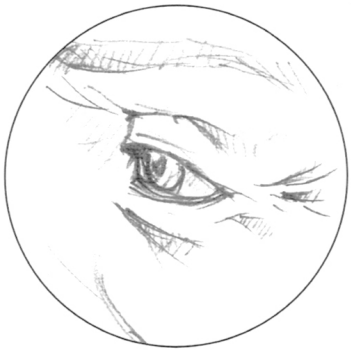


Key Points in Drawing Elderly Characters





On elderly characters, skin tends to sag in the directions the arrows indicate.



Wrinkles form at the corner of the eyes owing to sagging skin, which causes the eyes to appear smaller.



The flesh of the lower lip sags causing the distance underneath the nose to lengthen.

Using Wrinkles and Sagging Flesh at the Mouth to Portray Elderly Characters

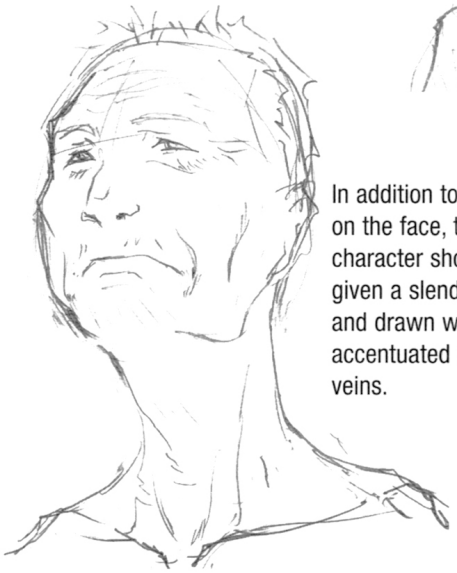




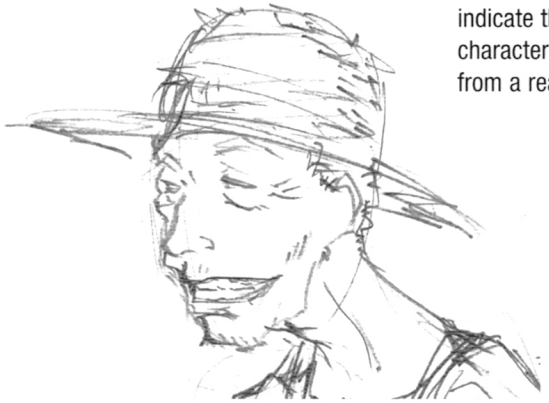




Vertical wrinkles indicate that the character is elderly even from a rear view.



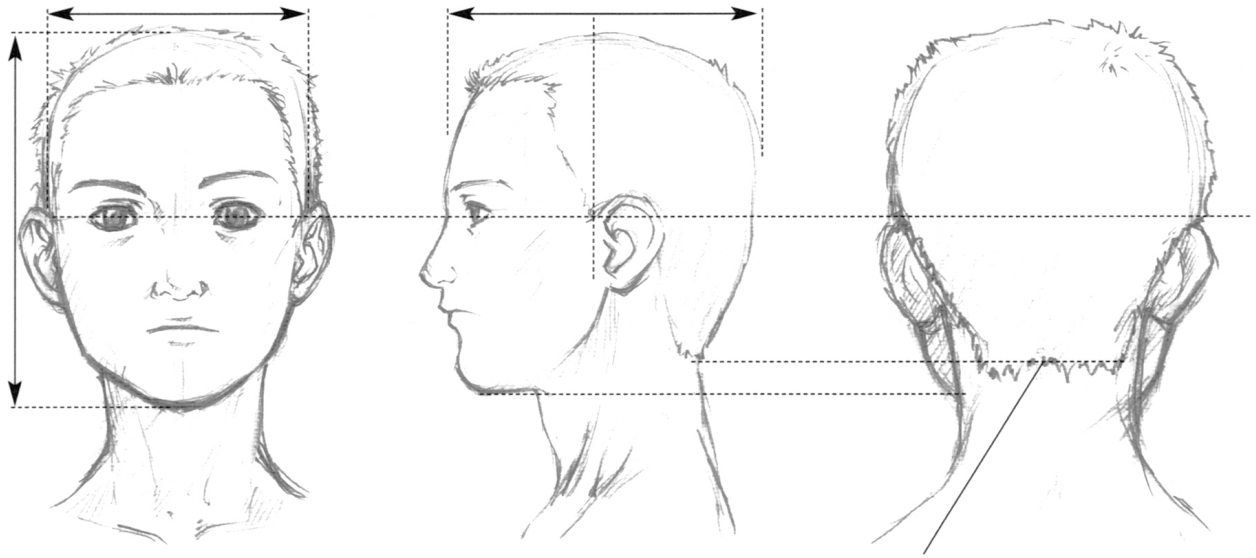
In addition to wrinkles on the face, the character should be given a slender neck and drawn with accentuated bones and veins.



The Basics in Drawing the Head

The human form lies at the very foundation of *manga* sketching. The reader should make an effort to learn the basic forms and rules in proportioning.

Conceiving of the Head as a Solid



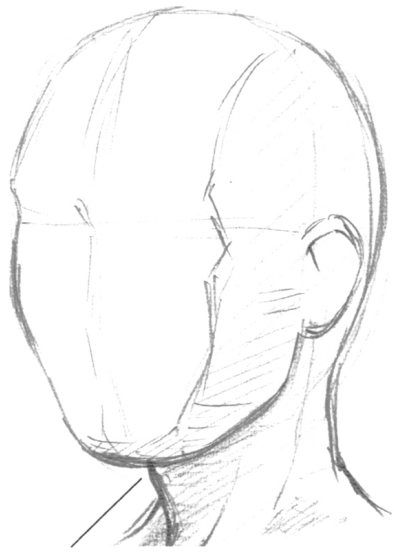
An adult's face is narrower than it is long.

In profile, the distance from the forehead to the back of the head is longer than the head's width when viewed from the front.

The hairline at the back of the neck should fall below that of the chin.

The Head's Contours

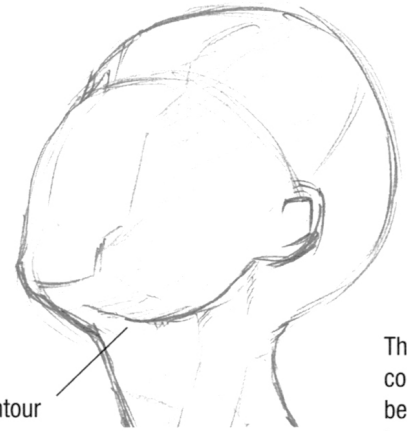
3/4 View Facing the Left



Note where the neck's contour meets the underside of the chin.

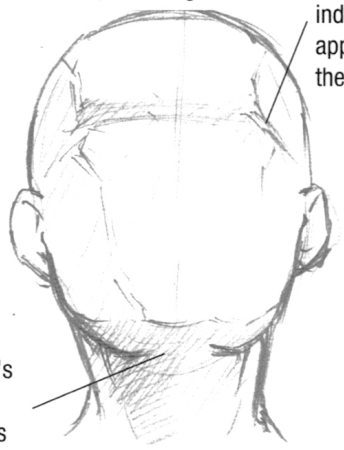
Shading the underside of the jaw and the side of the face creates the appearance of a solid.

3/4 View Facing the Left ; Low Angle



Jaw contour

Front View; Low Angle



An indentation appears at the eyes.

The jaw's contour becomes longer.

3/4 View Facing the Left; High Angle



Drawing a cross on the head's crown will make it easier to proportion the head correctly.

3/4 Rear View; Level Angle

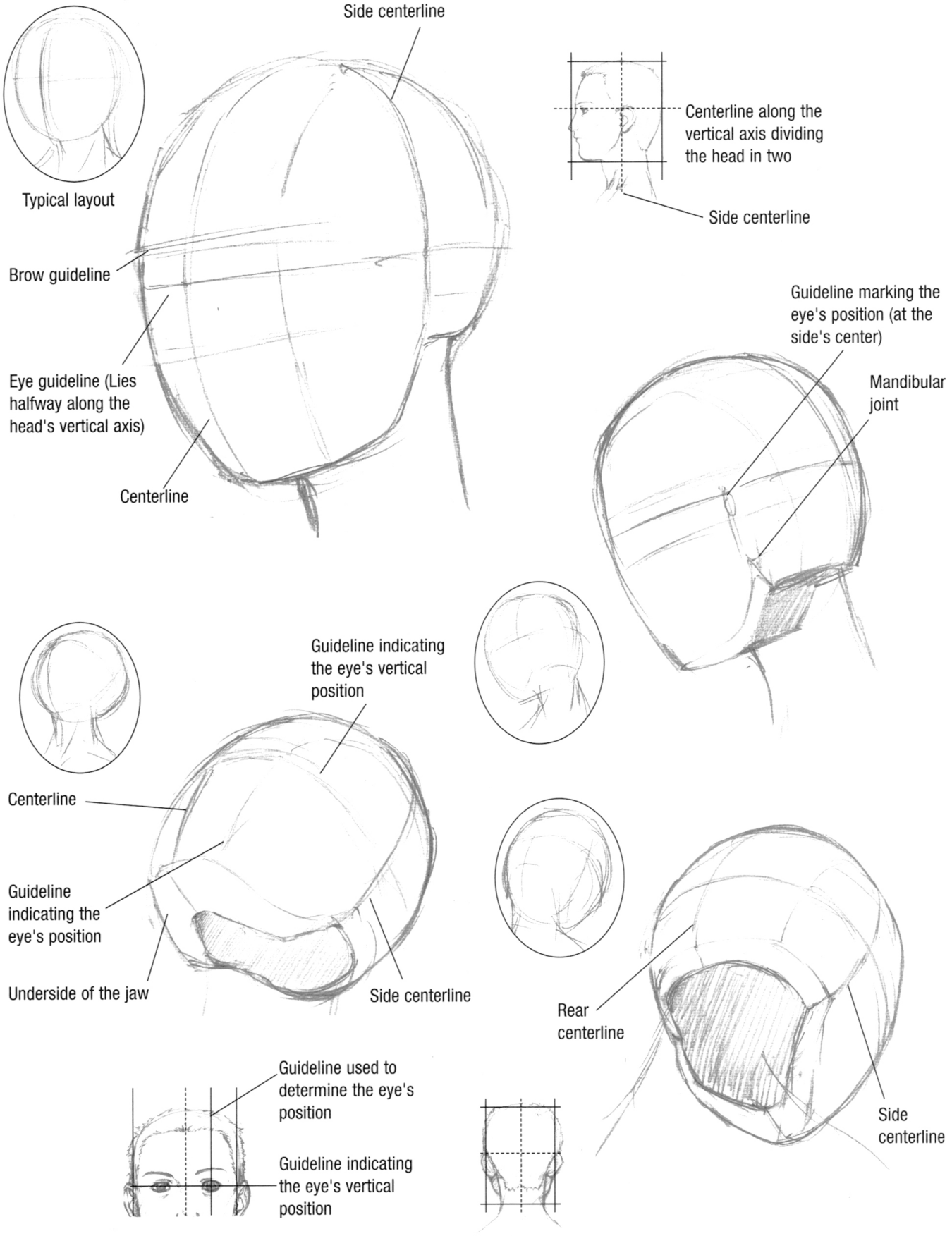


Drawing this contour indicating where the head meets the neck helps to give the head a sense of three-dimensionality.

Layouts Reflecting Solids

Layouts this involved are rarely used in the drawing process. However, artists should always maintain awareness that the head is proportioned as shown below.

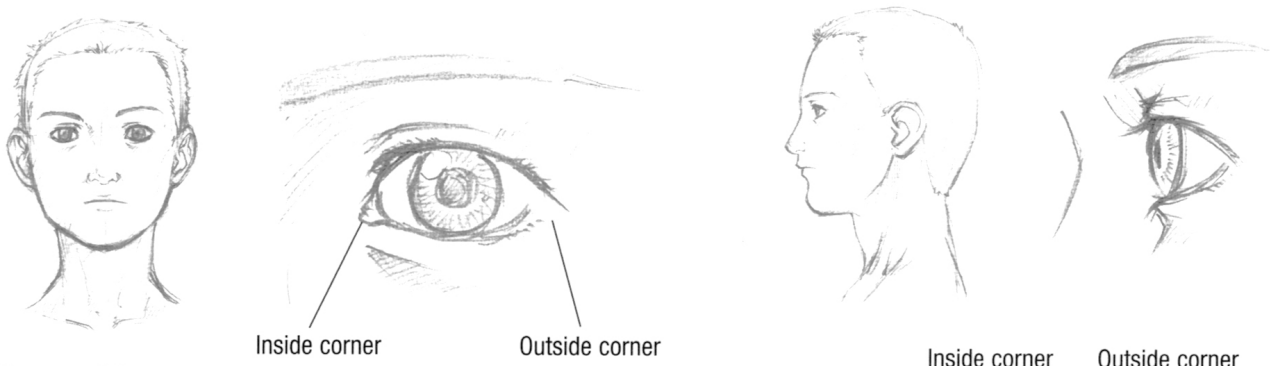
Layouts Taking into Account Three-Dimensionality

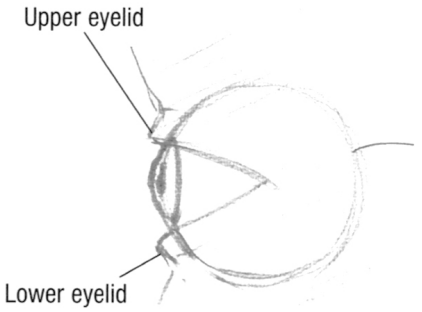


The Basics in Drawing the Head

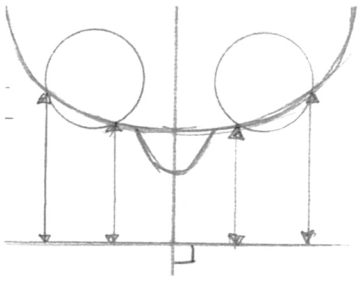
The face comprises gently curved surfaces. The eyes, nose, and mouth all rest on curved surfaces.

Using the Eyelid's Curved Contour to Create the Illusion of a Spherical Eye

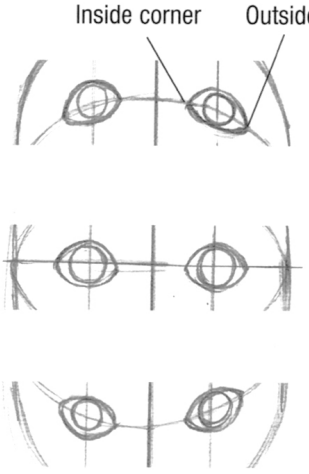




The eye is a sphere. The eyelid is a piece of skin covering a curved surface. Consequently, rendering the eyelid as a curved line suggests the roundness of the eye.



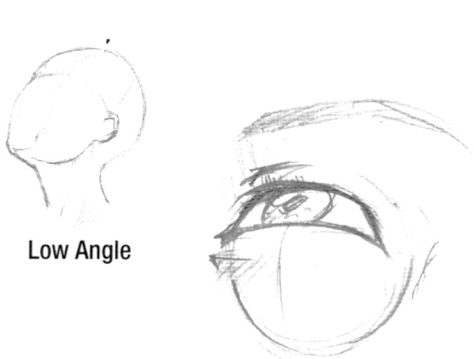
The eyeballs sit inside sockets, which are openings on a curved surface. Because this surface is curved, the eyes' exterior contours change according to whether they are drawn from a front, low, or high angle.



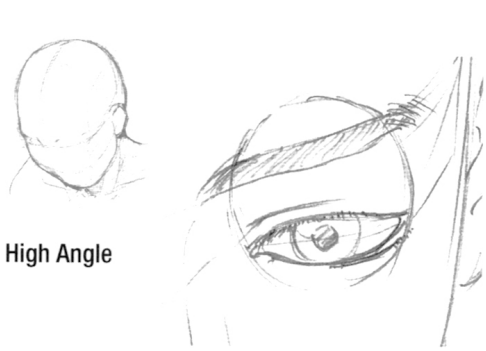
From a low angle, the eyes' outside corners lower, creating the look of downward sloping eyes.

Normally, both the inside and outside corners of the eyes would be parallel.

From a high angle, the eyes' outside corners rise, creating the look of upward slanting eyes.



The contours of both the upper and lower eyelids form similar bowlike shapes.



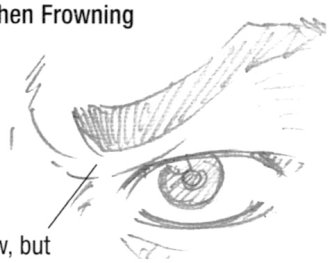
The upper eyelid's contour forms a gentle "S" curve.

Leaving a Gap between the Eyebrow and Eye

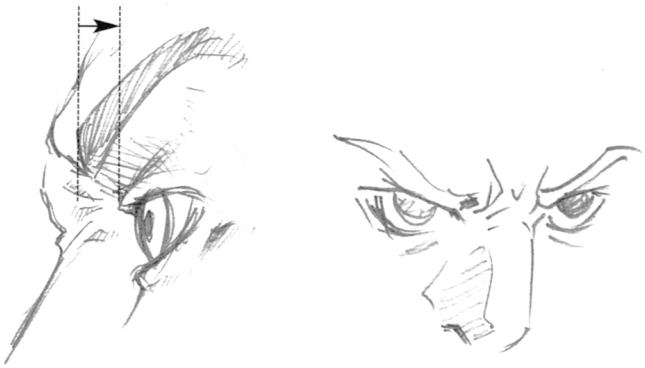


Eyes with the eyebrows attached to the eyelids

Actual Appearance of the Eye When Frowning

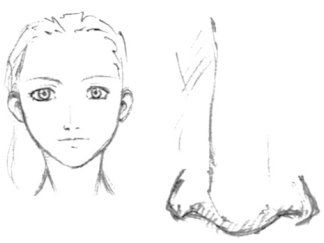


The flesh does furrow, but this does not cause the eyebrow to touch the eye.

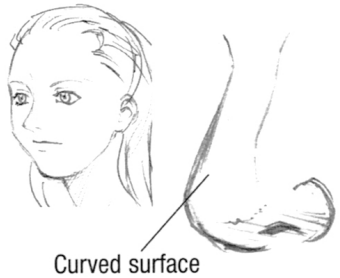


The eye is actually set deeper than the eyebrow, so, the eyebrow and eyelid should be drawn touching when composing from a moderately high angle.

The Nose as a Protuberance in the Face's Center



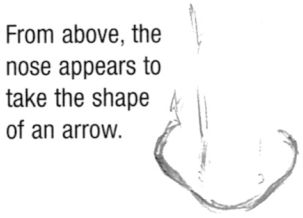
The nostrils are still visible from a front view.



Curved surface



The nose's tip is not pointed.



From above, the nose appears to take the shape of an arrow.



The lower portion of the nose forms a trapezoid.

Common Nose Renditions



The nose rendered solely as nostrils



The tip of the nose and nostrils





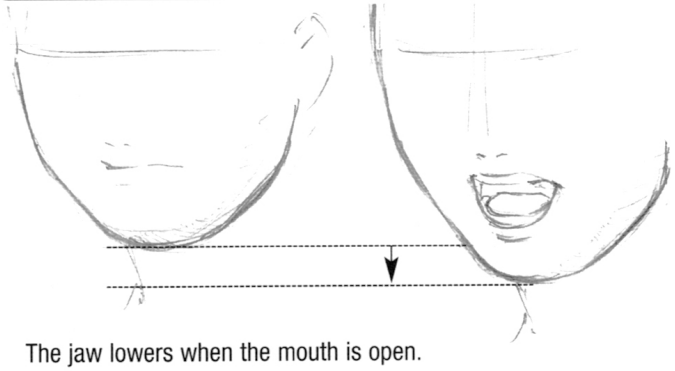
When creating a realistic rendition, give the nose a rounded tip. In the case of a *manga*-esque character, the nose's tip may be pointed.





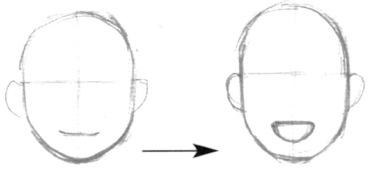
When composing from a 3/4, low angle view, draw the contour defining the bridge of the nose sloping from the brow between the eyes to the tip of the nose. When composing from a front, low angle view, include the underside of the nose.

Using the Lower Jaw to Define the Mouth



The jaw lowers when the mouth is open.

The Changing Jaw Line When the Mouth Is Open



Rounded jaw

Rounded jaw

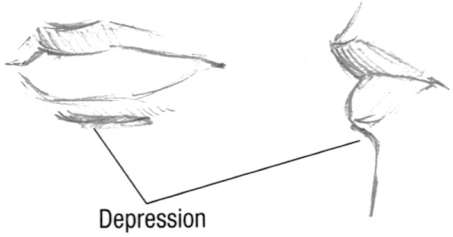
Incorrect
Here, the mouth is open, but the jaw line did not change shape.



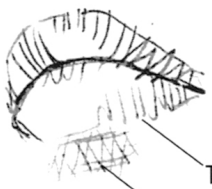
The jaw line becomes slightly narrowed.

Correct
In this figure, the mouth is open, causing the jaw line to change shape. The chin narrows.

The Contour Defining the Dip underneath the Lower Lip



Depression



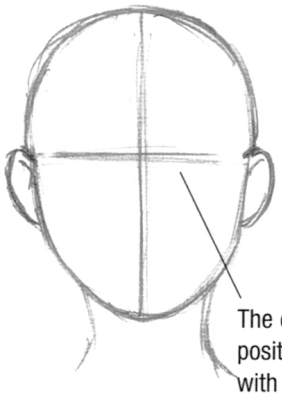
The lower lip's contour

Depression

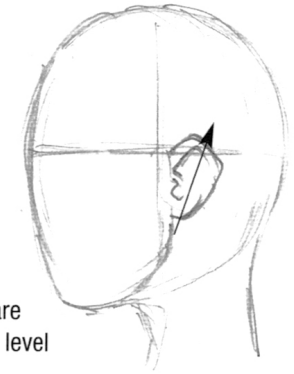
Drawing an Angled Elliptical Layout of the Ear

Unlike the other facial features, the ears are not located on the front of the face. Conceive of the ears as protuberances jutting out from the sides of the head.

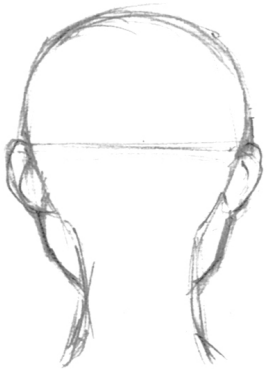
Positioning the Ears

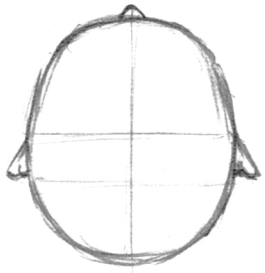


The ears are positioned level with brow.



The base of the ear, which attaches to the head lies at an oblique angle.





Overhead view

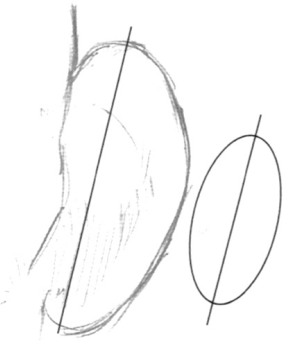
Ear Layout Shapes



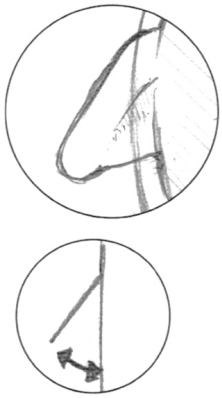
Use an obliquely angled ellipse when composing from a front view.



The ear is only seen straight on from a profile view of the head.



This is a rounder ellipse than that used for the front view. The angle is also not as vertical.



Guideline denoting the angle at which the ear protrudes from the head.

Correct



The back of the ear becomes visible from a 3/4 rear view.

Common Pitfalls

Incorrect



The shape of the ear drawn here is too similar to that composed from a front view of the head.

Incorrect



The ear drawn here is that composed from a straight-on rear view.

Common Ear Renditions



Realistic

Manga-esque

The Face's Musculature and Expressions

The next few pages cover the natural depressions and protuberances in the human skull and the facial expressions created by the face's muscles.

Learning from the Musculature

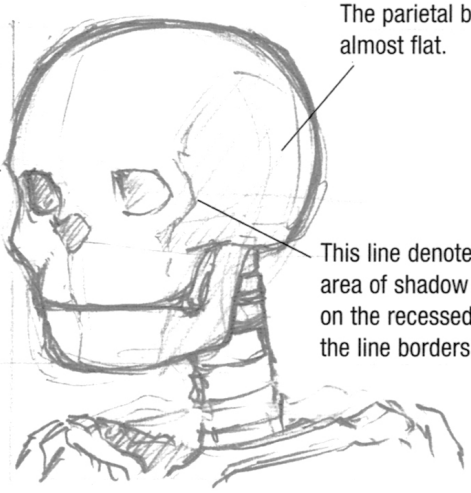
The supraorbital process (brow) juts out above the eye socket.

Zygomatic bone (cheekbone)

Make an effort to master the basic recesses and protuberances of the three-dimensional skull.

The parietal bone is almost flat.

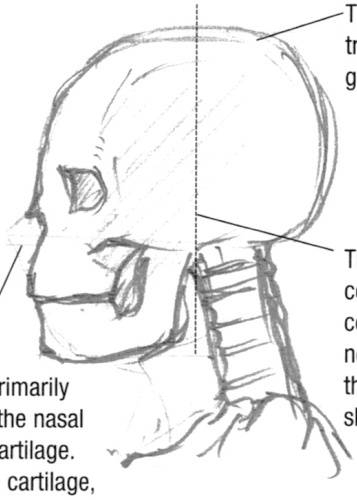
This line denotes an area of shadow formed on the recessed region the line borders.



The top of the head traces an almost flat, gently curving arc.

This denotes the side centerline. The cervical vertebrae or neck bones attach to the rear half of the skull.

The nose primarily comprises the nasal bone and cartilage. Without the cartilage, the skull underneath is recessed.



Primary Facial Muscles

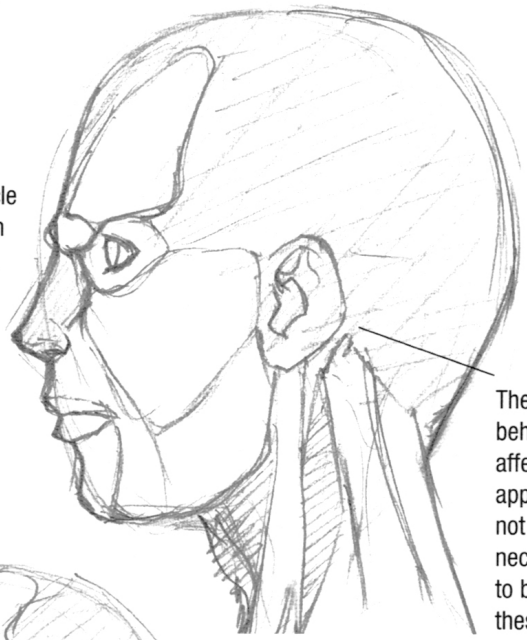
The muscles around the eyes, the forehead (the region above the eyes), around the mouth, and the jaw generate facial expressions.

Note that the hatched region denotes a portion of the skull that does not move.

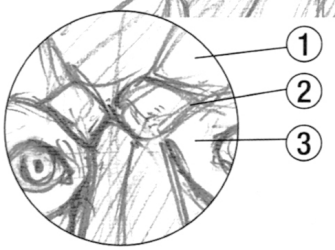
The white regions denote areas of muscle related to the creation of facial expressions.

Line denoting a boundary between muscles





There are also muscles behind the ears that affect the face's appearance, but it is not particularly necessary for an artist to be concerned with these muscles.



The brow between the eyes comprises three muscles connected to the eyes and to the forehead, giving rise to intricate furrows, creases, and wrinkles.

Multiple muscles at the side of the cheek wrap around to attach underneath the jaw. The jaw's motion pulls at the facial muscles.



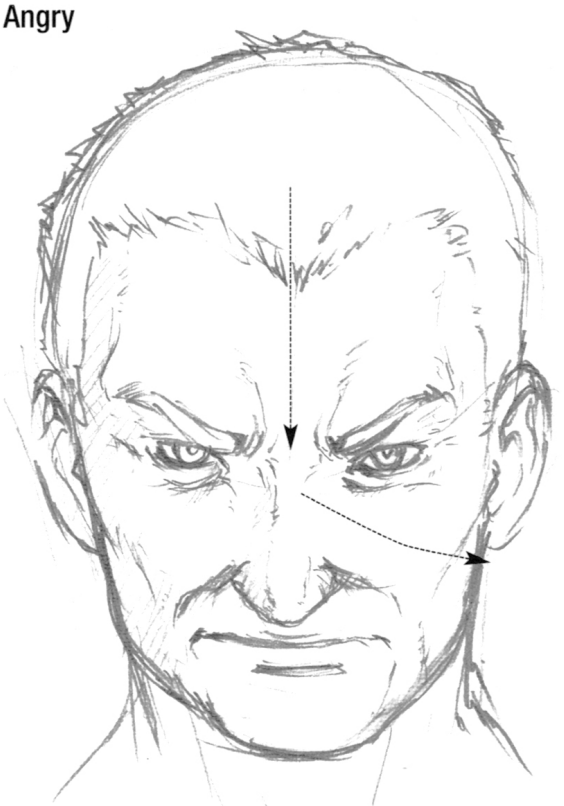


Ref. Fig. Rear view

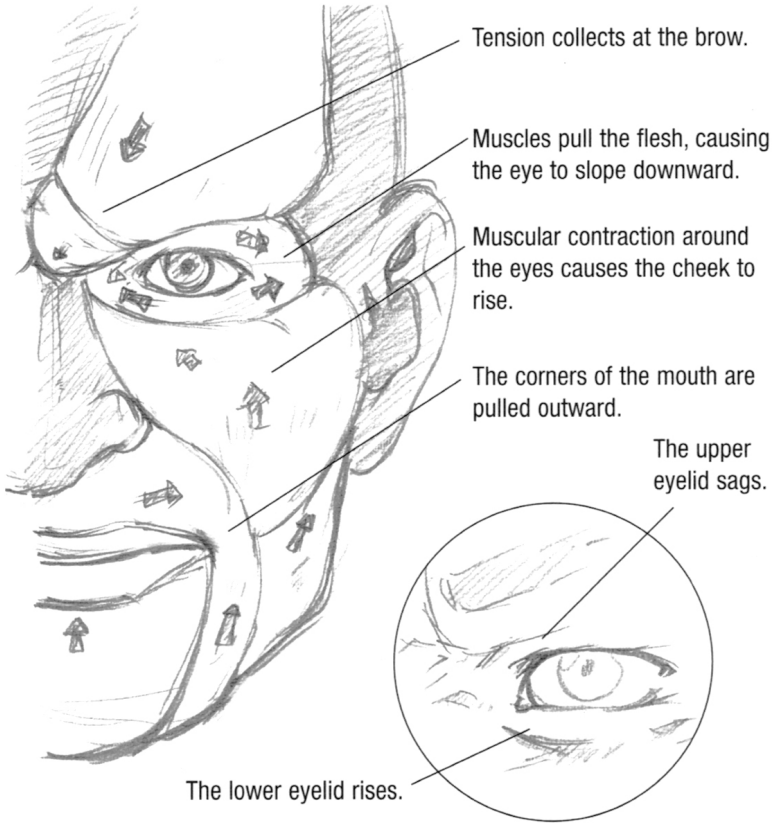
Drawing Facial Expressions Based on Muscle Movement

The motion caused by muscular expansion and contraction creates our facial expressions. It also causes bulges or mounds in the flesh as well as wrinkles and creases. These should be rendered using hatching or contour lines, giving variation to a character's expression.

Angry



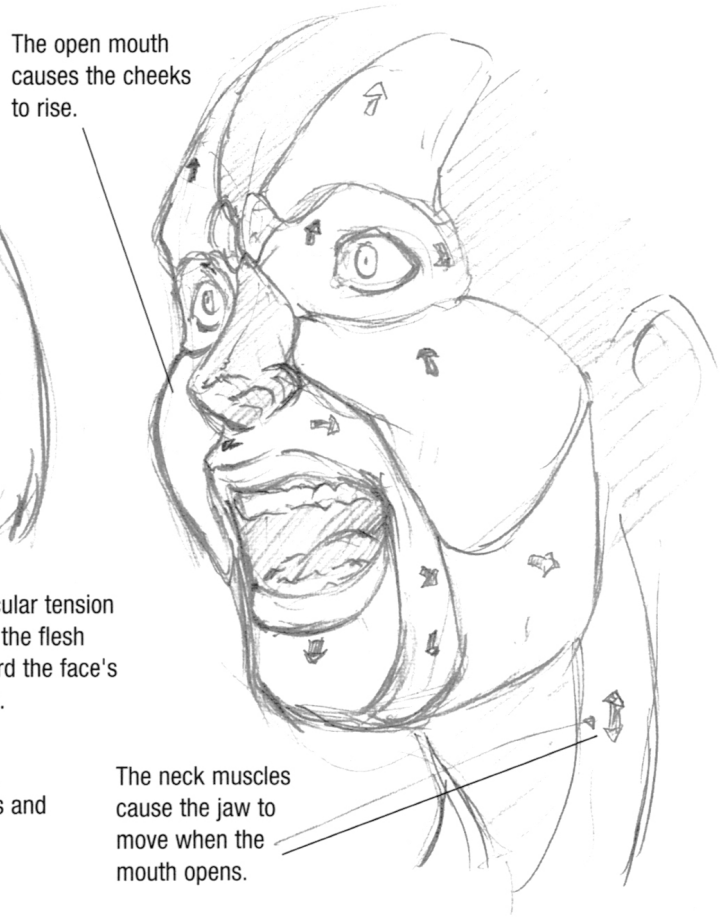
The center of the face (brow) tenses, while muscular contraction becomes directed from the nose to the face's side.



Laughing

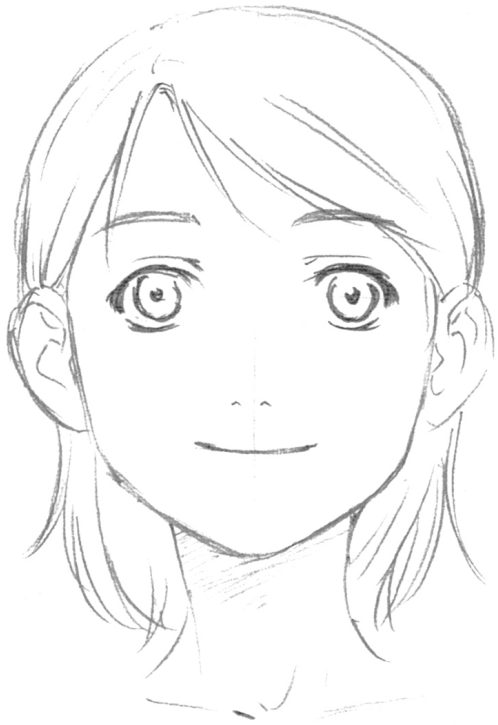


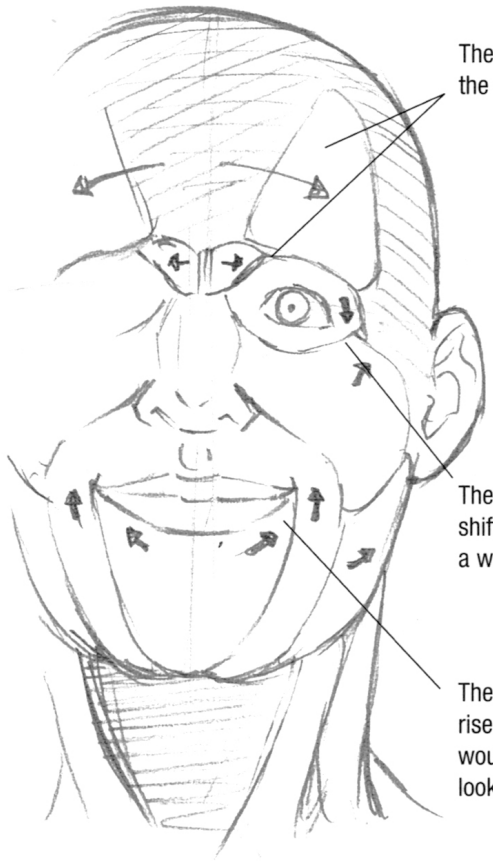
Muscular tension pulls the flesh toward the face's sides.



When drawing even a character stylized in a *manga* manner, maintain awareness of the direction of muscular contractions and where the muscles bunch when the face smiles. A dynamic character will result.

Smiling with the Mouth Closed





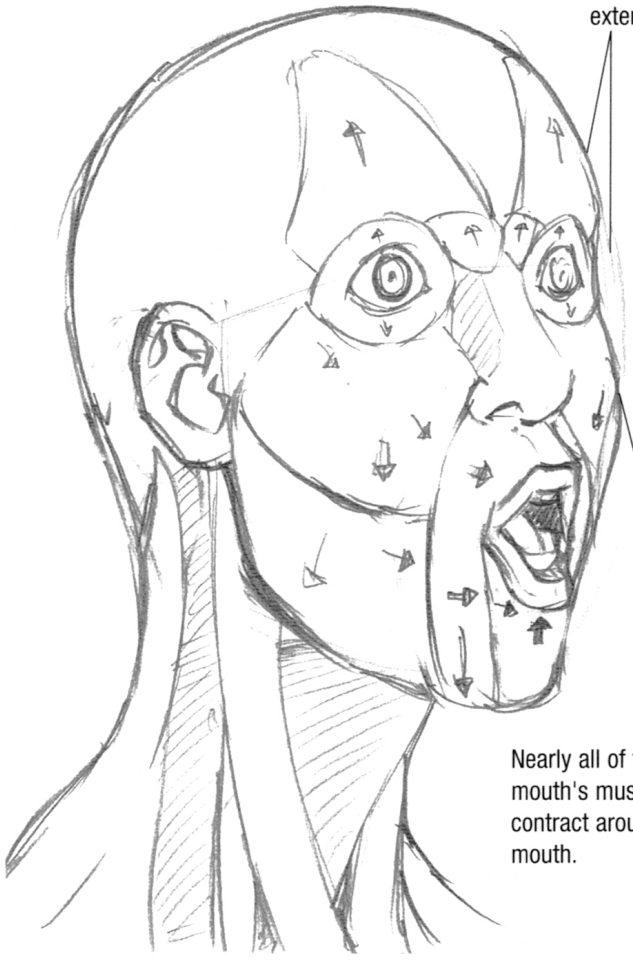
The brow relaxes, drawing the flesh outward.

The corners of the eyes shift downward, generating a warm expression.

The corners of the mouth rise equally. A lopsided grin would result in a sardonic look.

Surprised





The muscles above and below the eye's center extend, opening the eyes.

The cheeks do not rise when the mouth forms an "O".

Nearly all of the mouth's muscles contract around the mouth.





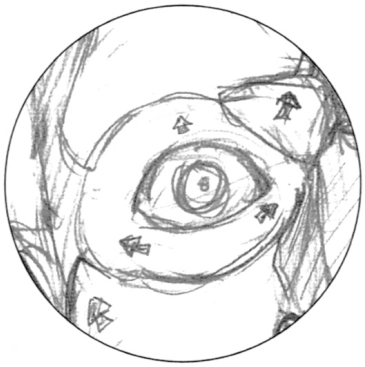
The eyes do not form an upside-down V when closed.



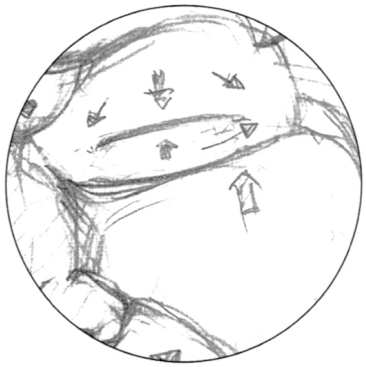
Winking is occasionally abstracted or symbolized in *manga* using an upside-down V.



The head is tilted by contraction of the neck muscles.



When winking, effort must be expended to keep the other eye open. The muscles underneath the eye contract toward the left and right, while the upper eyelid is pulled upward.



Shutting an eye involves not only the eyelids. The muscles in the cheeks and nose bunch into mounds accompanying this movement.



When smiling, the direction of tension follows a radial projection with the corners of the mouth as the centers. The nostrils also expand owing to the movements of the mouth's muscles.

Chapter 3
The Fundamentals in Drawing a Figure *Manga*-Style



Artists use a variety of angles and movements to dramatize *manga* and *anime* characters. Often an artist is required to make a realistic character perform like a character in a movie as the plot or production demands.

Artists need to learn basic human skeletal structure, musculature, how the bones and muscles affect the figure as a solid, and how they move. However, strict attention to anatomy or locomotion does not readily lend itself artwork production.

This chapter contains an overview of key points in human skeletal structure, musculature, and movement that are pertinent to cultivating drawing skills in a context dedicated to artwork production. The reader should make an effort to acquire the specific knowledge forming the foundation to artwork production and master drawing techniques.

The Backbone Forms the Base of Composition

The spine is like a column that originates at the head, extends through the torso, including the waist, and ends at the pelvis. The spine, which runs along the figure's center, supports the body, and movement in the entire body expands from the spine. Taking care to compose the figure's motions around the spine will allow you to create characters with a sense of presence.

Even lizards who are unable to sit erect have spines.

The Spine as the Figure's Centerline

When standing at an angle, the spine takes on an "S" curve.

The spine's presence is difficult to detect from a front view. The spine runs along the body's center. Try drawing figures from the rear to learn to conceive of the spine as the body's centerline.

In a layout, the spine becomes the back's centerline.

The Spine as the Torso

In these diagrammatic studies of poses, the torso is represented symbolically in stick form by the spine. The spine appears as a straightforward representation in simplified, abstracted figures.

The Backbone Travels the Length of the Torso

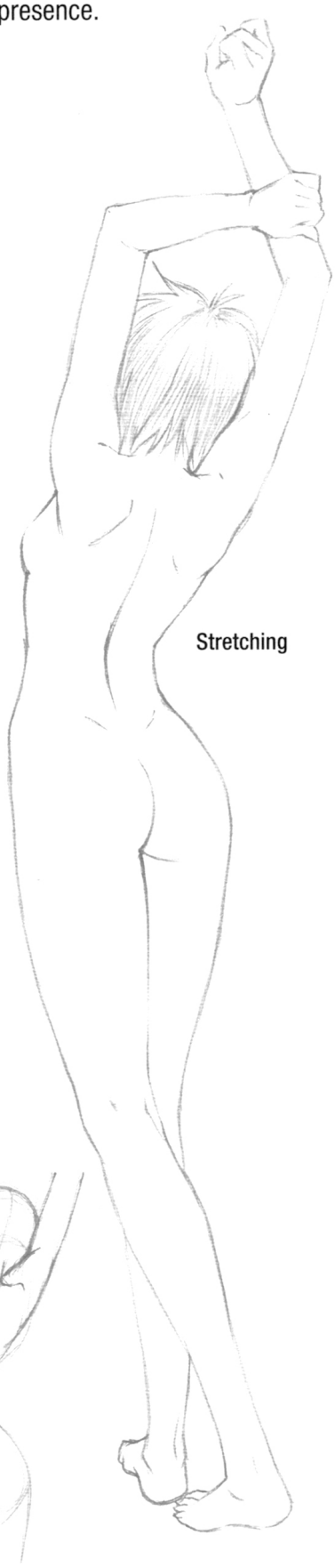
Showing consideration of the spine when drawing even an unaffected pose allows you, the artist, to imbue your character with a sense of presence.

Sitting and Looking Back



Maintain consciousness of the spine as an "S" curve. The "S" curve becomes even more pronounced when the character looks back or makes another such twisting motion.





Stretching

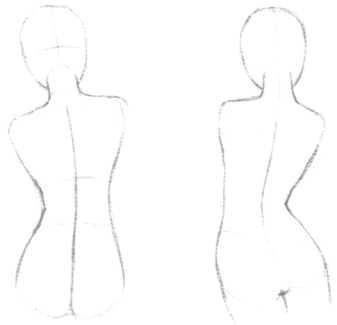
Straight-on, Rear View



Sitting While Grasping the Knees



Use a moderately arced line to define a gently curved back.



From a straight-on, back view the spine traces a sinuous "S" curve through the torso's center.



Humans rarely adopt a perfectly straight, upright posture. When showing the figure adopting a natural, leaning position, rendering the spine's layout as an "S" or sideways "V" will facilitate drawing the pose.

The Backbone Is the Source of Movement

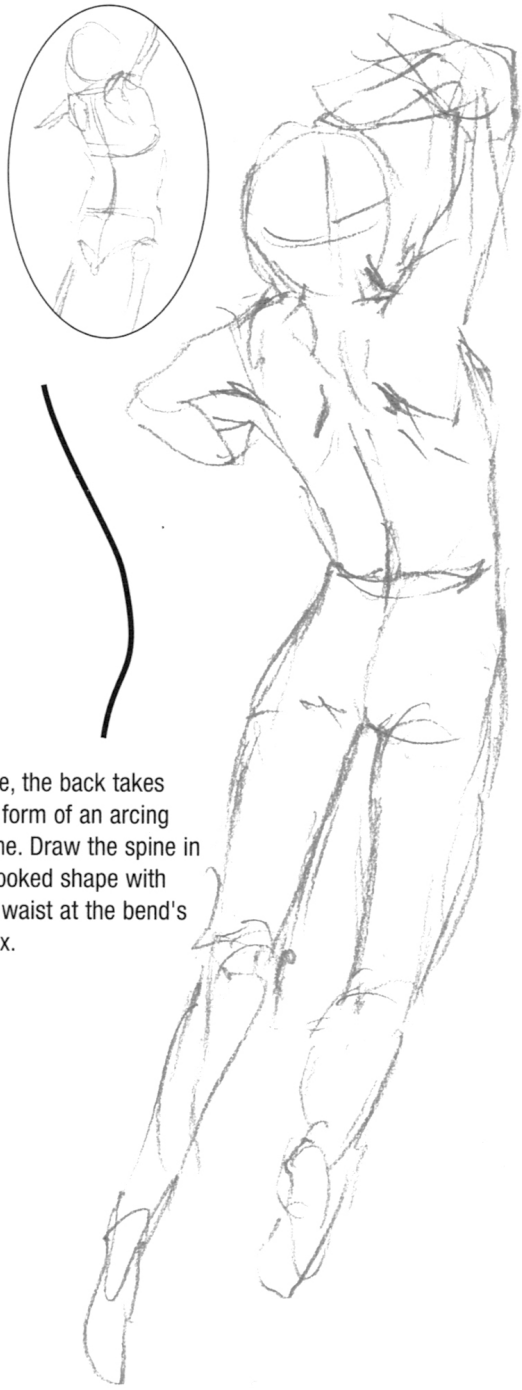
The spine plays a key role in portrayal of three motions: bending, stretching, and twisting.

Bending, Leaning Forward



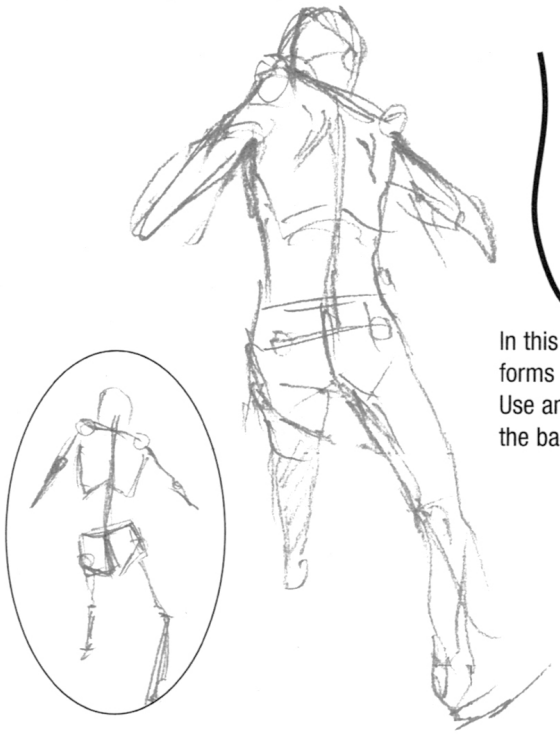
Render the spine as a gently curving arc when drawing a rounded back, as seen in this pose.

Stretching, Leaning Back



Here, the back takes the form of an arcing plane. Draw the spine in a hooked shape with the waist at the bend's apex.

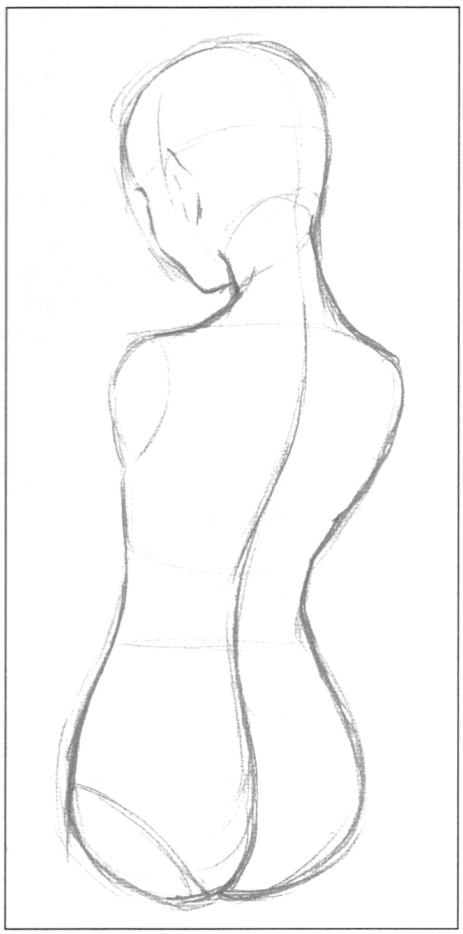
Twisting, Turning



In this pose, the back forms a twisted surface. Use an "S" curve for the backbone.

Adding Arms and Legs after Completing the Torso

Once you have drawn the head and the torso, simply adding the arms and legs allows you to create a wide range of poses.



Adding arms and legs to the basic head and torso layout pictured above allows you easily to create a standing or seated figure.

Standing

Pointing

Seated

Walking

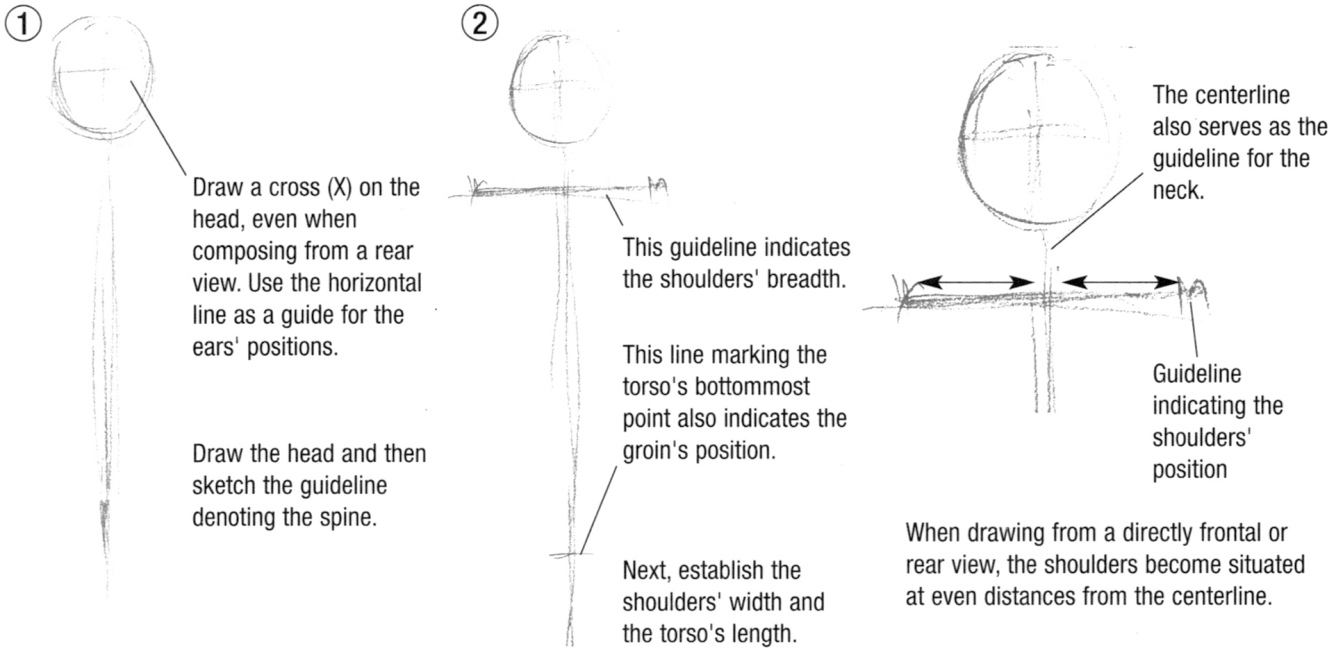
Kneeling with the Body Held Erect

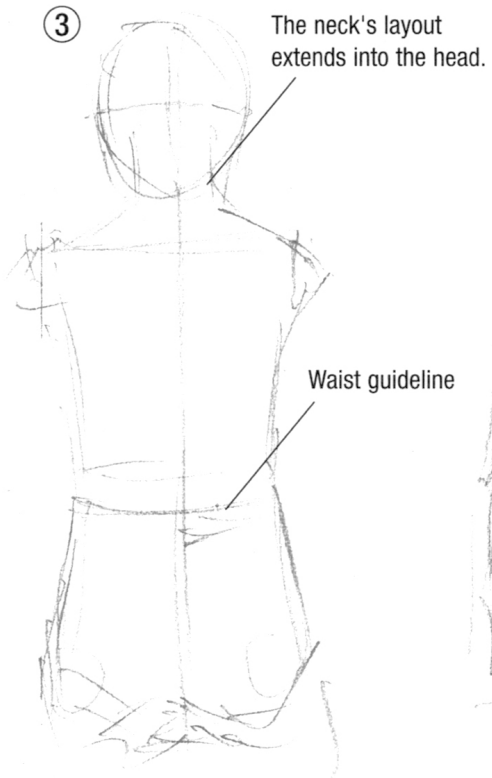
Take careful note of the angles of the shoulders and pelvis when drawing the arms and legs. Moderately adjusting the torso according to the arms and legs will consistently allow you to produce appealing poses.

The Steps in Drawing a Figure

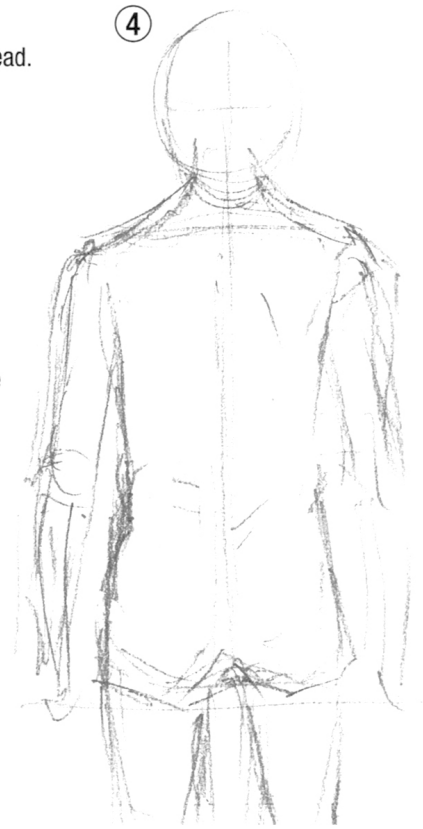
Whenever drawing a figure, first determine the centerline's appearance. Since the back contains what is the body's natural centerline, these steps show how to draw the figure maintaining awareness of the spine.

The Figure from Behind

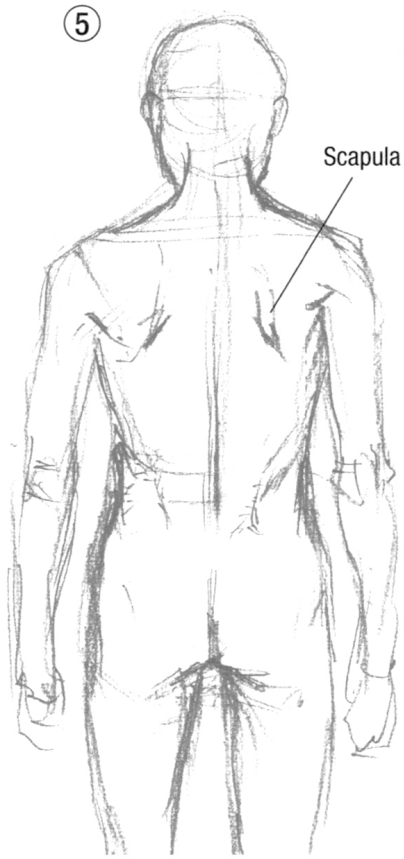




Sketch the layout for the overall torso while balancing the right and left sides. The arms and legs are not yet added at this point.



Once the torso, including the neck and shoulders, has finished taking shape, sketch layouts for the arms and legs.



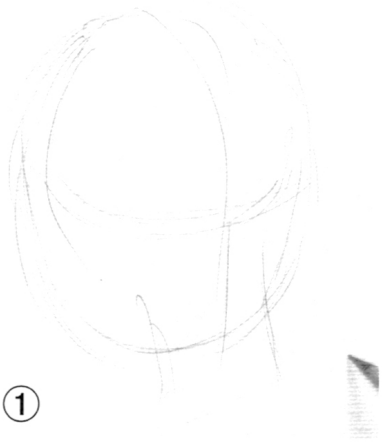
Adjust the contours and add the scapulae and other details to complete the under drawing.

Viewed from a Moderately High Angle

Undulations in the torso's contours appear when drawing a figure from a moderately high angle, making curved lines essential to the drawing. Below is an actual example of using a layout with an "S" curved spine.

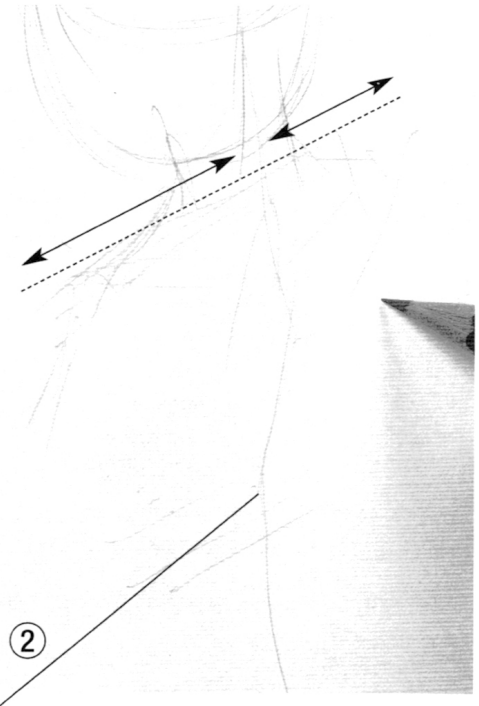


Sketching the Layout



①

Roundness of the head (which imparts a sense of volume) is vital. In order to ensure that the overhead angle is easy to capture visually, first sketch a circle-and-X layout of the head, adhering to the head's rounded surface, and then draw a layout of the neck.



②

Use the top of the arc of the "S" curve as a guide for the waist.

Use an extremely light line to sketch an "S" curve spine guide. Next, draw the shoulder guideline at an oblique angle. Note that the shoulders should not be equidistantly spaced from the spine.



③

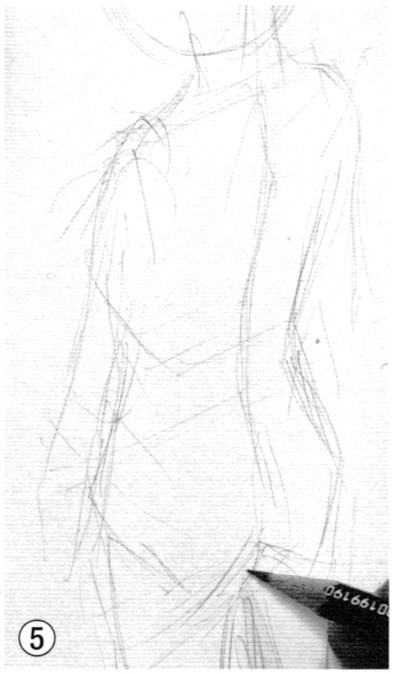
Draw the torso's layout, including the exterior contours. This angle of composition accentuates the tapering at the waist and the swelling of the buttocks, requiring a sideways "V" shaped curve for the spine.

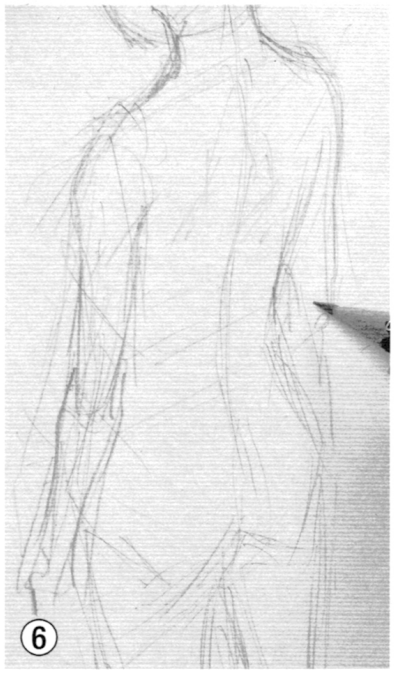


④

Adjust the torso's contours while emphasizing the line of the spine.

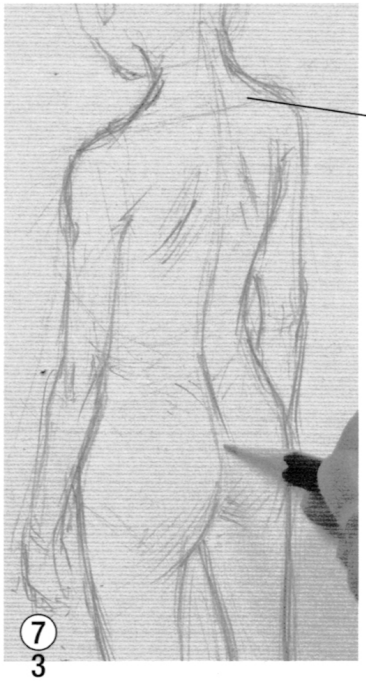
Drawing lines at the side makes it easier to determine the torso's thickness.





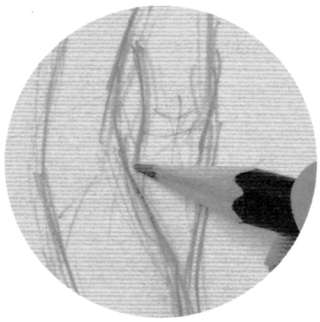
Once the torso's form has been captured satisfactorily, then go ahead and add layout for the arms and legs.

Adjusting the Contours and Adding the Details to Finish

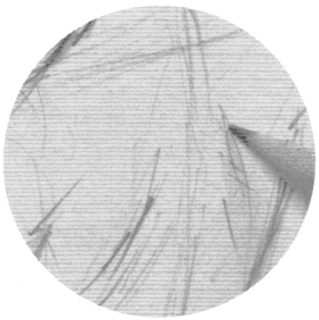


Continue to complete the entire figure while drawing light guidelines to ensure proper balance and proportioning.

Emphasizing the spine, especially at the waist, gives the figure a clearer sense of three-dimensionality.



The exterior contour from the waist to the pelvis is a relatively straight line, contrasting with the roundness of the posterior.



Apply shadows in an inverted "V" shape to portray the protruding scapulae.



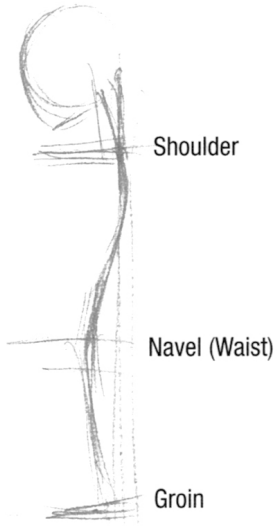
Completed Sketch

Add layouts for the chest and the pelvis over the "S" curved spine to capture the figure's overall form.

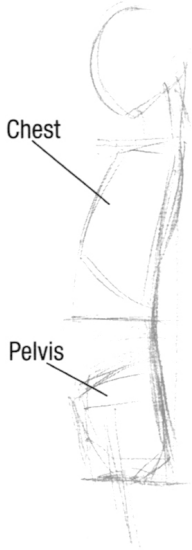
The Essentials in Capturing the Form



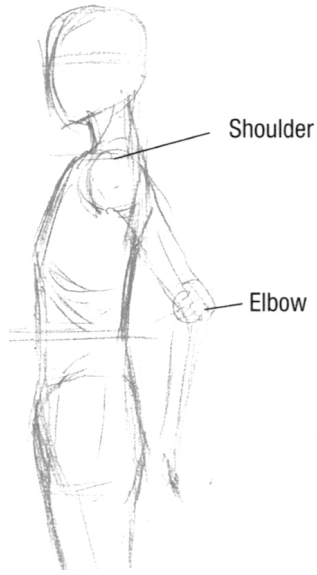
① Use a circle for the head's layout in profile as you would for a front view.



② Establish the positions of the shoulder, navel, and groin and draw an "S" shaped guideline denoting the spine.

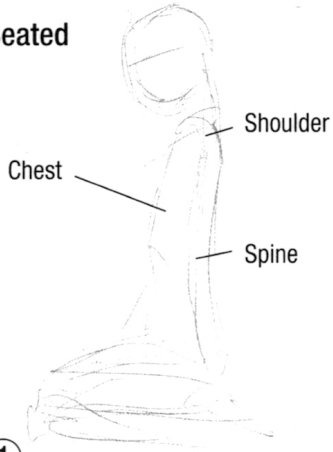


③ Add in layouts for the chest and pelvis.



④ While capturing the torso's overall shape, add layouts for the shoulder and elbow. Adjust the shape of the head.

Seated



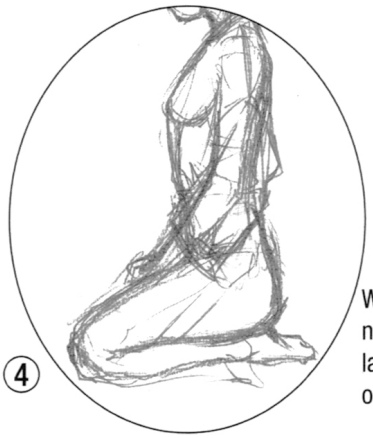
① Sketch the head and torso's exterior contours and the spine's guideline. Omit the pelvis's layout, but add a layout capturing the leg's form.



② Adjust the shapes of the head and chest while cleaning up the exterior contours of the figure overall.



③ For the figure above, the face, hair, breast, and other details were added next, thus completing the nude under drawing.



④ When adding clothes, use a nude under drawing as the layout and draw the clothes on top of the figure.

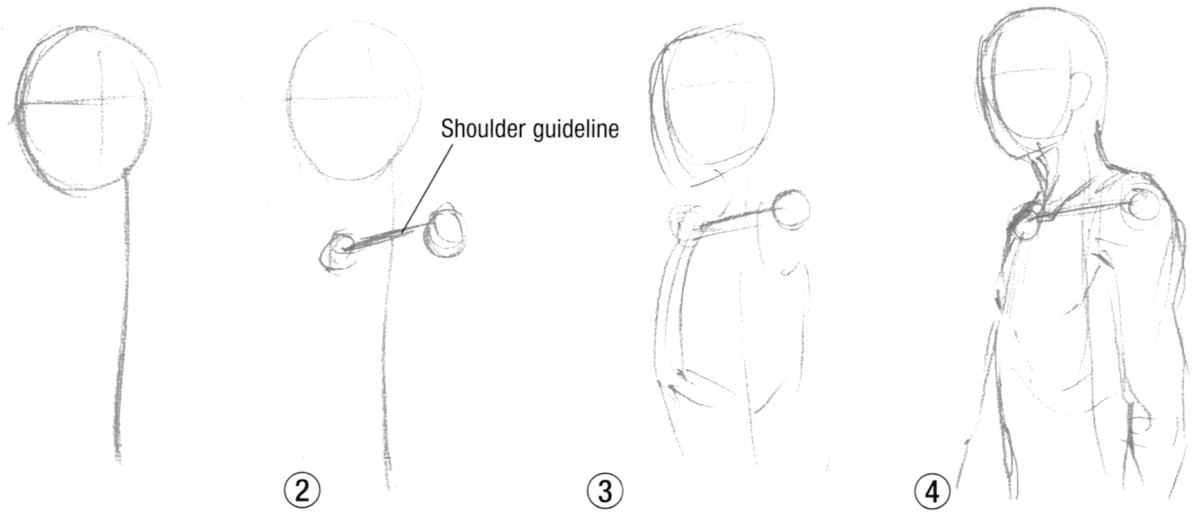


⑤ Completed Dressed Under Drawing (Wearing a Kimono)

3/4 View

In this view, the "S" curve of the spine forms a gentle sinuous line. Establish the position and length of the shoulder guideline.

The Essentials in Capturing the Form



① First draw the head layout and spine guideline.

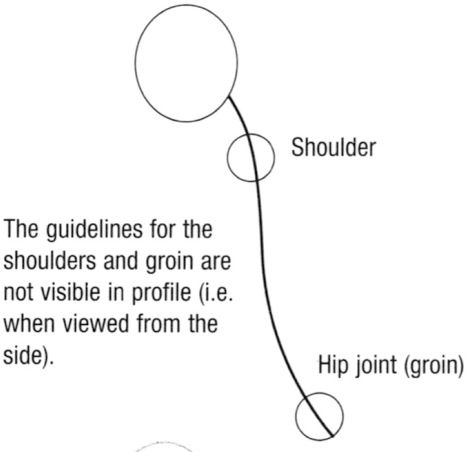
② Decide temporarily where to position the shoulders and draw the shoulder guideline.

③ Draw the torso's layout and adjust the shape of the head.

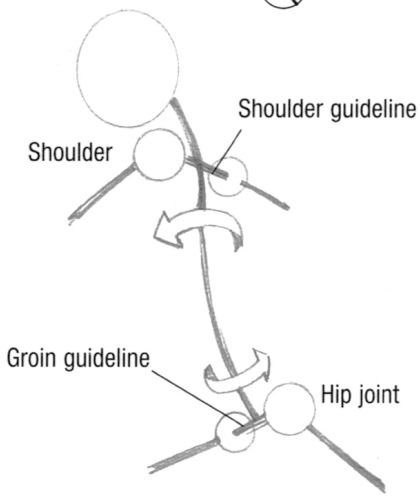
④ Draw the arms and adjust the contours.

Ref. Fig.: Running





The guidelines for the shoulders and groin are not visible in profile (i.e. when viewed from the side).



Using the spine guideline to draw the shoulder and groin guidelines will clarify the positions of the near and far shoulders as well as the positions of the legs. In turn, this will make the twisting motion easier to capture.

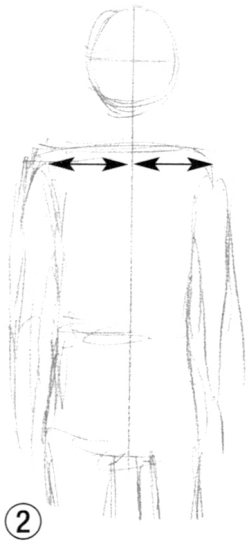
Front View

The spine is straight as when drawing a back view; however, it is completely obscured in the front view. The centerline passing through the front of the figure is known as the "median" or "axial line."



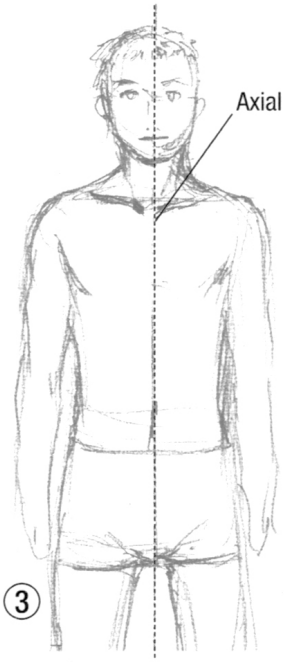
①

Pay attention to balancing in terms of the right and left shoulders and the torso's width when drawing the torso's layout.



②

Layout showing major exterior contours



③

Adding the axial line will immediately clarify whether or not the two sides are balanced.

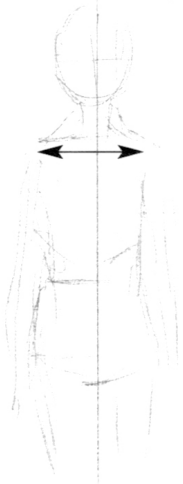


④ Completed under drawing

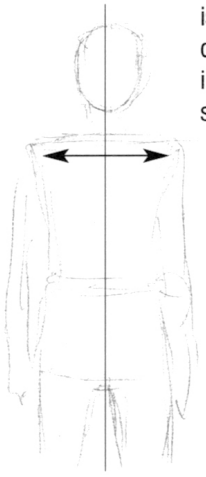
Noting Differences in Figures' Breadth

An artist rarely is called upon to draw a figure standing in a stiff, bolt-upright position. However, when the artist is designing characters and seeks to identify differences in body types, drawing the figures standing in a bolt upright, frontal pose will clarify differences in shoulder breadth or the torso's width or thickness.

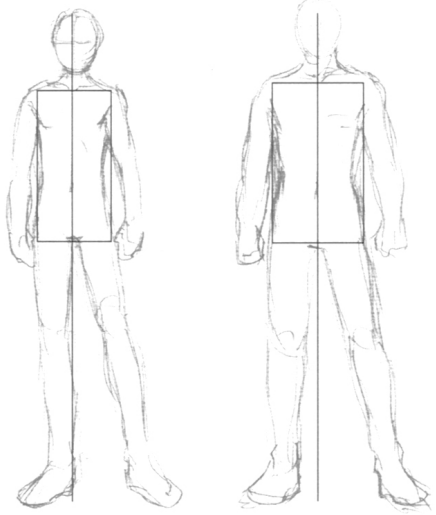




Female figures have narrower shoulders and slenderer bodies overall.



Male figures have broader shoulders and thicker, burlier bodies overall.

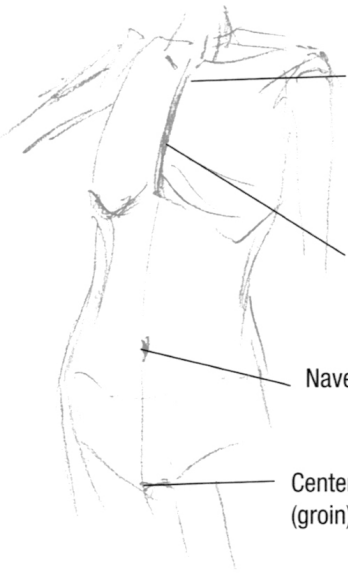


When intending to draw two male characters with contrasting builds (in this case lean versus muscular), the torso's width will vary.

Guideline Defining the Backbone from the Front The Axial Line

The centerline of the figure's front is known as the axial line or median and is used to correspond to the spine, which appears on the back.





Draw a single line traveling from where the clavicles meet the sternum to the center of the sternum and down to the navel. This constitutes the axial line. Drawing the axial line facilitates achieving symmetrical balance and makes the figure easier to compose.



Connecting the centerlines on the front and rear sides illustrates the torso's thickness.





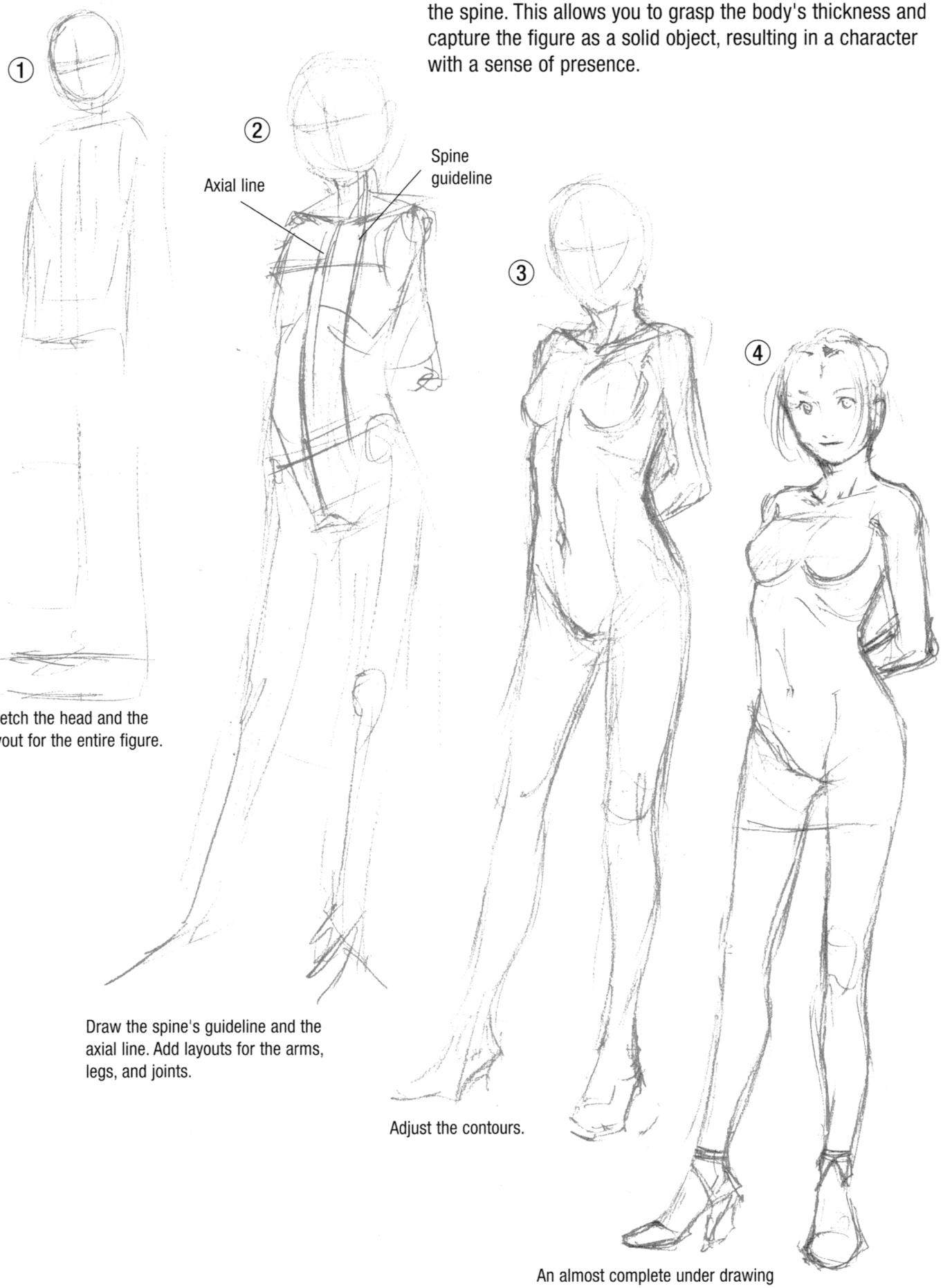
When the body bends into a sideways "V", the axial line takes on a sideways "V" shape as well.



The axial line corresponds to the spine.

Drawing a Standing Pose Using the Backbone and the Axial Line

The steps in drawing layouts for the head, torso, and overall figure are the same as when drawing a rear view. Since the figure's front is visible, the axial line is drawn at the step as the spine. This allows you to grasp the body's thickness and capture the figure as a solid object, resulting in a character with a sense of presence.



Sketch the head and the layout for the entire figure.

Draw the spine's guideline and the axial line. Add layouts for the arms, legs, and joints.

Adjust the contours.

An almost complete under drawing

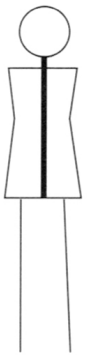
Using the Axial Line to Draw a Front View Standing Pose with Presence

Rendering the spine with an "S" curve or arced line breathes life into a standing figure.





The figure's contours shift to match the sinuous spine.

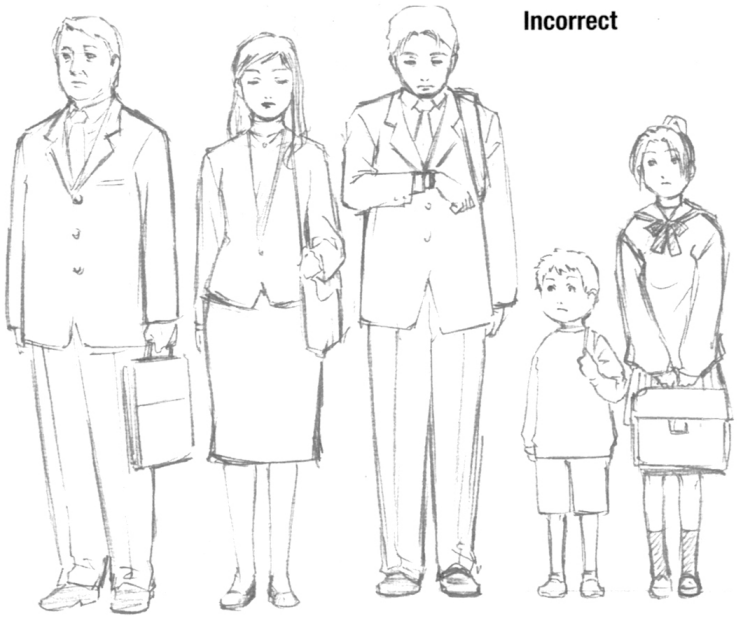


A figure with a straight spine seems rigid and lacking in movement.



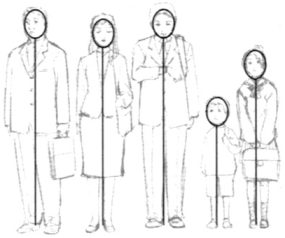


Spines in a sinuous "S" curve appear on people standing in an unaffected, unconscious manner. Often, the individual will shift his or her weight to either the left or right.

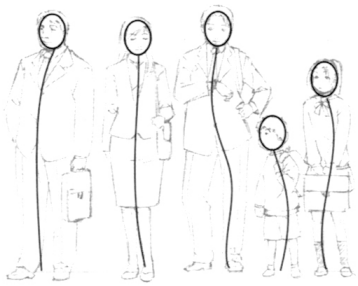


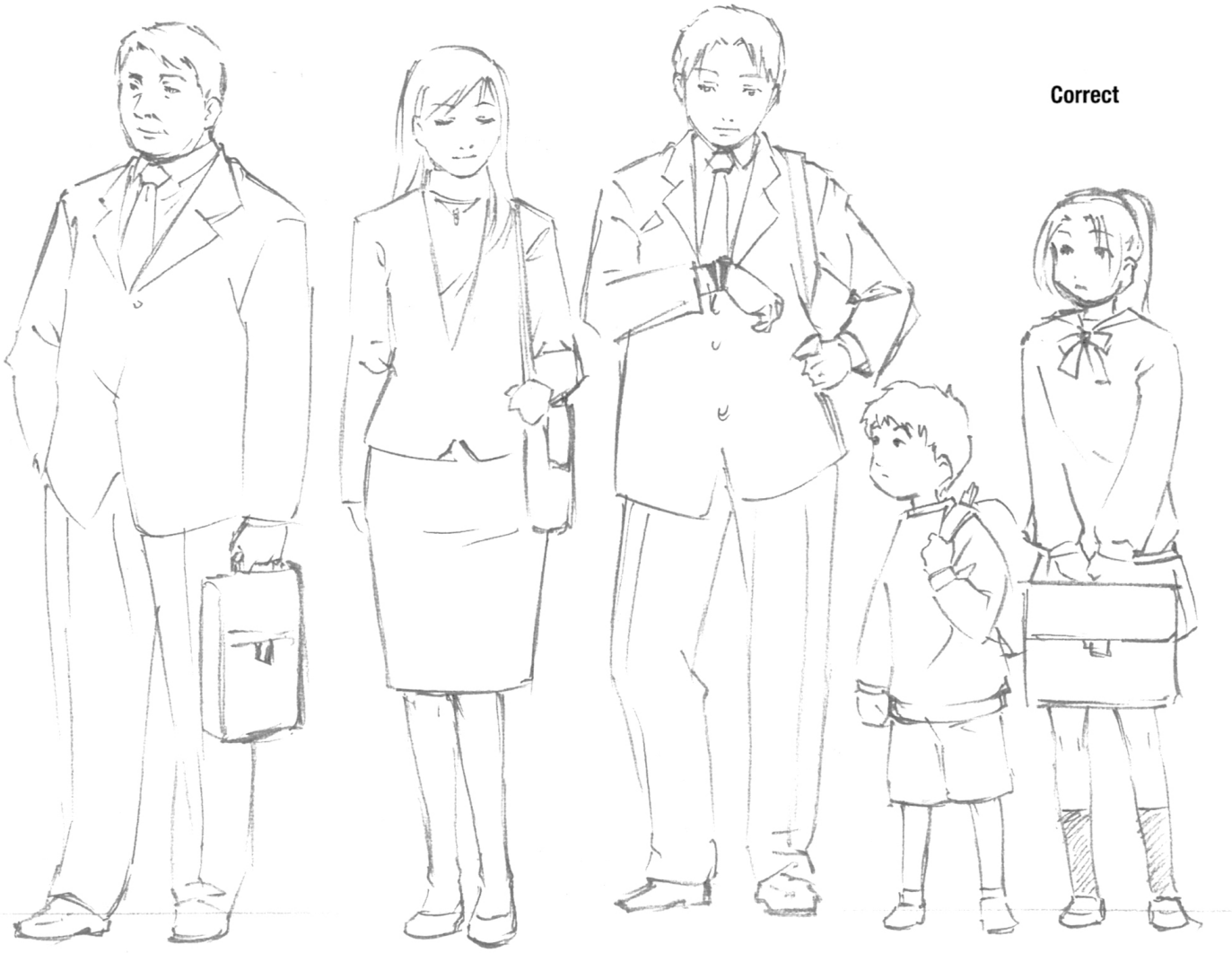
Incorrect

Incorrect: All members of the group are standing at attention.



Make an effort on a regular basis to observe people behaving unconsciously. This will allow you to draw characters comporting themselves in a natural manner.





Correct

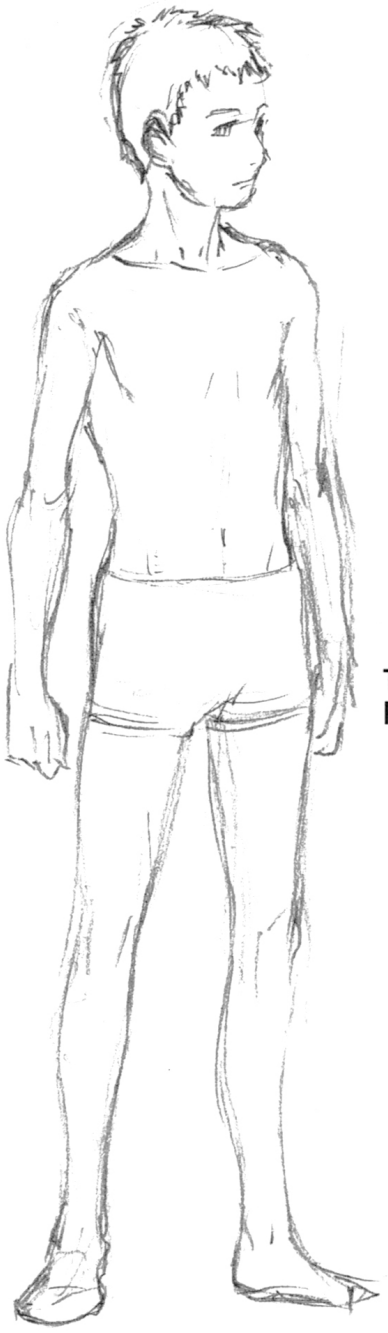
Each character in the group is assuming a different posture, generating a natural atmosphere.

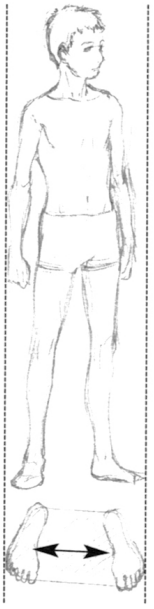
Standing Poses and the Center of Gravity

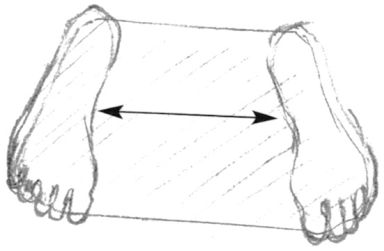
We adjust the positions of our heads, torsos, spines, arms, and legs to maintain balance to prevent us from falling over. When drawing, paying attention to the center of gravity will generate an overall sense of balance.

Noting the Spacing between the Feet When Drawing

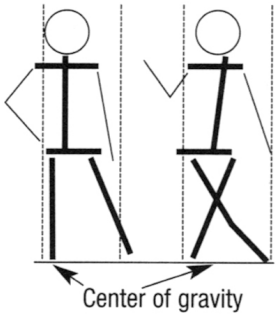
Being aware of the space between the feet when drawing enhances the character's sense of presence.







A standing figure's center of gravity is situated between the two feet.

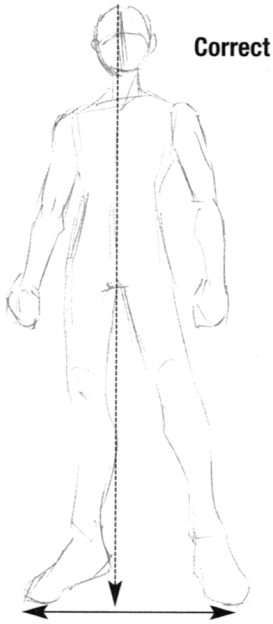


Regardless of which leg bears the figure's weight, the center of gravity is always located between the two feet.

The Distance between the Feet and the Position of the Head Hold the Keys

Try drawing a perpendicular line from the head.

Correct



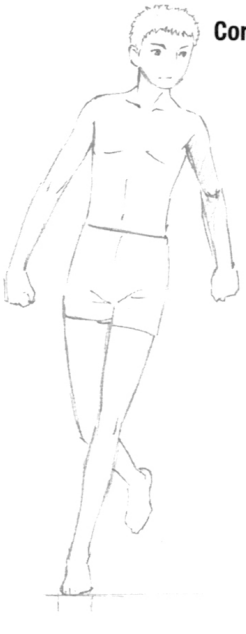
In the figure above, the feet are spread widely, projecting a commanding atmosphere.

Correct



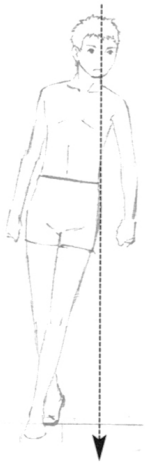
Even in the case of a *chibi* (i.e. ultra-stylized) character, ensuring that the head is situated between the feet produces a sense of balance.

Correct



When drawing a character running with the arms swinging and legs kicking forward and backward, the figure will still appear stable even if the head is not positioned between the feet.

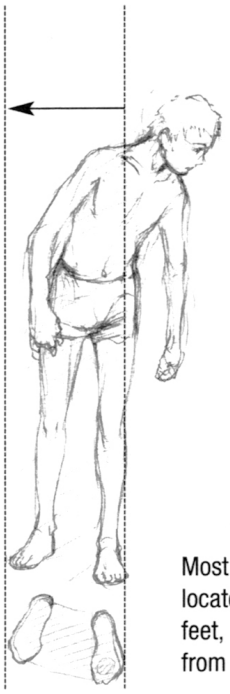
Incorrect

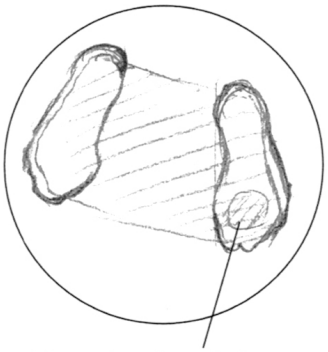


If the head is not located between the feet, the figure will appear as if it is about to tip over. However, in a single panel or drawing a visually unstable figure might create an impressive effect.

Looking Down





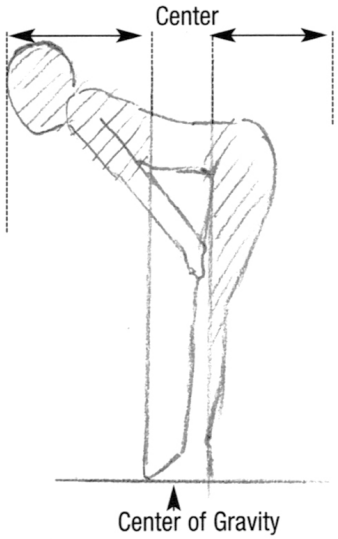


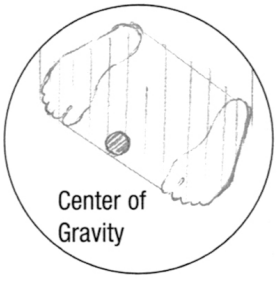
The center of gravity is located over the tip of the left foot.

Most of the body is located between the two feet, preventing the figure from topping over.

Bending Over







The head, upper body, and lower body (including the posterior) are all located outside of the feet. However, because the torso's center is located over the feet, the figure does not topple over.

Balanced on One Leg

Compose the figure so that a straight line could be drawn connecting the head to the foot planted on the ground. When portraying a running figure, the center of gravity is constantly shifting. Consequently, drawing the torso at a dramatically oblique angle will make the figure appear balanced.

Standing on One Foot



When standing still on one foot, the center of gravity is located over that foot.





The center of gravity is located almost perfectly over the foot's center.

Correct

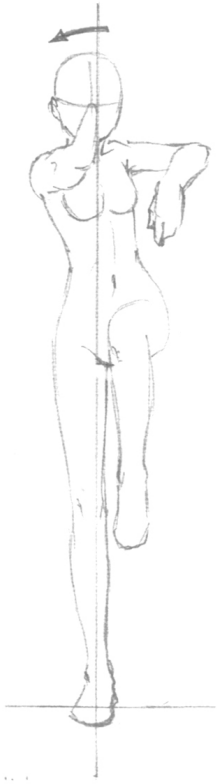


The above is the image to the left drawn from a front view.

Incorrect

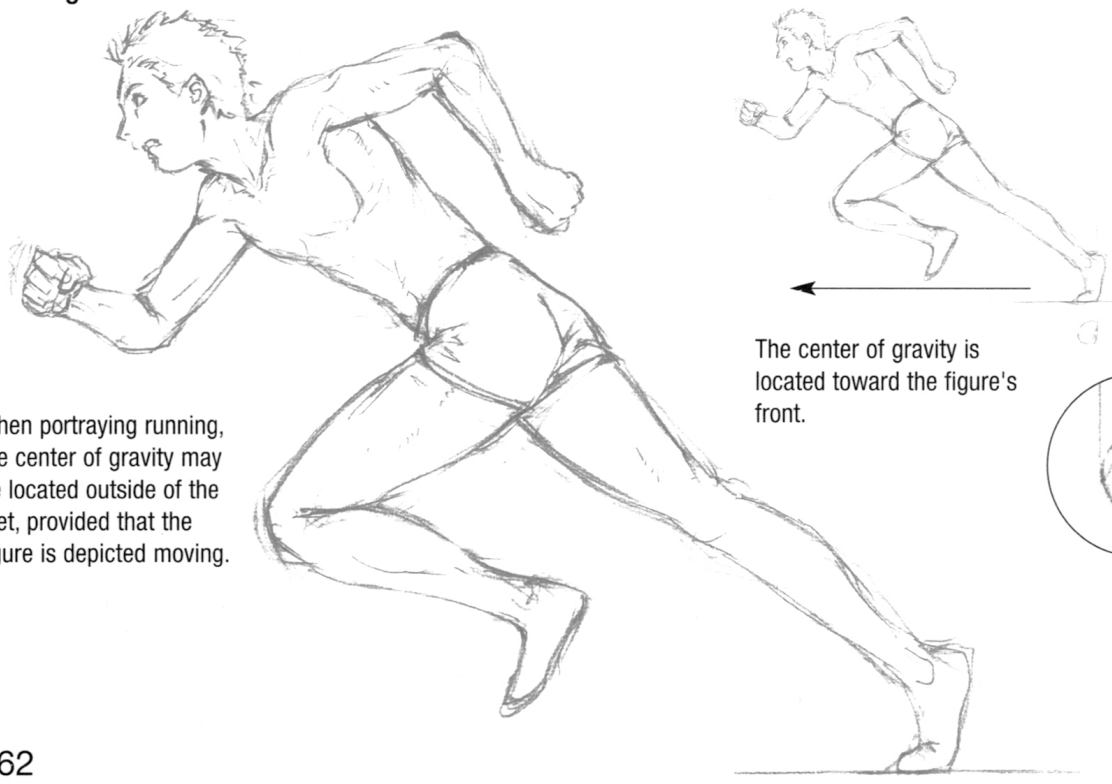


In this incorrect example, the center of gravity is not located above the foot touching the ground. In reality, the figure would tip over.



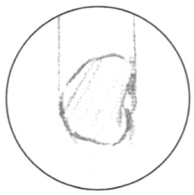
In this corrected version, shifting the upper body allowed the center of gravity to be brought over the load-bearing foot. Torsion in the upper body results in a more dynamic-looking composition.

Running



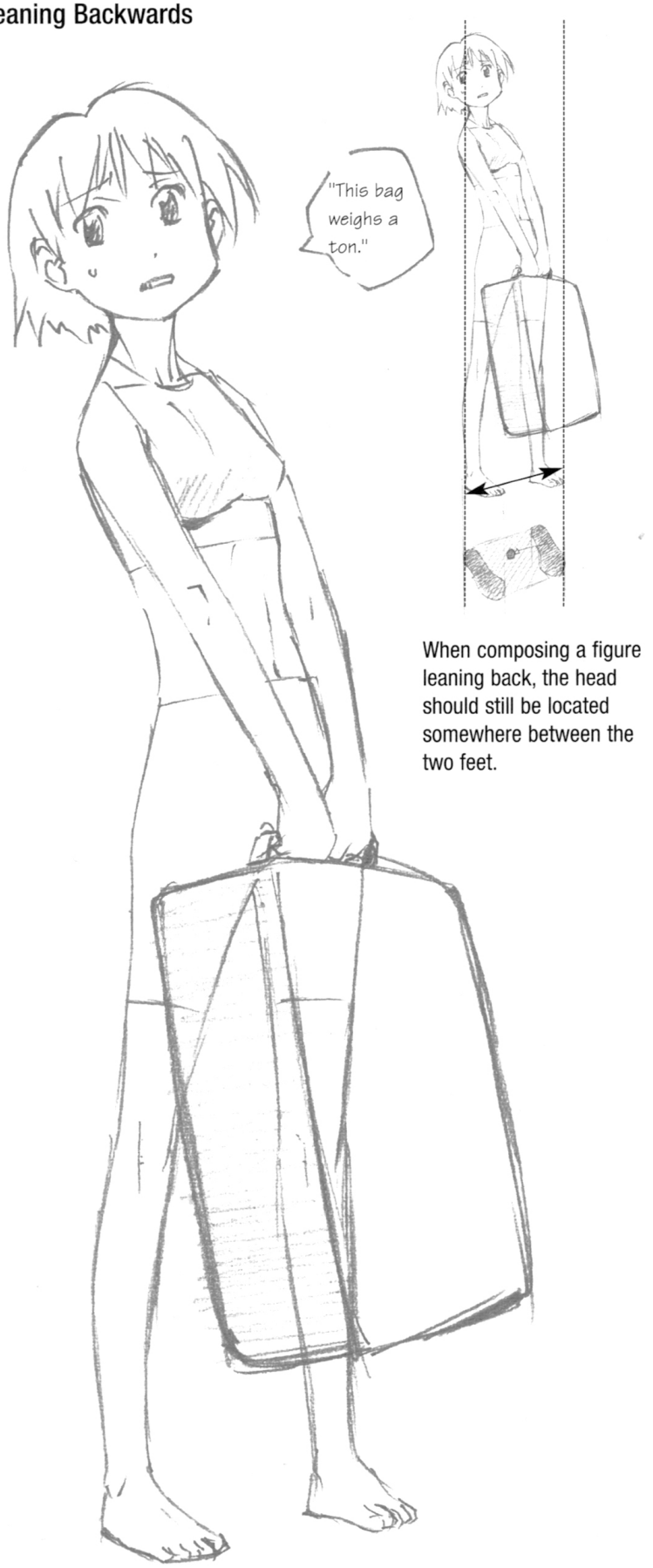
When portraying running, the center of gravity may be located outside of the feet, provided that the figure is depicted moving.

The center of gravity is located toward the figure's front.



Balance is achieved in the same manner, regardless of whether or not the figure is carrying a load.

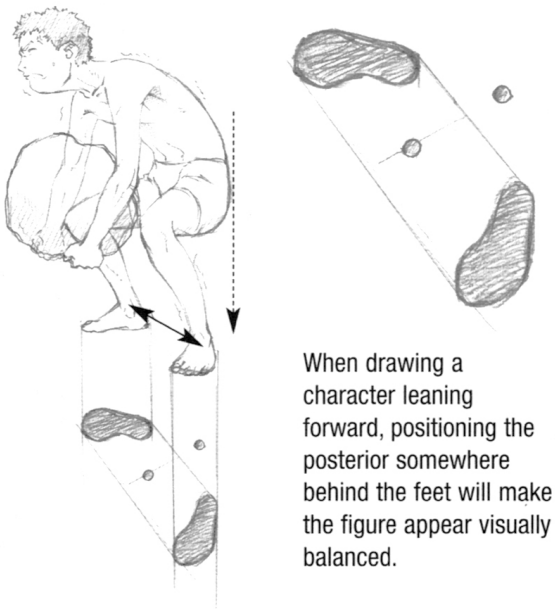
Leaning Backwards



When composing a figure leaning back, the head should still be located somewhere between the two feet.

Leaning Forward



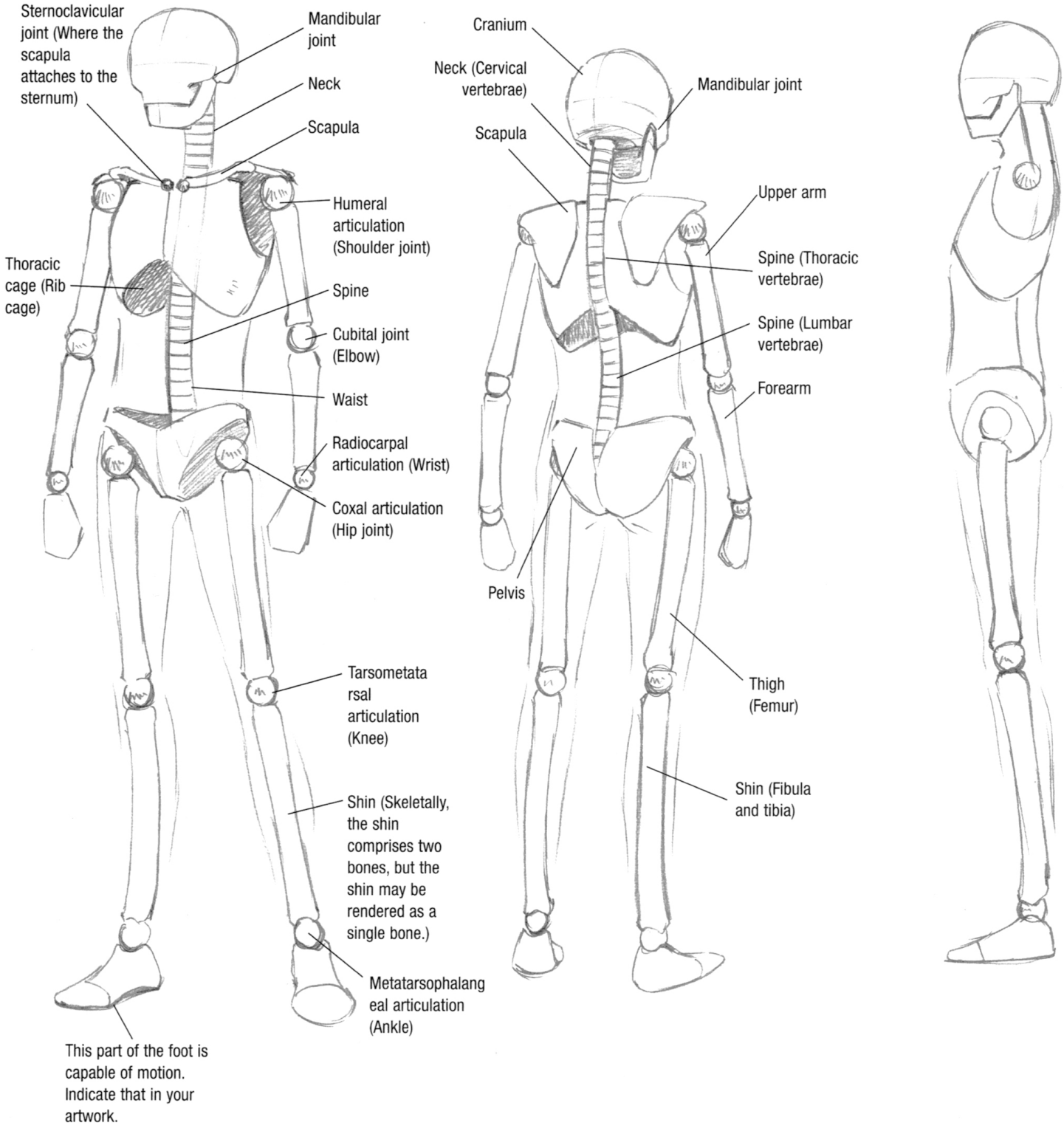


When drawing a character leaning forward, positioning the posterior somewhere behind the feet will make the figure appear visually balanced.

The Body's Structure

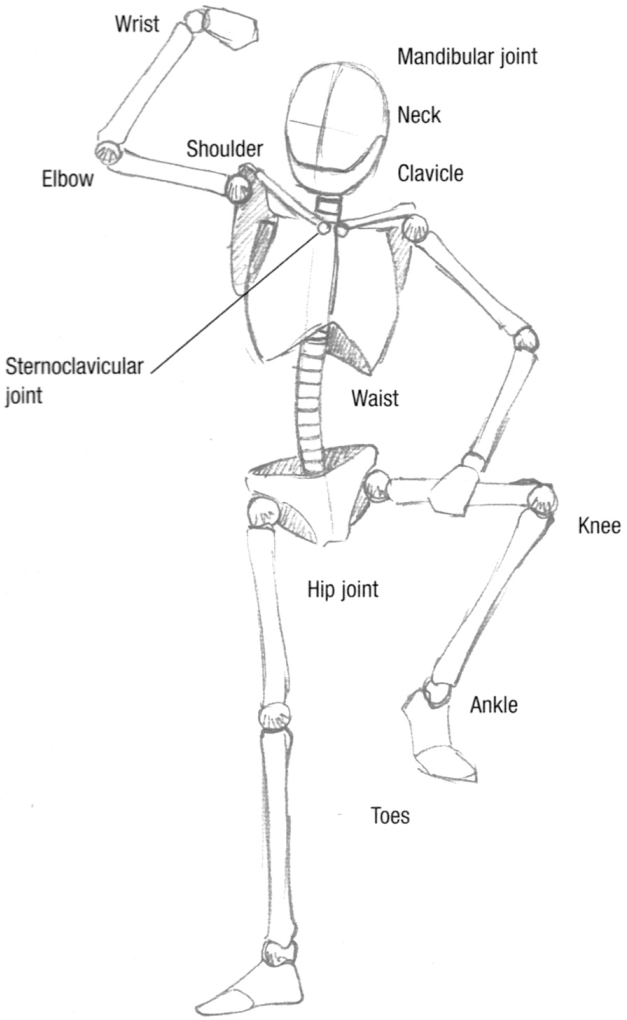
Make an effort to learn the basic makeup of the skeletal structure and musculature.

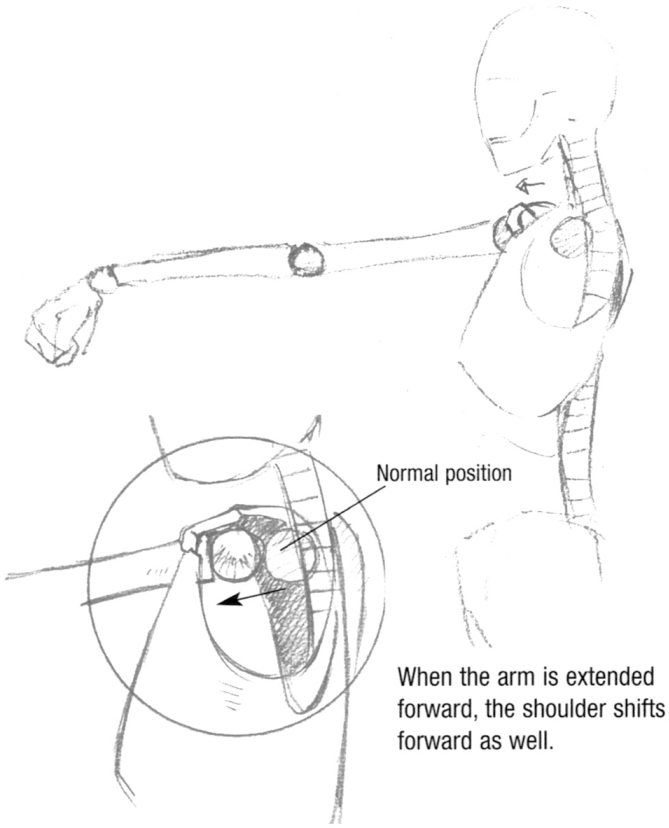
Major Body Parts and Their Names



Moveable Body Parts

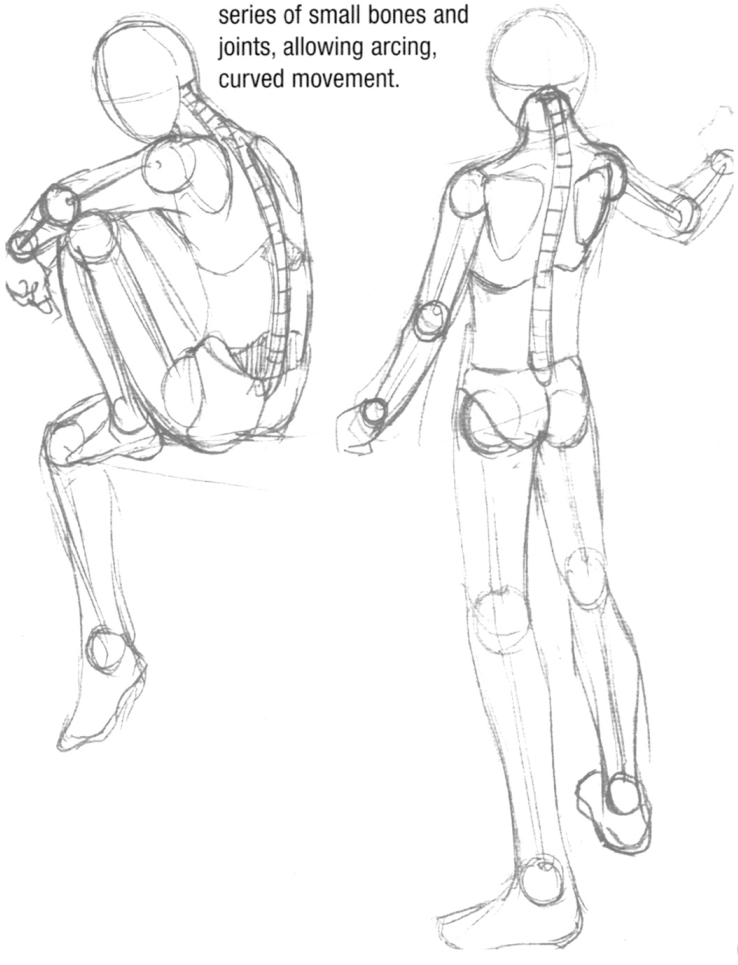
The joints allow turning and twisting motions and possess a certain amount of flexibility, which makes minor stretching possible.



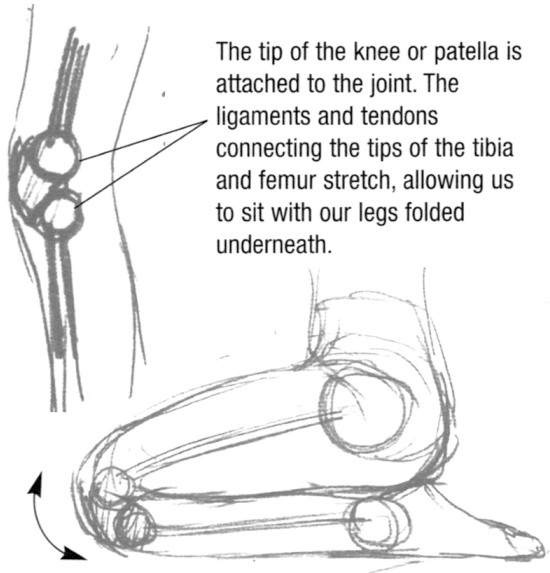


When the arm is extended forward, the shoulder shifts forward as well.

The neck and spine are series of small bones and joints, allowing arcing, curved movement.



Knee

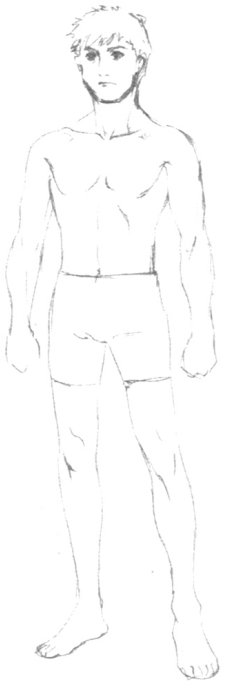


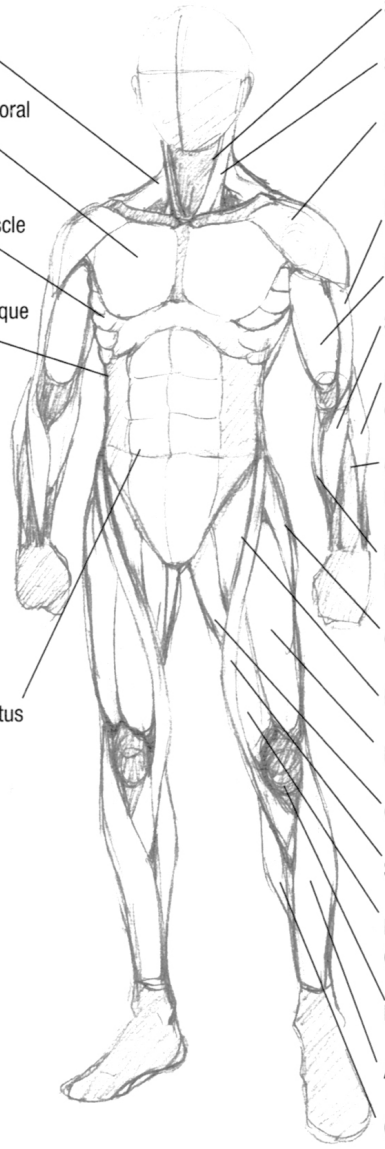
The tip of the knee or patella is attached to the joint. The ligaments and tendons connecting the tips of the tibia and femur stretch, allowing us to sit with our legs folded underneath.

Muscles Affecting the Exterior Contours

The contours on the front surface of the figures define undulations in the muscles. Make an effort to learn the names of the major muscles, especially those appearing in bold print.

Front View Showing the Major Muscles

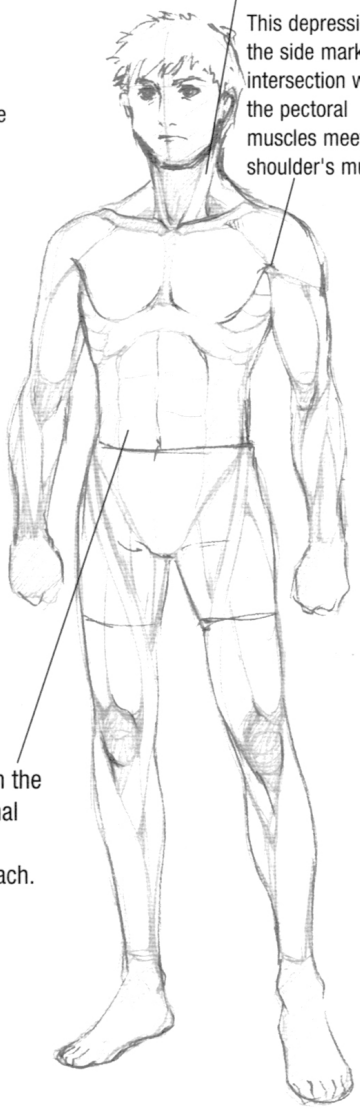




The figure above shows the major muscles appearing in a front view, arranged in large muscle groups.

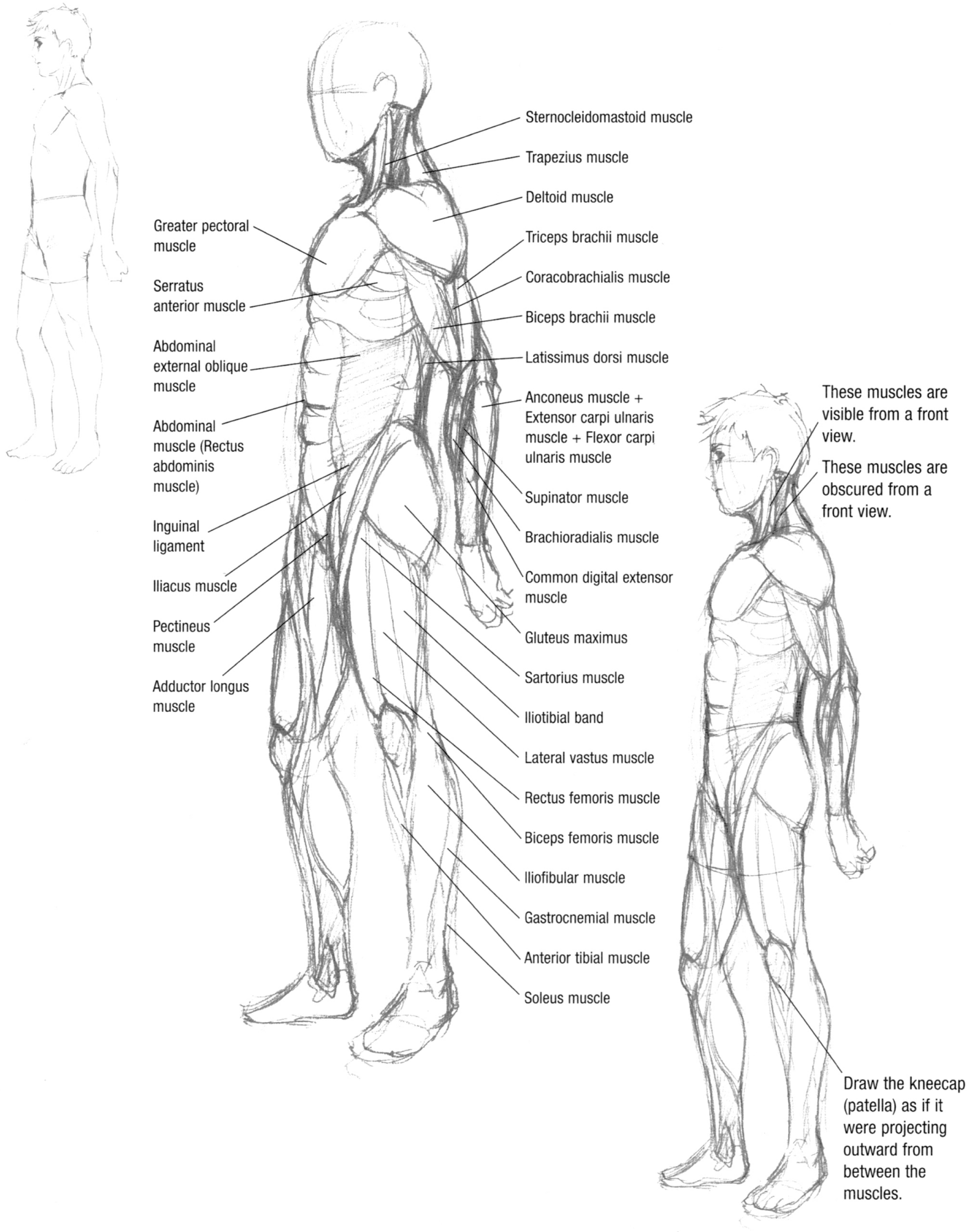


The image to the left is an anatomically correct rough sketch of the muscles. Not only are the muscles difficult to identify accurately, but it is also difficult to apply and draw anatomically correct musculature.

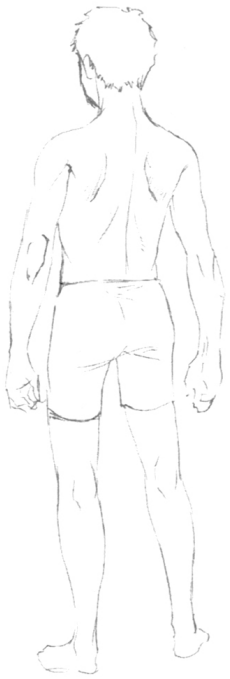


The line running down the center of the abdominal muscles suggests a moderately taut stomach.

Profile View Showing the Major Muscles

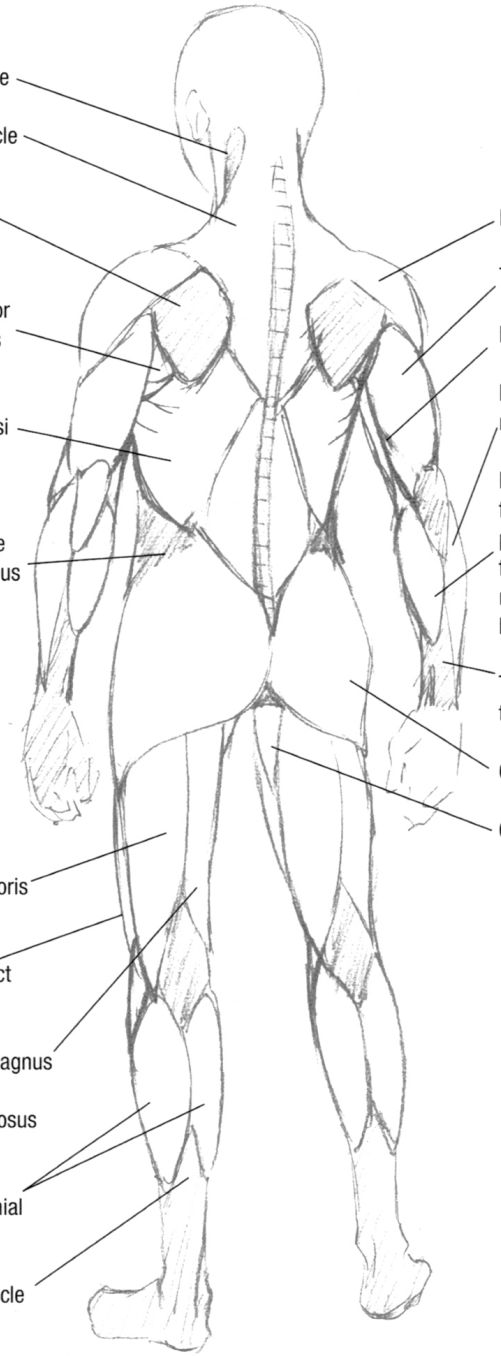


Back View Showing the Major Muscles





When drawing a female character, accentuate the inward curve of the back to create the appearance of a limber back.





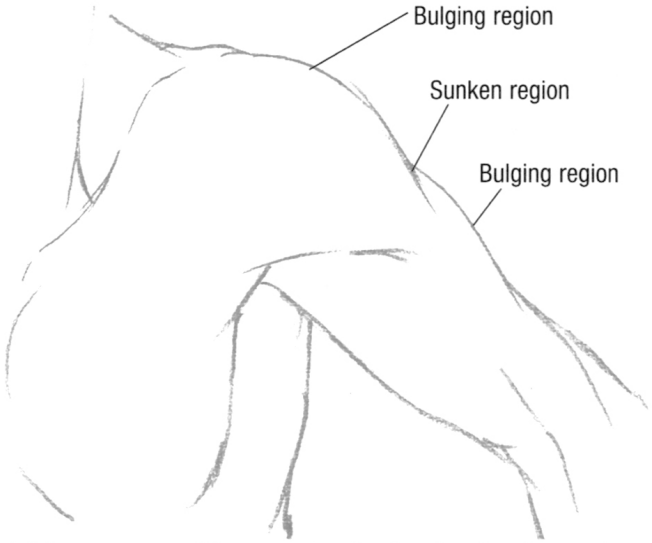
The figure above shows a realistic rendition of the back's elaborate musculature.



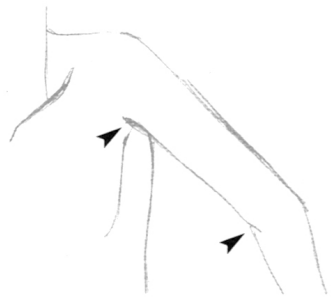
Rendering Exterior Contours



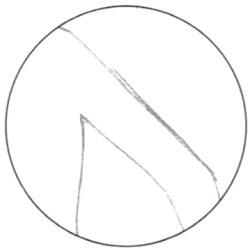
Use undulations in the contours to suggest volume in the body and muscles.



Maintain awareness of the muscular structure forming rises and falls when drawing such undulations on the figure's surface. Accentuating regions of bulging and depression create the illusion of flesh and muscle.



When omitting such undulations on the body's surface, using contour lines to portray where the arm attaches to the shoulder and the elbow allow you to maintain a sense of three-dimensionality.



Omission of the contours extending into the areas where the arm attaches to the shoulder and at the elbow completely loses any sense of volume, resulting in a flat image.

Muscles Are Like a Mountain Range

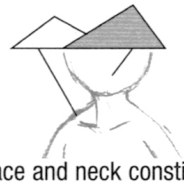


The far mountain is hidden behind the near mountains, rendered in outline. Objects close to the picture plane blocking objects far from the picture plane create a sense of depth.

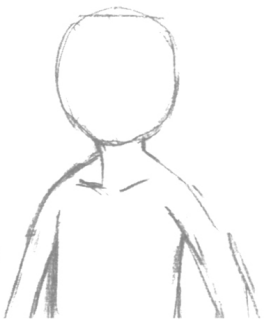




Muscles are actually mounds of layered muscle. Consequently, maintaining awareness of which objects are close to the picture plane and which objects are far and hidden will allow you to generate a sense of three-dimensionality.



The face and neck constitute a close mountain. The right shoulder is a far mountain. Layering solid objects allows you to establish the spatial relationships between objects, even when using simple outlines.

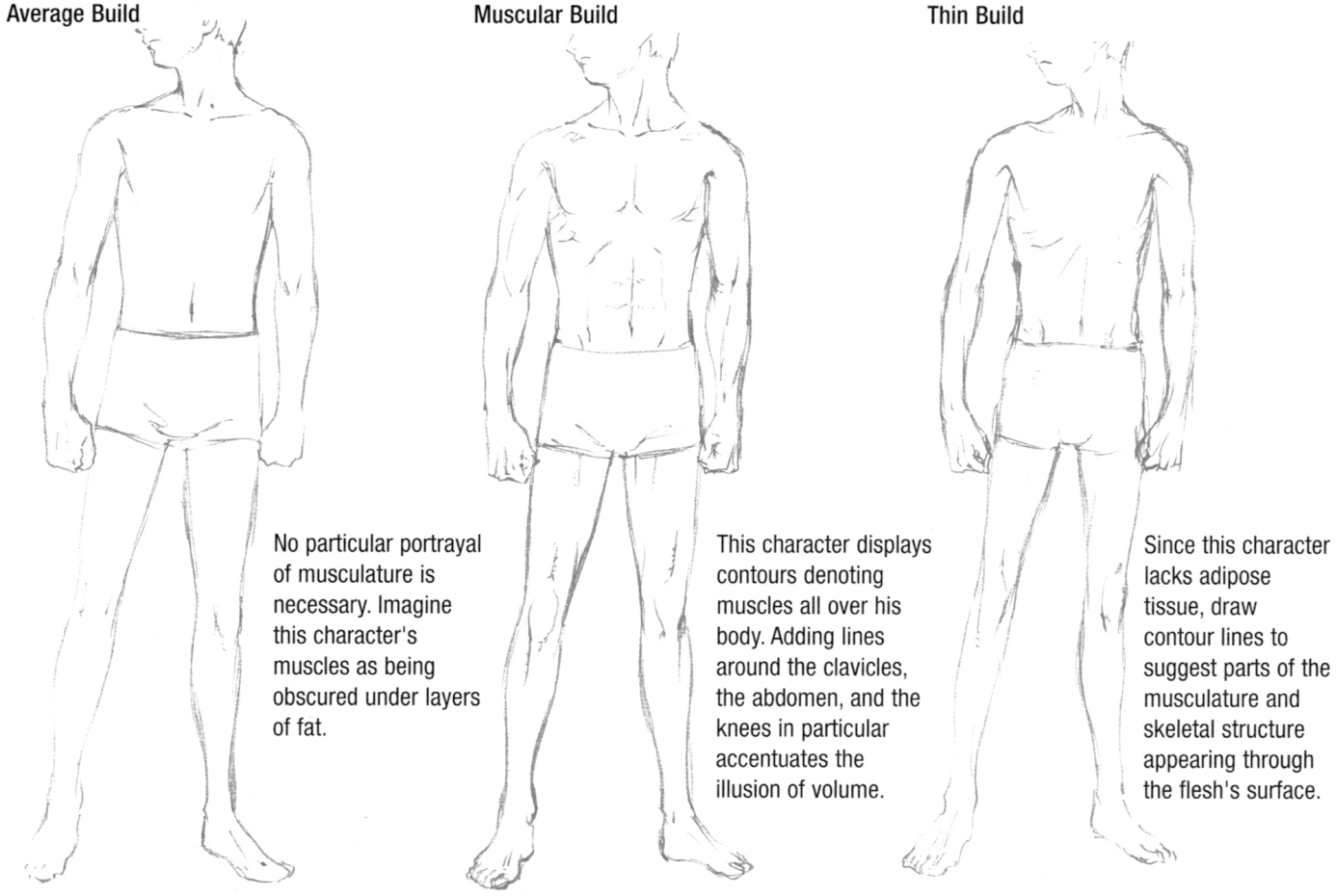




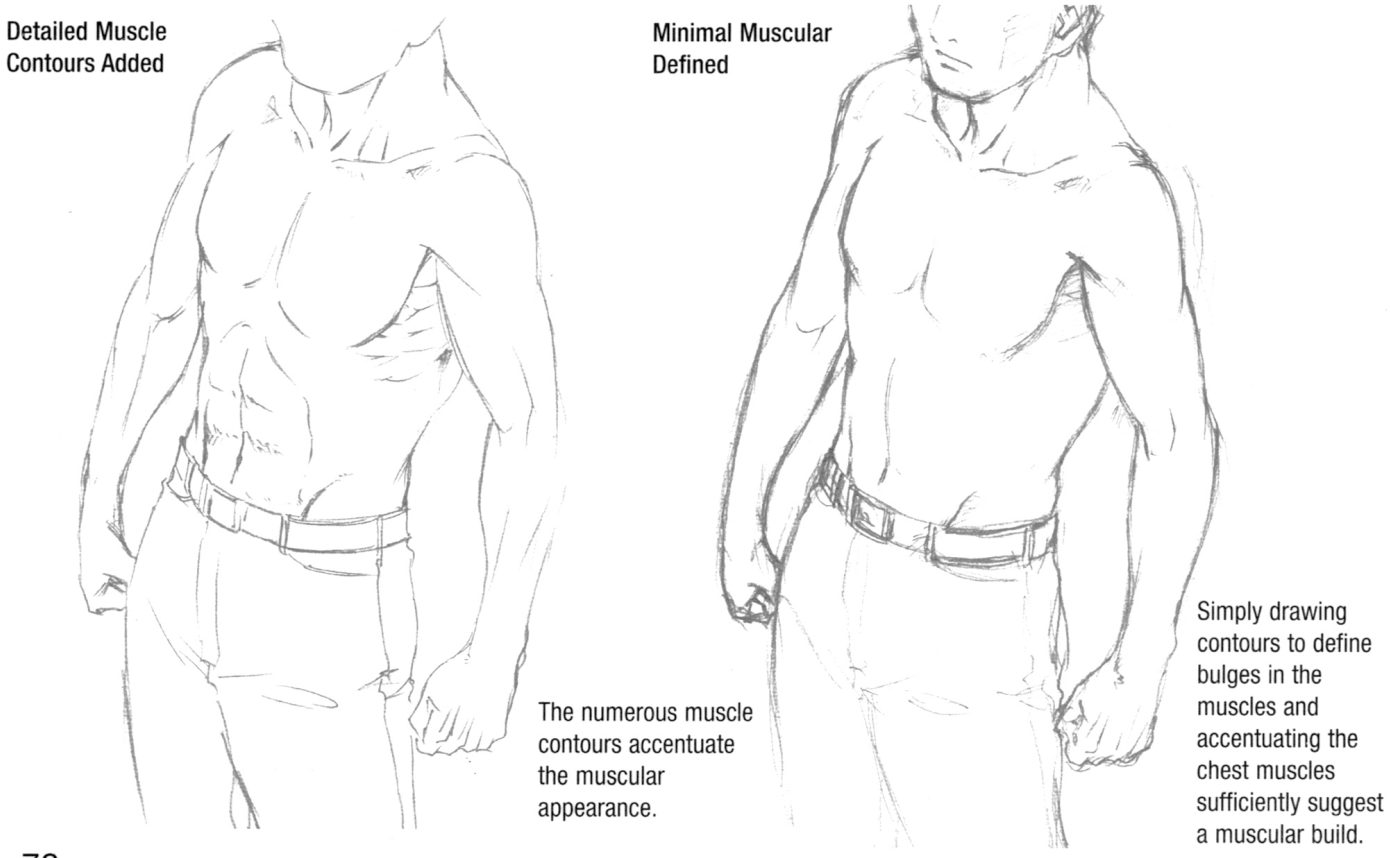
In the above, it is unclear which object is close and which is far, eliminating any sense of three-dimensionality.

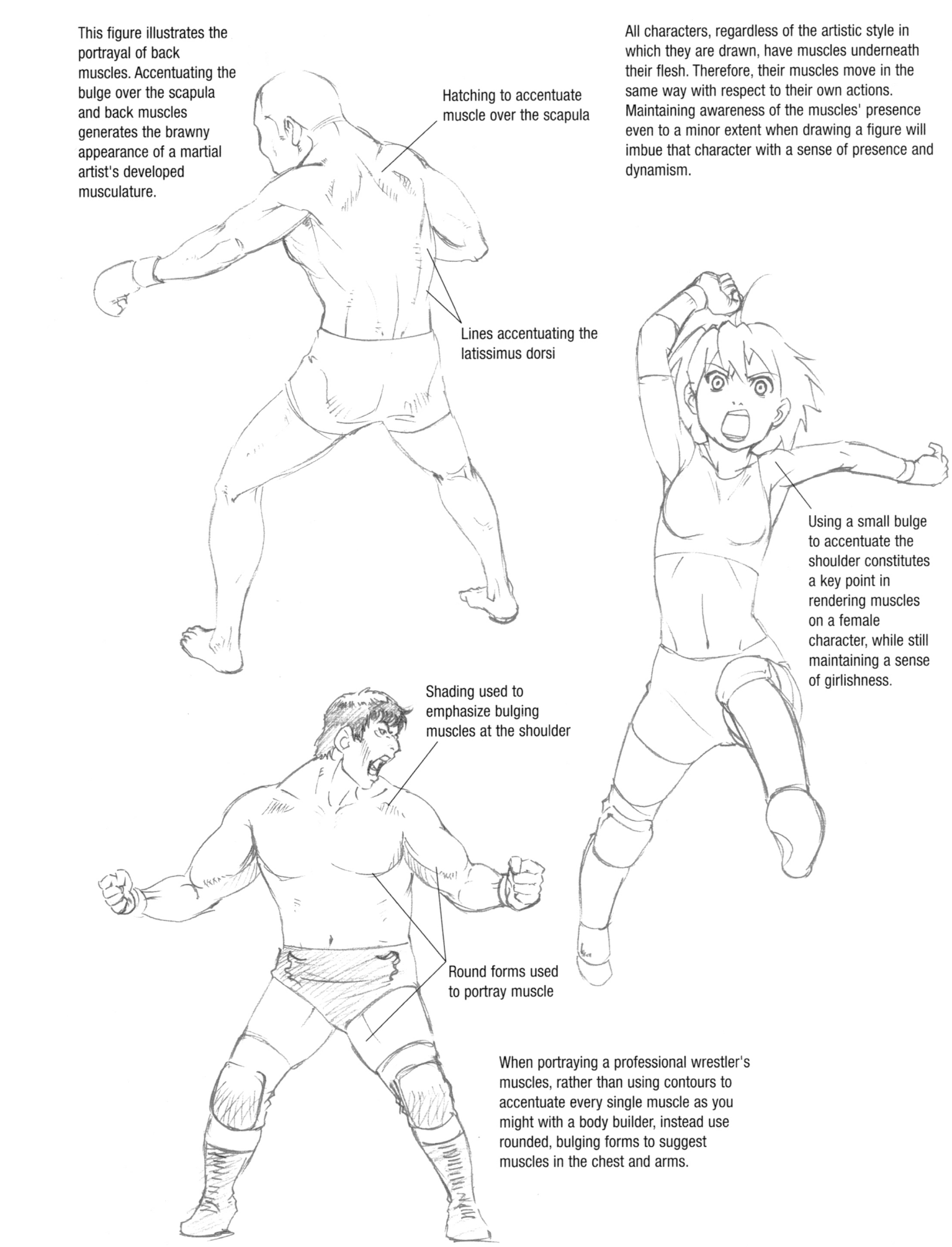


Rendering Exterior Contours



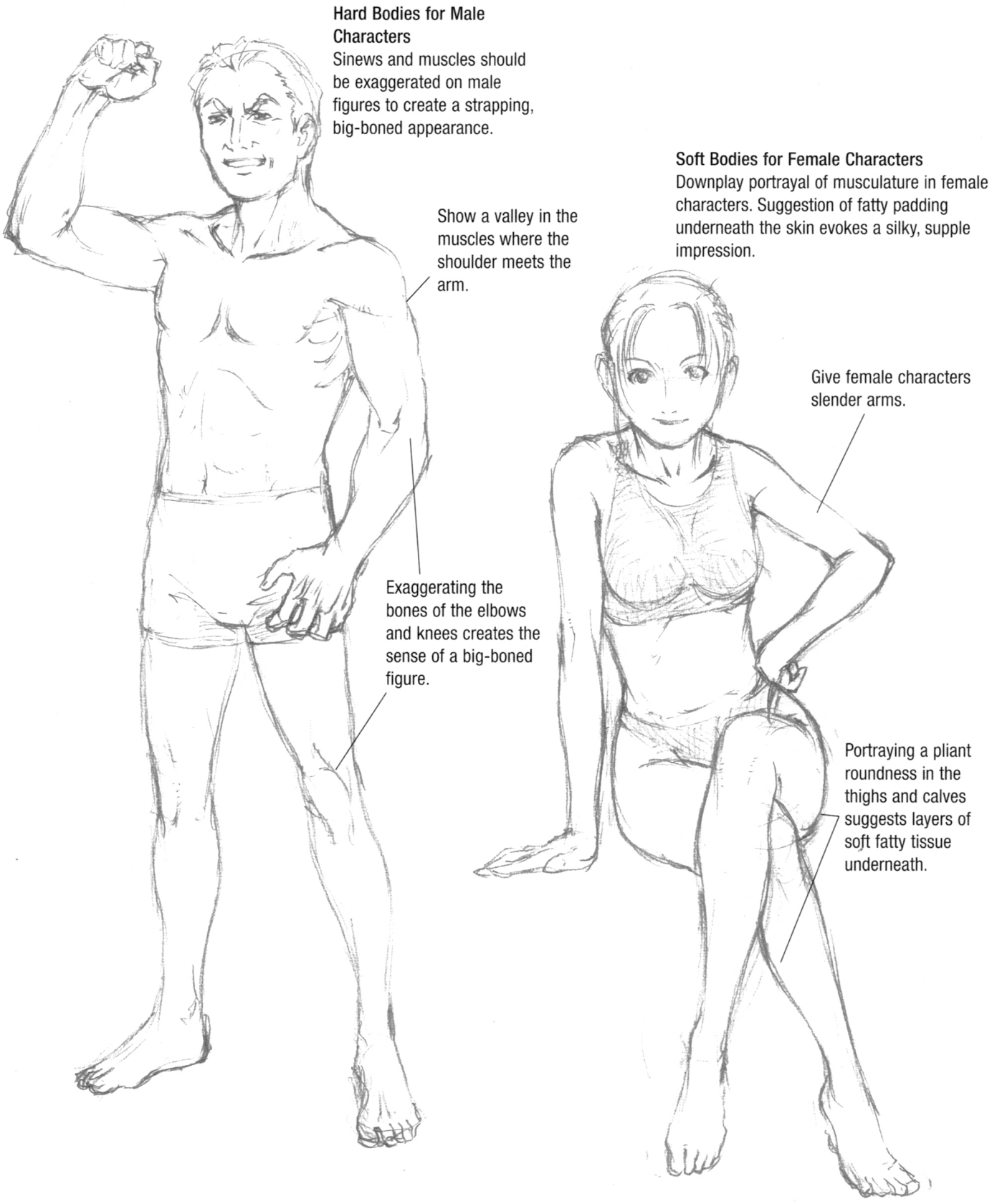
Portraying a Muscular Build



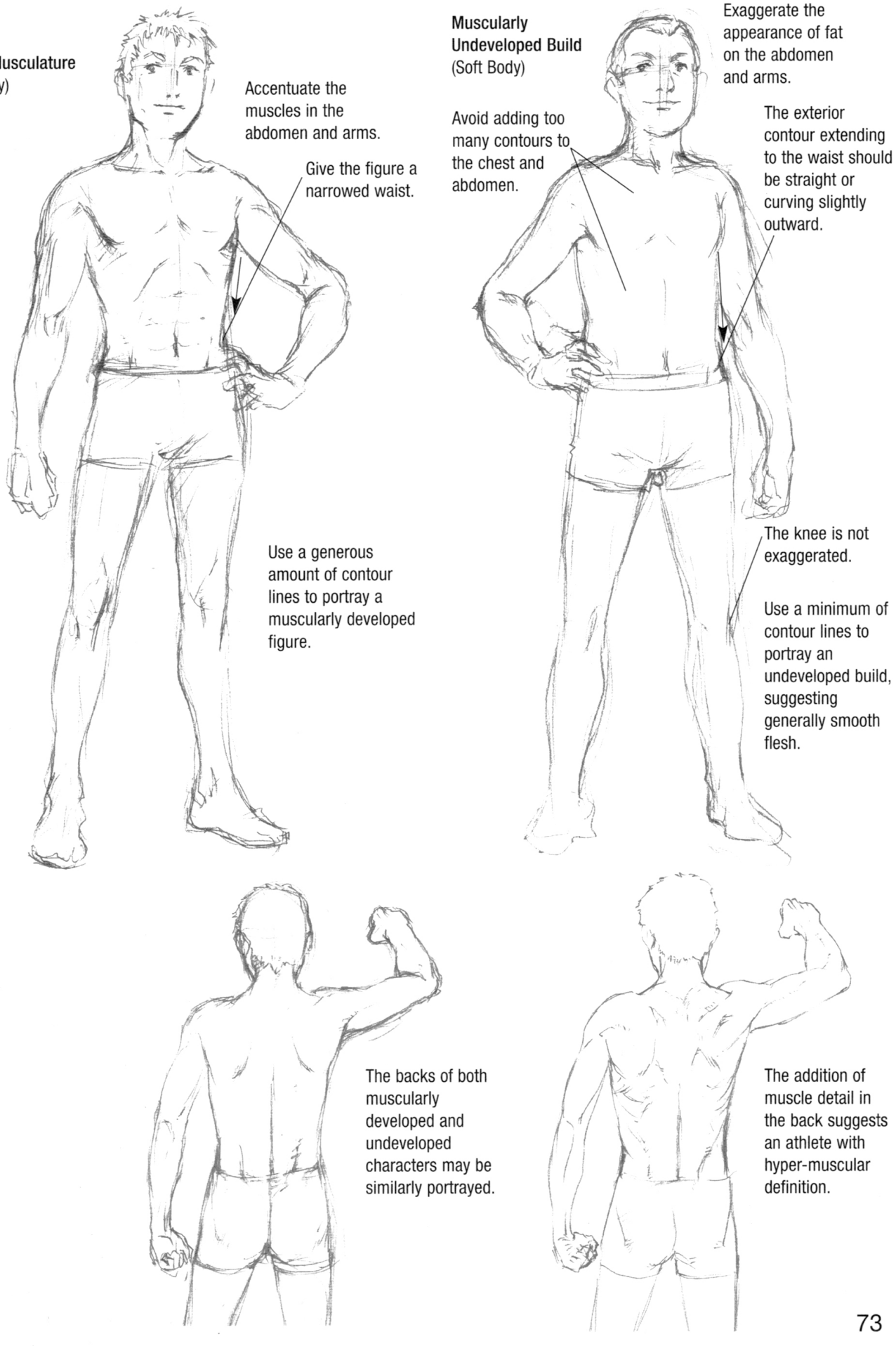

This figure illustrates the portrayal of back muscles. Accentuating the bulge over the scapula and back muscles generates the brawny appearance of a martial artist's developed musculature.
Hatching to accentuate muscle over the scapula
Lines accentuating the latissimus dorsi
All characters, regardless of the artistic style in which they are drawn, have muscles underneath their flesh. Therefore, their muscles move in the same way with respect to their own actions. Maintaining awareness of the muscles' presence even to a minor extent when drawing a figure will imbue that character with a sense of presence and dynamism.
Using a small bulge to accentuate the shoulder constitutes a key point in rendering muscles on a female character, while still maintaining a sense of girlishness.
Shading used to emphasize bulging muscles at the shoulder
Round forms used to portray muscle
When portraying a professional wrestler's muscles, rather than using contours to accentuate every single muscle as you might with a body builder, instead use rounded, bulging forms to suggest muscles in the chest and arms.

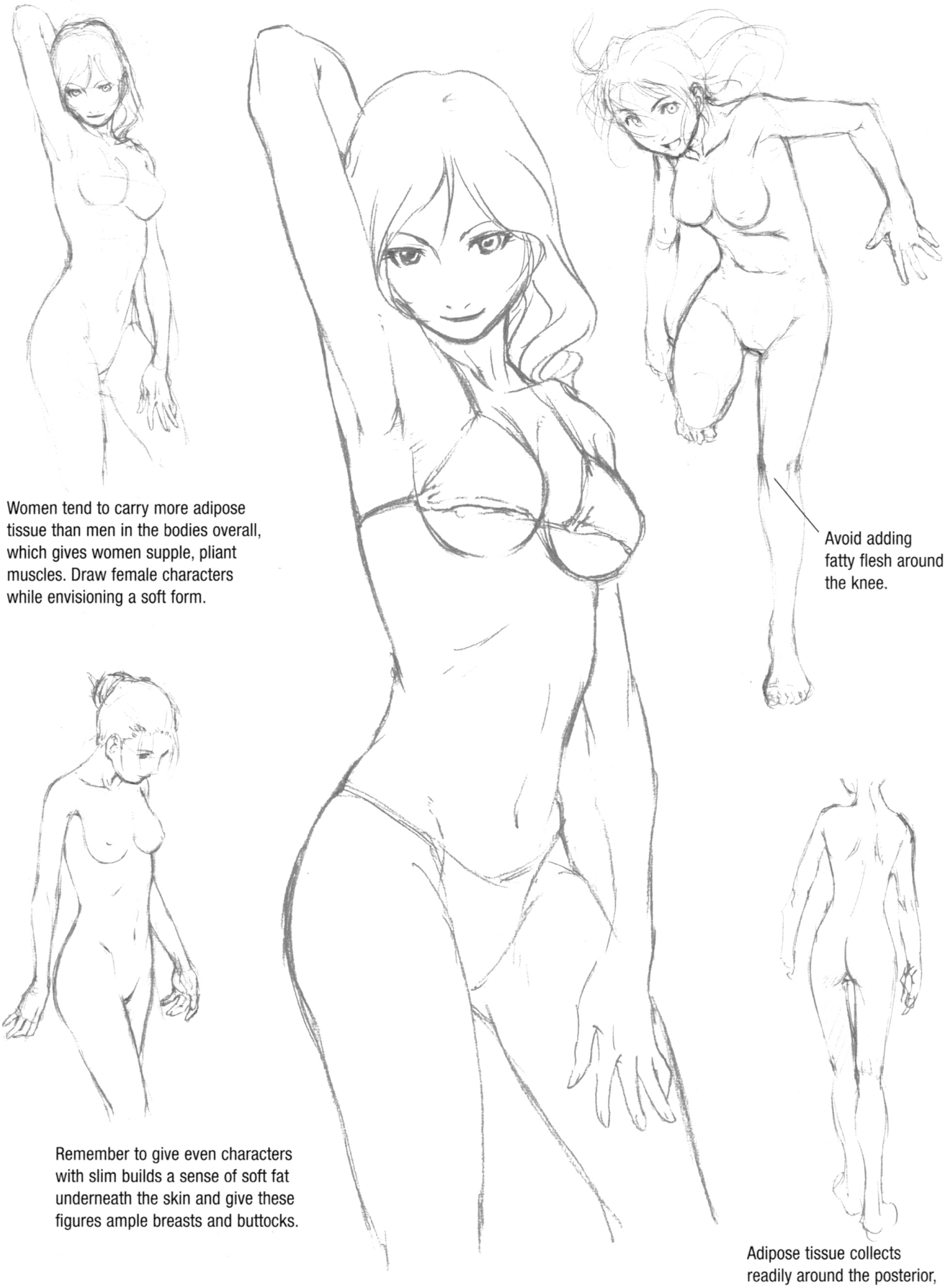
Distinguishing the Genders

Perceiving male characters as having "hard bodies" with generally well-defined musculature and female characters as having "supple bodies" covered with soft fat will allow portrayal of a wide range of characters.



Male Characters: Suggestion of Musculature Portrays Masculinity





Women tend to carry more adipose tissue than men in the bodies overall, which gives women supple, pliant muscles. Draw female characters while envisioning a soft form.

Avoid adding fatty flesh around the knee.

Remember to give even characters with slim builds a sense of soft fat underneath the skin and give these figures ample breasts and buttocks.

Adipose tissue collects readily around the posterior, so draw the buttocks with curved contours.

Muscular Female Figures

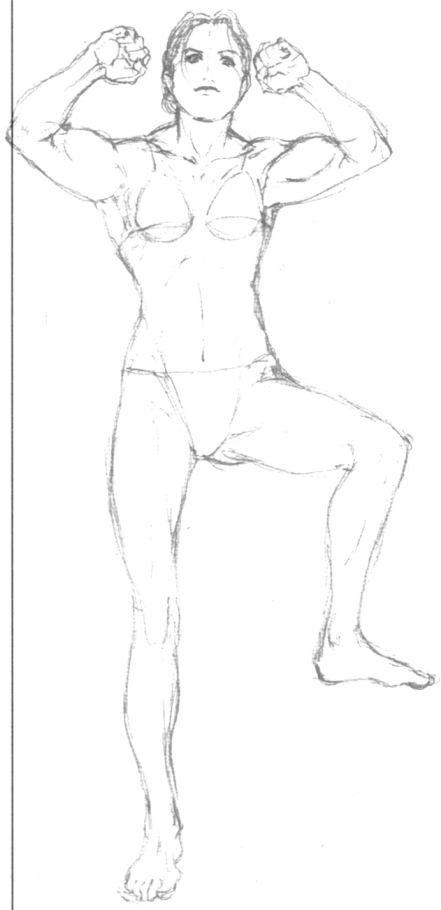




Drawing a female character with defined muscles will make her look masculine, enhancing the appearance of strength.



When a woman exercises, she tends to lose adipose tissue rather than gain muscle mass. Consequently, the silhouette of a female character does not lend itself to showing off that she has developed muscles.





Maximum muscle size for a female character



A man with only moderate exercise should be able to achieve the same size as a muscularly developed woman.

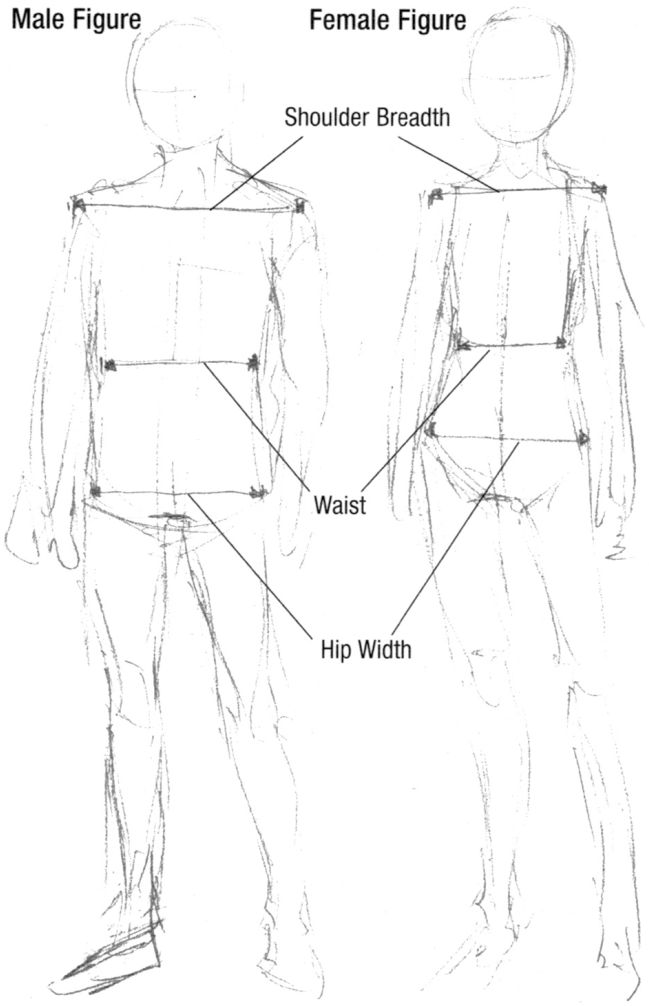
Proportional Differences

Be certain to establish distinctions between male and female builds at the layout stage.

Front View

Male Figure

Female Figure



These proportions apply to both the front and back views. Female figures should have narrower shoulders and waists. Hip width on male and female figures is virtually identical.

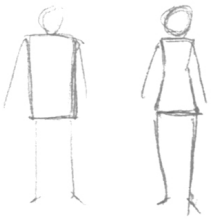
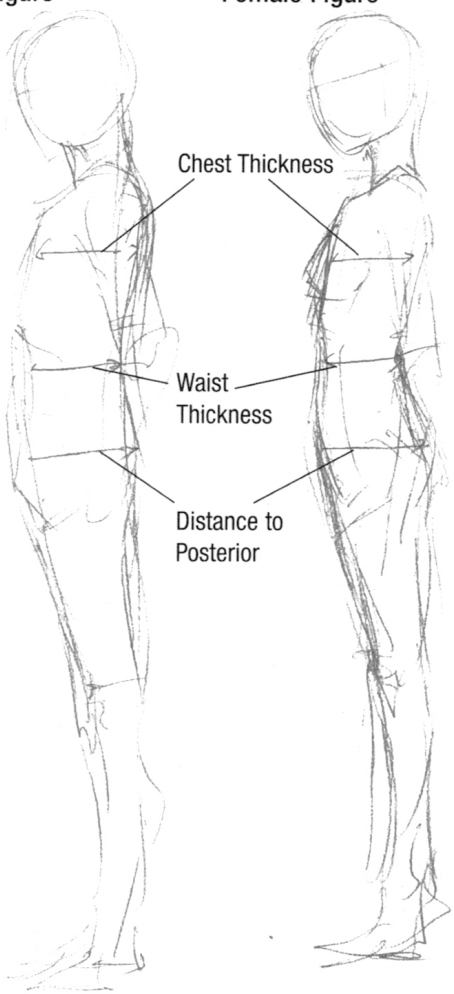


Diagram Showing Differences in Builds

Profile View

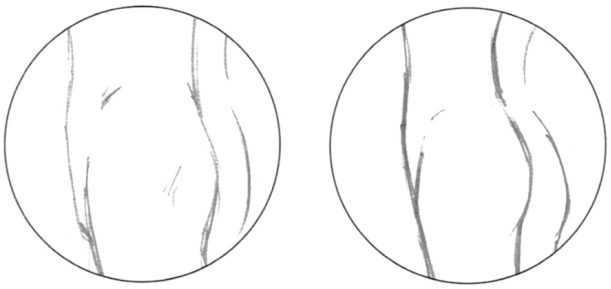
Male Figure

Female Figure



The chest and waist should be shallow on a female figure. Draw female characters with slender chests and waists. There is no need to draw female characters with the back of the posterior at a greater distance from the front.

Differences in Roundness of the Posterior

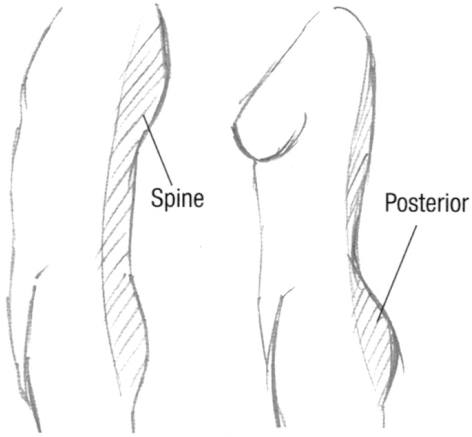


Male figures have generally flat buttocks.

Female figures have generally round buttocks.

Curvature in the spine tends to be similar for both male and female characters. However, note the significant difference in the roundness of the buttocks.

Differences in Profile Silhouettes



The spine is evident on a male figure.

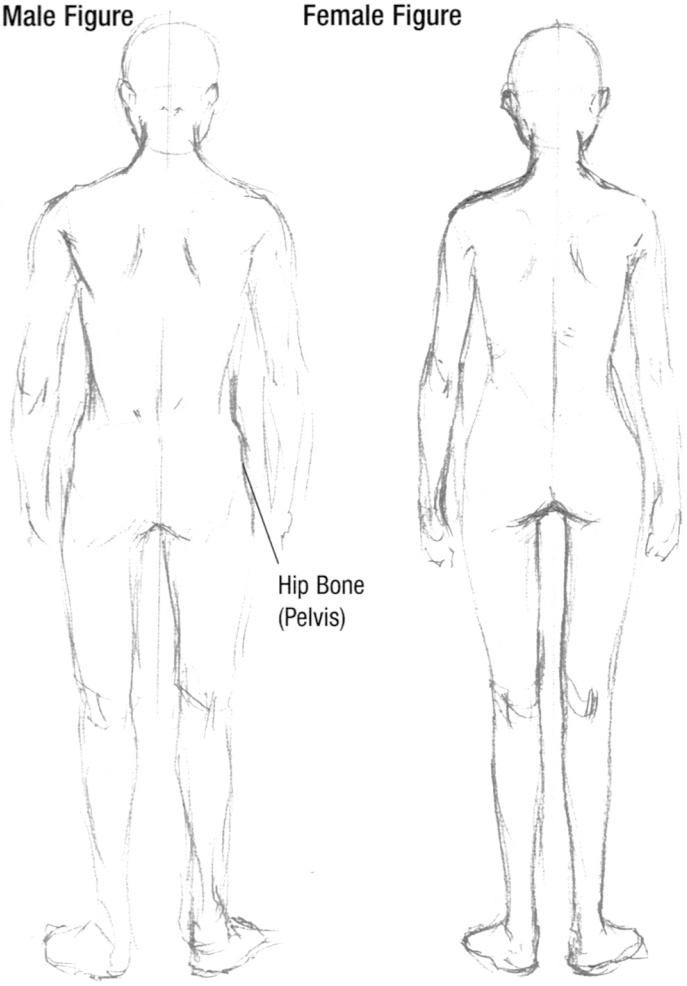
The posterior protrudes on a female figure.

Take note of musculature around the spine and of the posterior when drawing the figures.

Back View

Male Figure

Female Figure



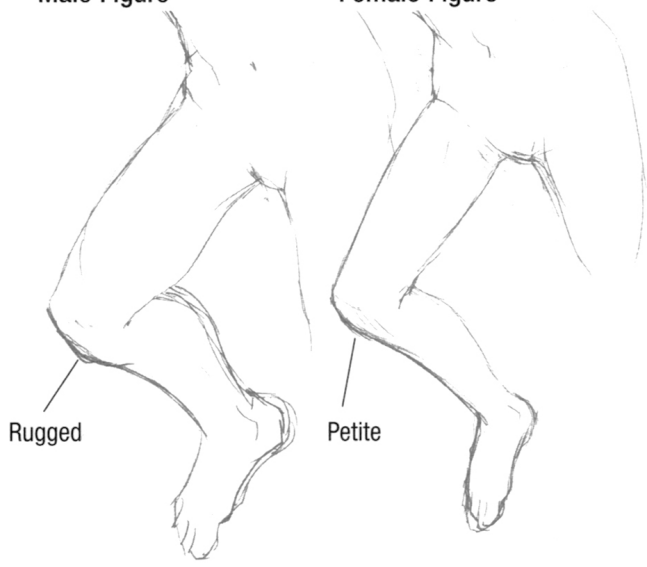
The figure is angular overall and rendered using relatively straight contours.

The figure is round overall and rendered using curved contours.

Differences in Thickness

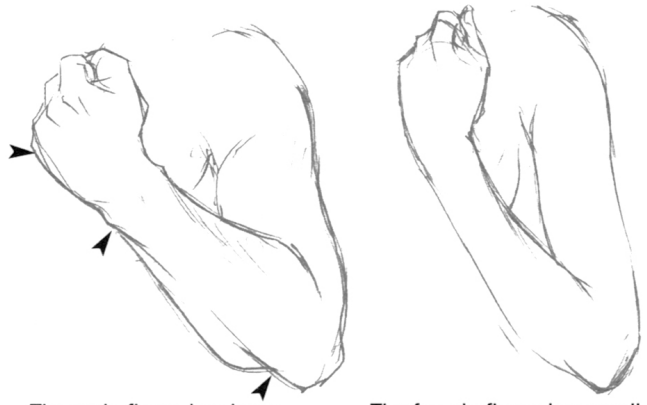
Male Figure

Female Figure



Male Figure

Female Figure



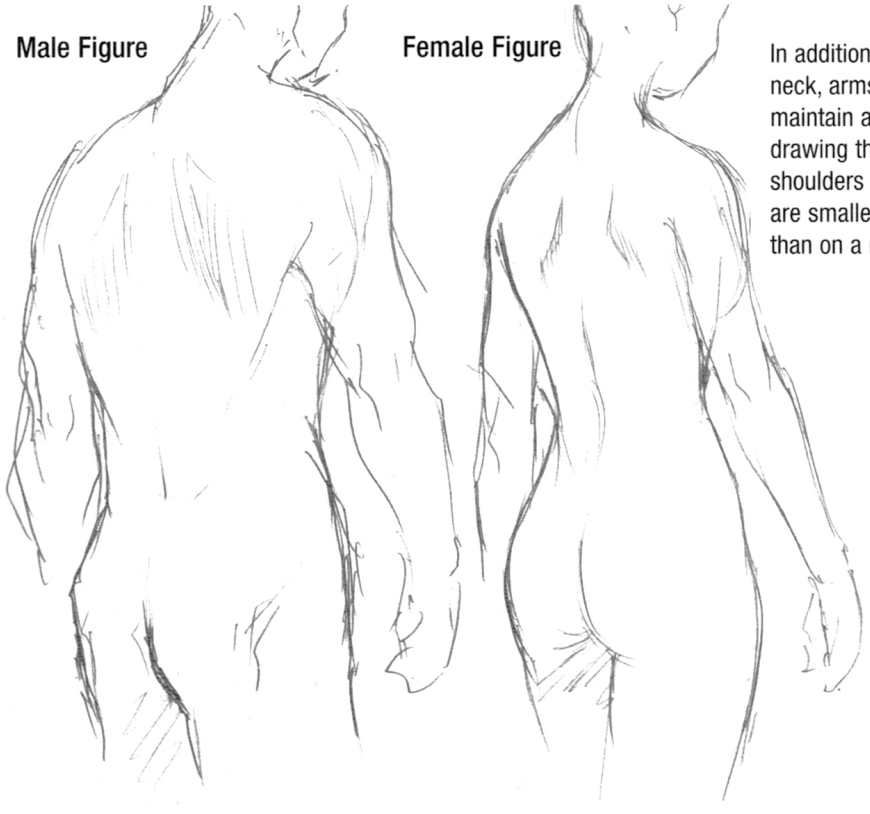
The male figure has large, prominent joints.

The female figure has small, understated joints.

Differences in Girth

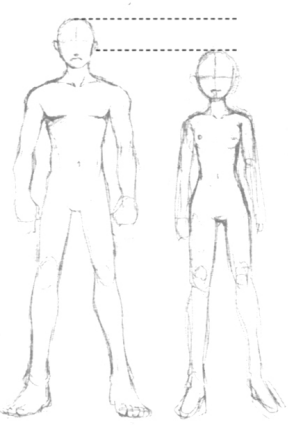
Male Figure

Female Figure

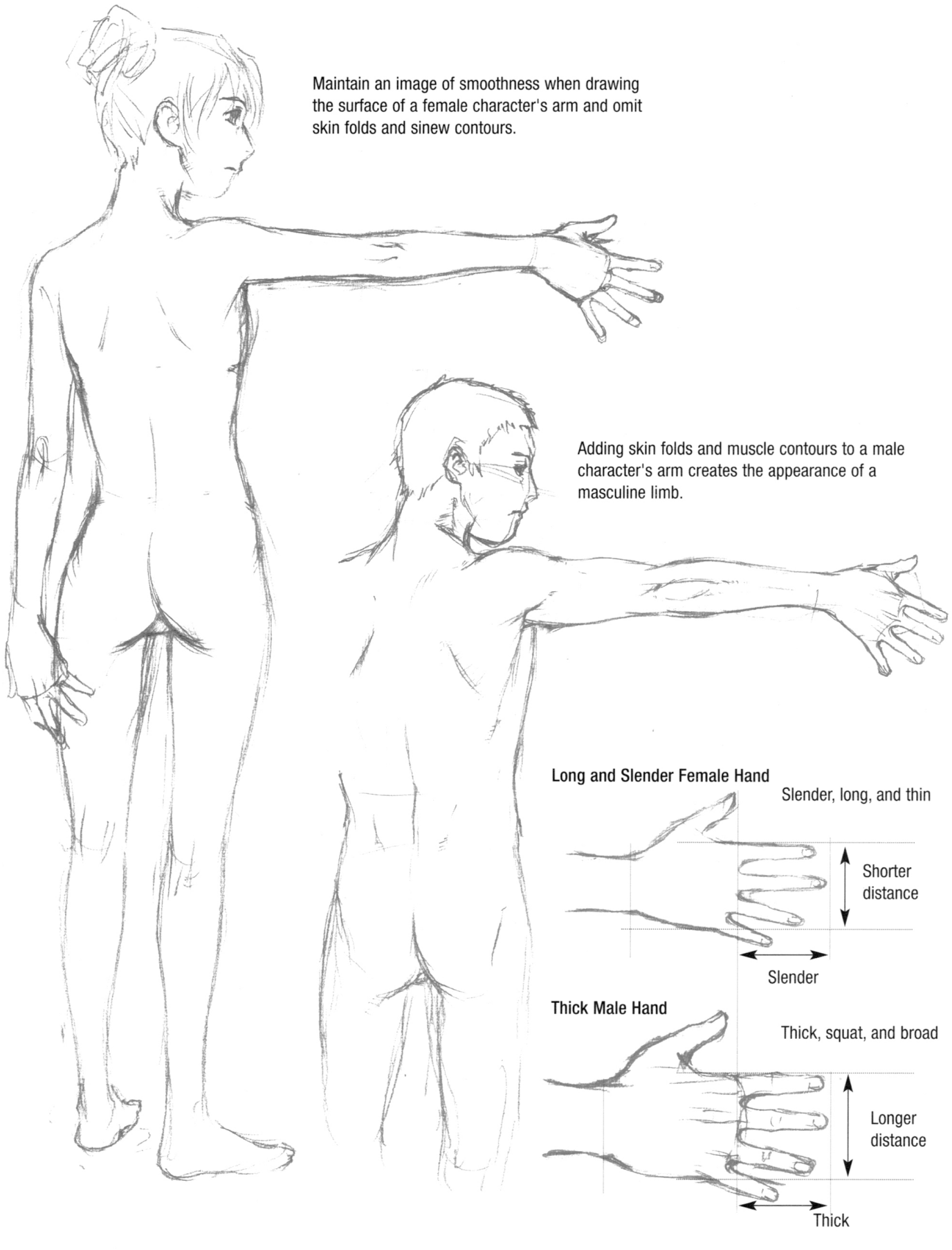


In addition to the torso, neck, arms, and legs, also maintain awareness when drawing that the shoulders and scapulae are smaller on a woman than on a man.

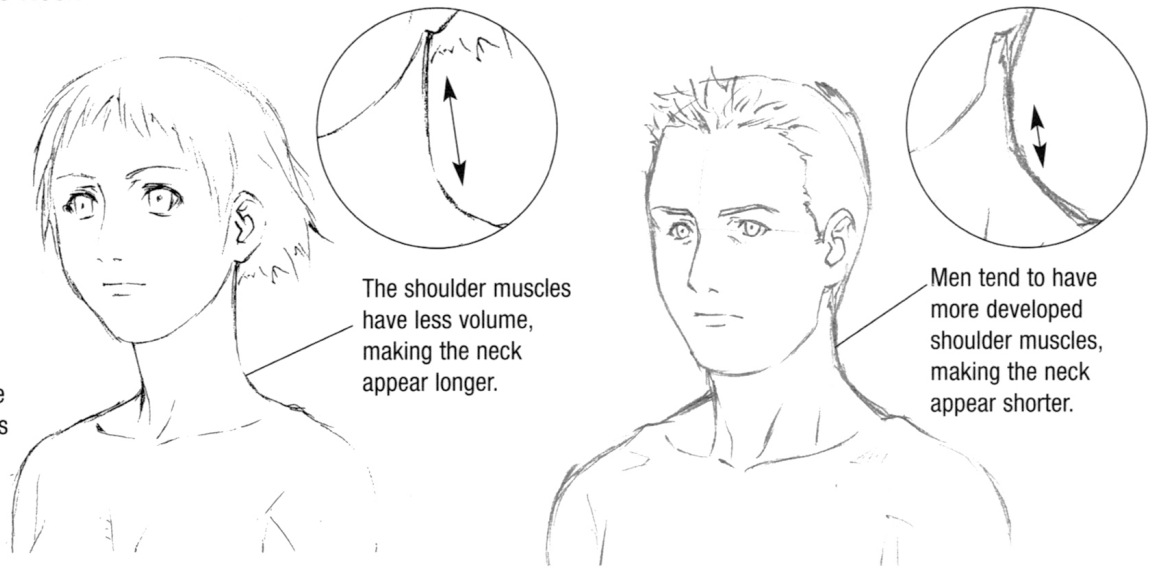
Differences in Height



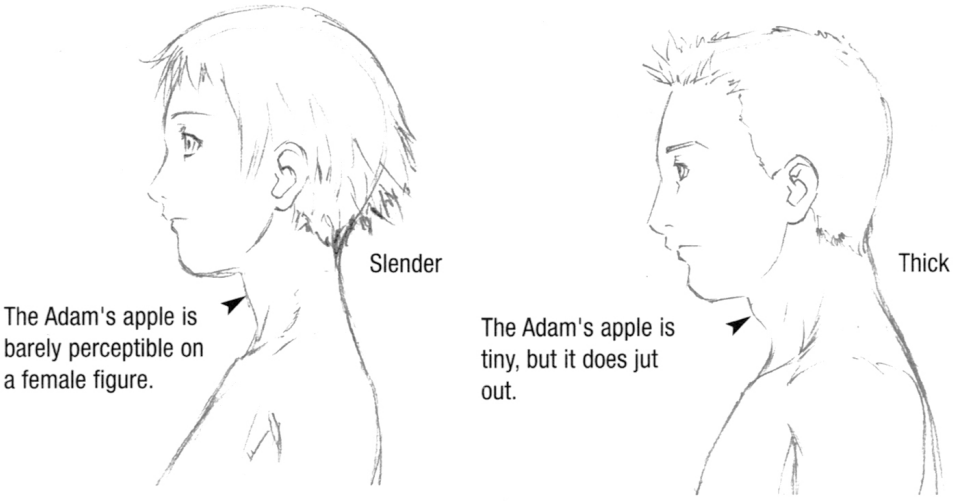
Drawing the height of female characters to come about level with the eyes of male characters makes the two distinguishable at a glance even in "long-shot" (small) compositions.


Maintain an image of smoothness when drawing the surface of a female character's arm and omit skin folds and sinew contours.
Adding skin folds and muscle contours to a male character's arm creates the appearance of a masculine limb.
Long and Slender Female Hand
Slender, long, and thin
Shorter distance
Slender
Thick Male Hand
Thick, squat, and broad
Longer distance
Thick
Masculine Fingers
Making the joints bony and projecting generates a rugged look.

Differences in the Neck



Differences in the neck's girth and shoulder muscle volume as well as the absence of an Adam's apple make the neck of a female figure appear longer than that of a male.

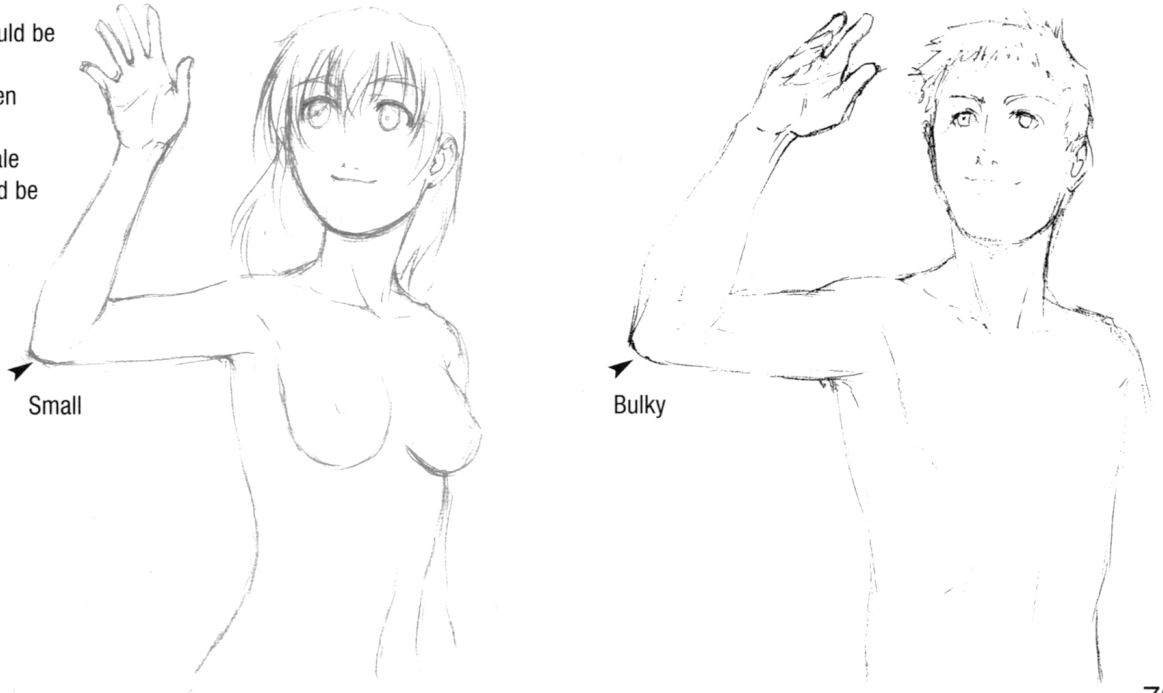


The Adam's apple is barely perceptible on a female figure.

The Adam's apple is tiny, but it does jut out.

Differences in the Elbow

A distinction should be made in bone thickness between male and female characters. Female characters should be given diminutive elbows.



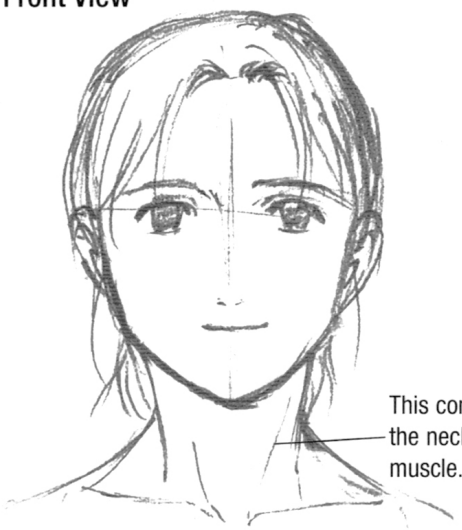
Makeup of the Primary Joints and Movement

Make an effort to master the basic motions of the joints in order to create a natural portrayal or illustrate movement effectively.

1. Basic Neck Structure and Movement

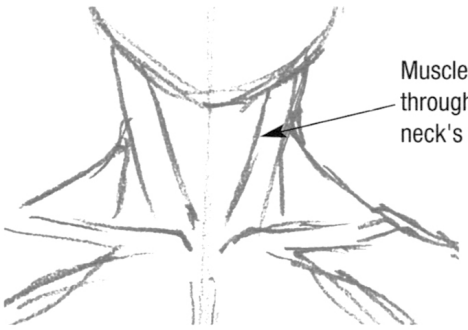
Learn how the head and neck connect and the way the neck moves.

Front View

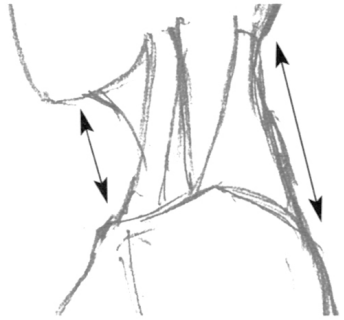


This contour at the base of the neck represents bulging muscle.

Adding muscle contour lines to the neck gives the head and the neck the illusion of three-dimensionality.

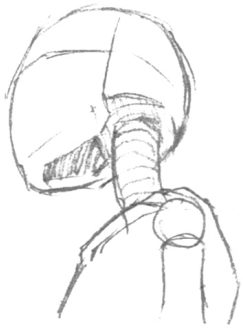


Muscle bulging through the neck's surface

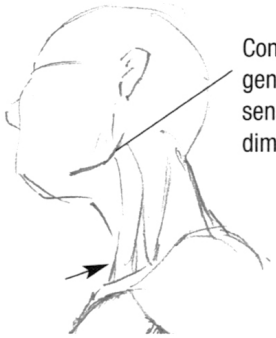


The back and front of the neck have different lengths.

Head and Neck from a Low Angle

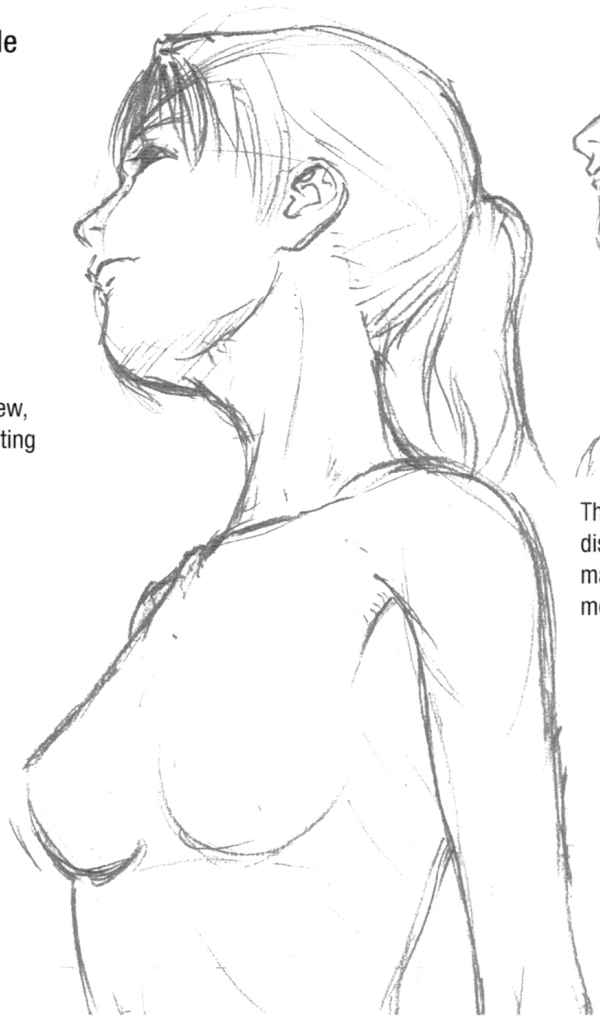


The underside of the jaw comes into view, making this angle the best for representing the head as a solid object.



Contour generating a sense of thee-dimensionality

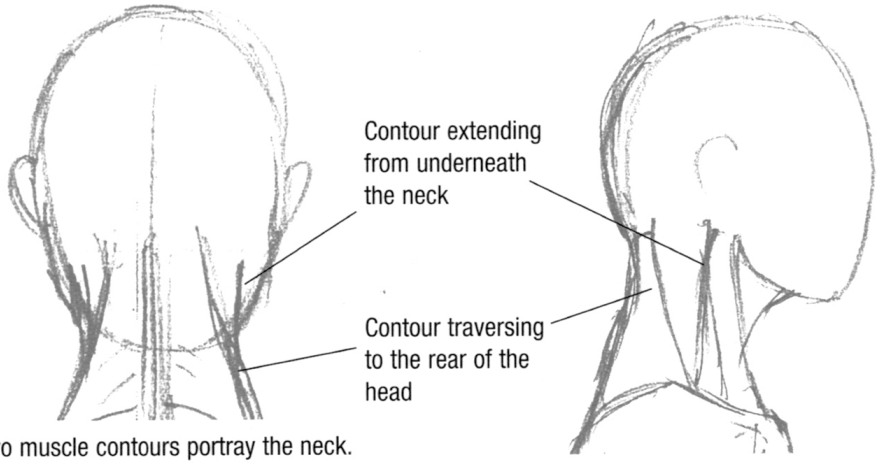
The muscles to the neck's side extend from beneath the ear to the clavicle.



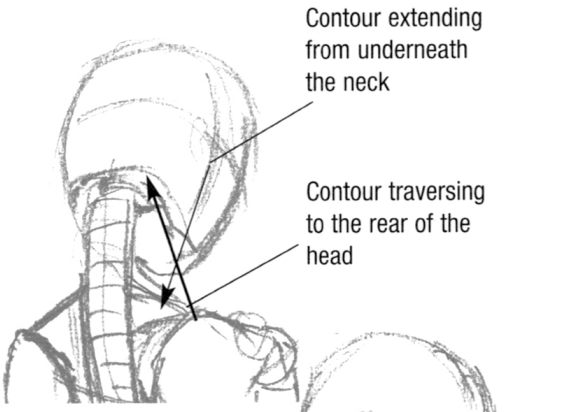


The jaws of male and female figures display no difference in width. Give male figures thicker necks and add more contour lines.

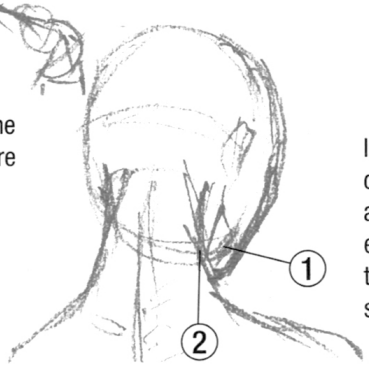
Back View



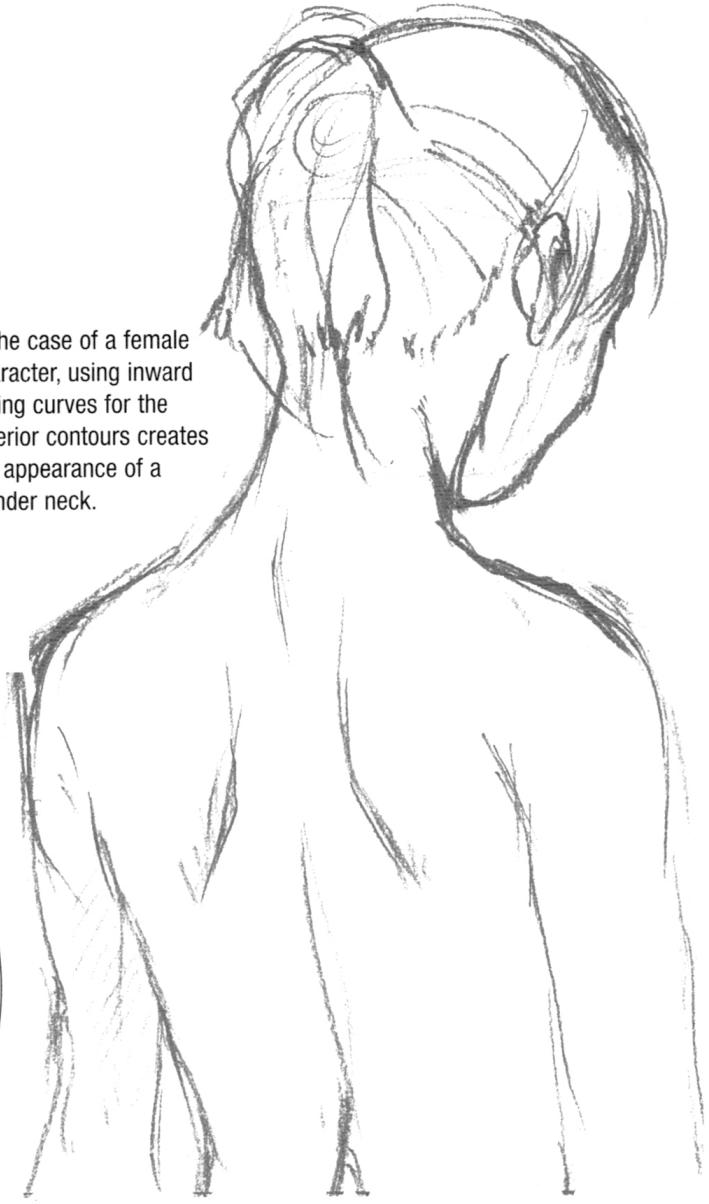
Two muscle contours portray the neck.



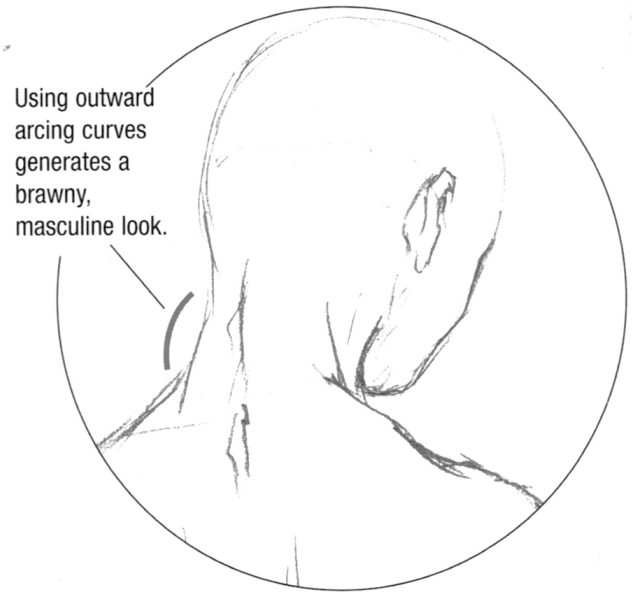
From a 3/4 angle, the two contours obscure the jaw.



Rendering the neck using these two contours allows you to give the neck and head a sense of volume.



In the case of a female character, using inward arcing curves for the exterior contours creates the appearance of a slender neck.

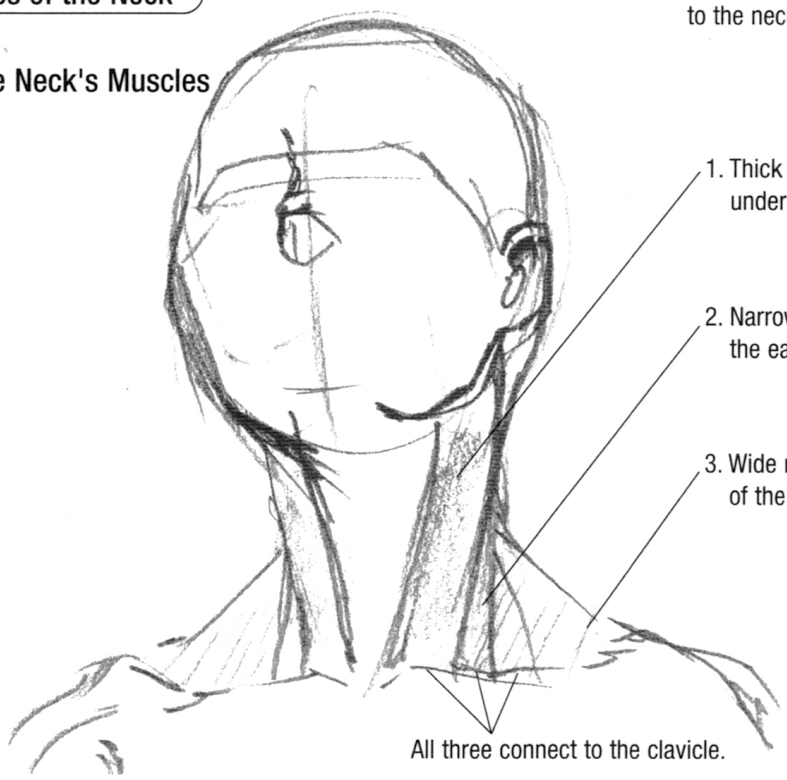


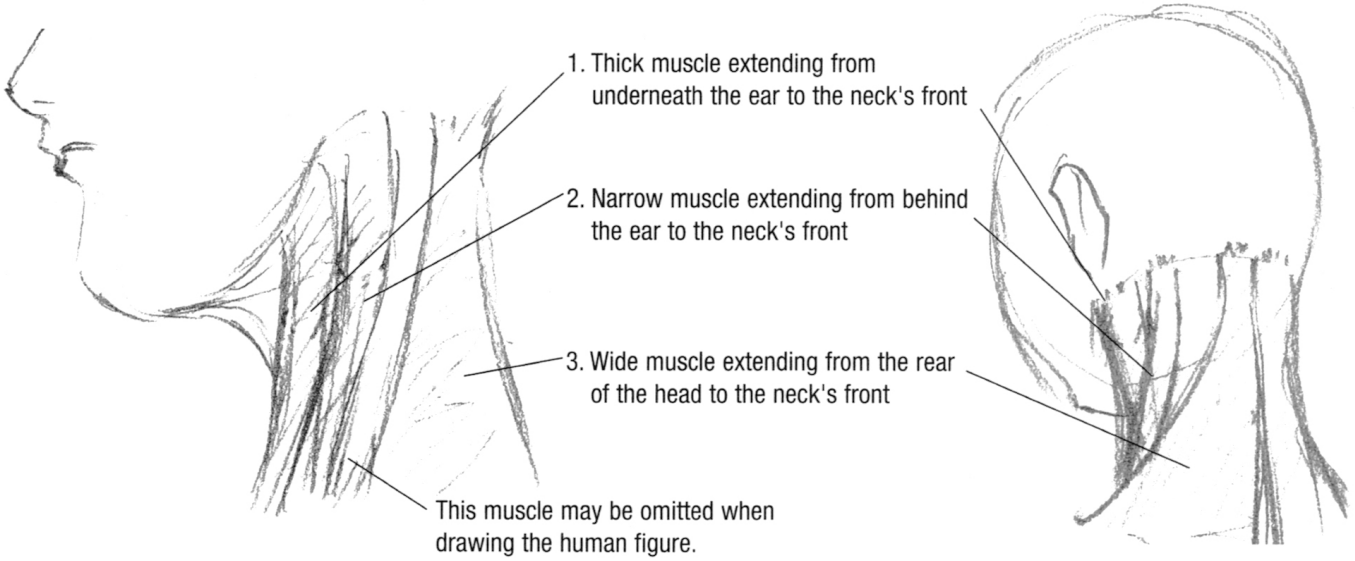
Using outward arcing curves generates a brawny, masculine look.

Major Muscles of the Neck

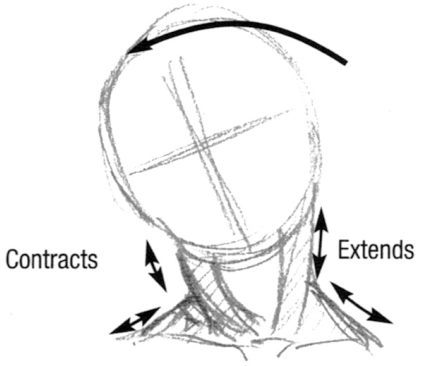
There are three primary muscles that are pertinent to the neck's movements and contour lines.

The ABCs of the Neck's Muscles

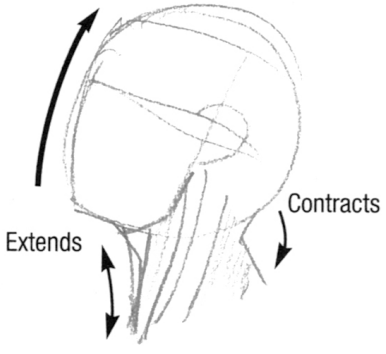




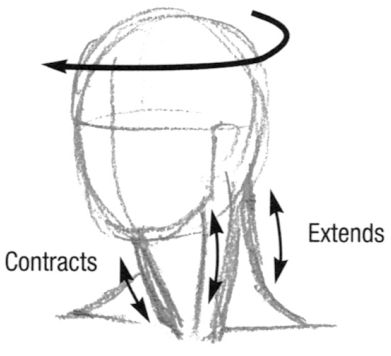
The Fundamental Structure of Movement: Muscle Extension and Contraction



Right and Left Motions: Right and Left Extension and Contraction
The muscles extending to the shoulders extend and contract to match the motion.

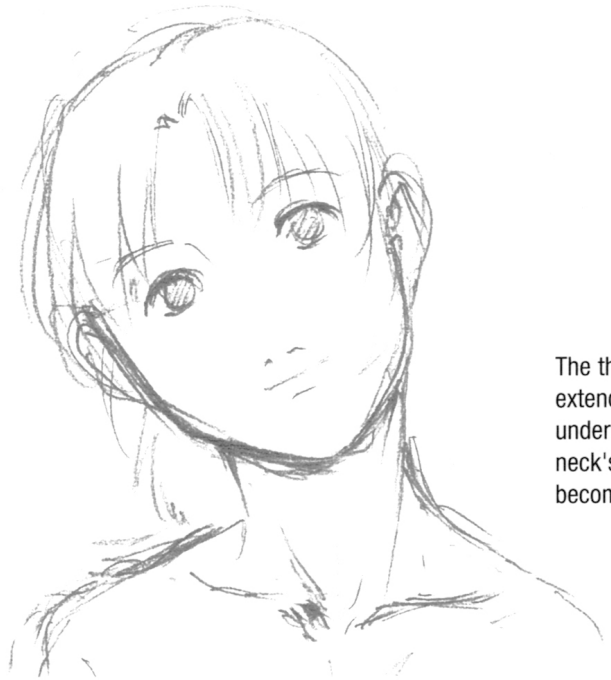


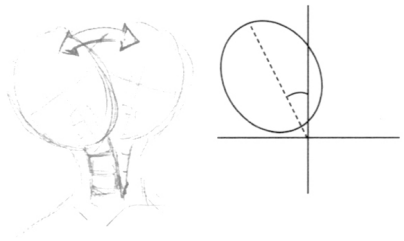
Forward and Back Motions: Front and Rear Extension and Contraction



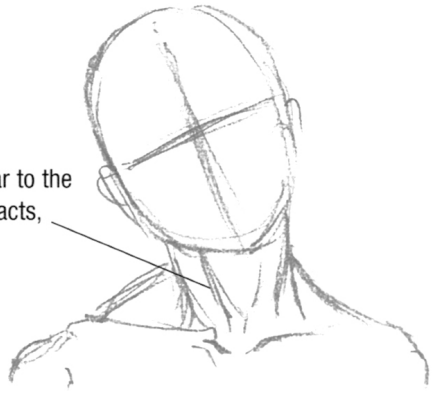
Turning Motions: Combination of Muscle Extension and Contraction

Tilting the Head: Right and Left Motion



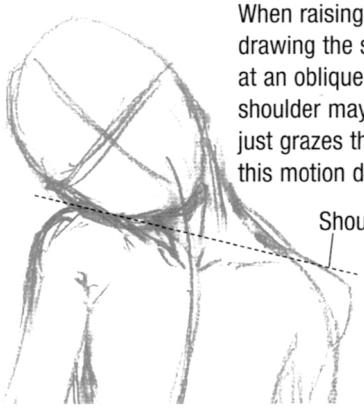


When the shoulders are held in a relaxed position, the head can tilt to approximately a 30º angle.



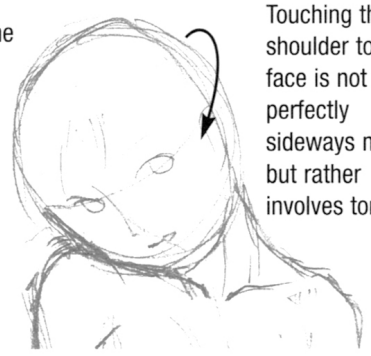
The thick muscle extending from underneath the ear to the neck's front contracts, becoming wider.

Raising a Shoulder While Facing Forward

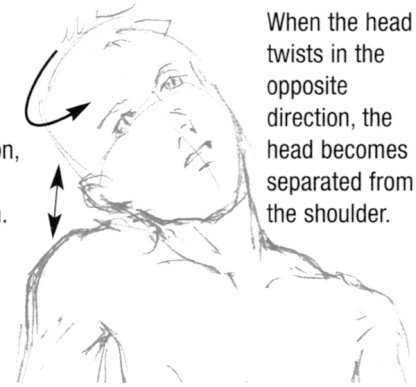


When raising a shoulder (i.e. drawing the shoulder guideline at an oblique angle), said shoulder may rise so that it just grazes the ear. However, this motion does have limits.

Shoulder guideline

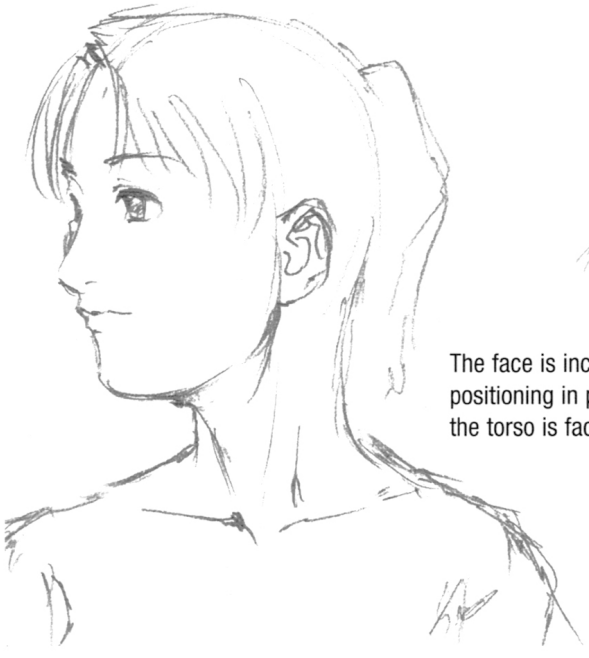


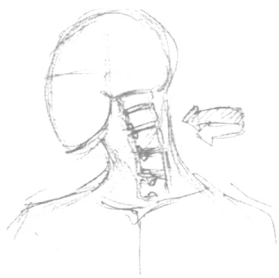
Touching the shoulder to the face is not a perfectly sideways motion, but rather involves torsion.



When the head twists in the opposite direction, the head becomes separated from the shoulder.

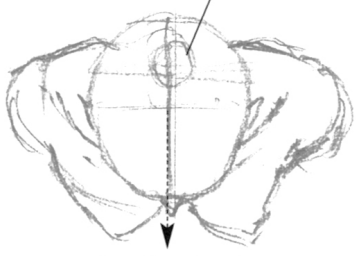
Facing Sidewise: Turning





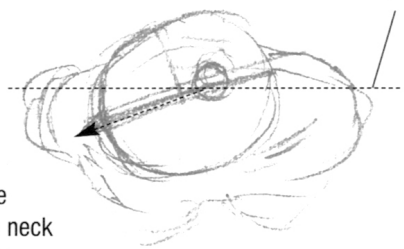
The face is incapable of positioning in perfect profile if the torso is facing forward.

Position of the spine



Direction faced

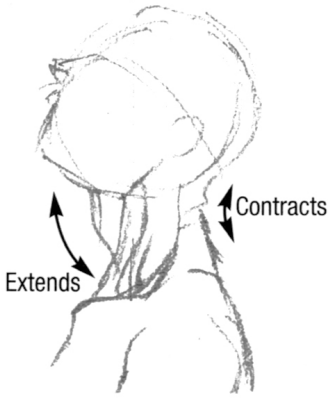
Shoulder guideline

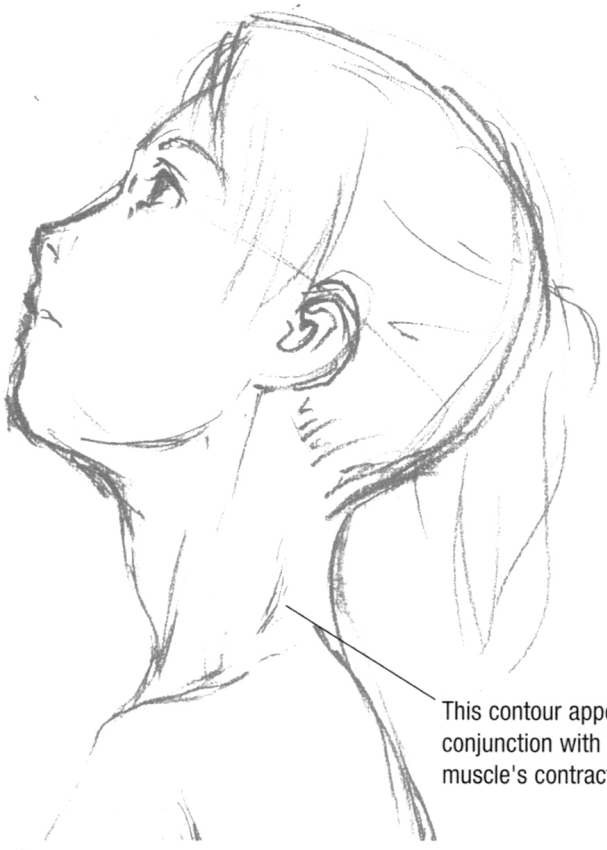


Guide indicating the extent to which the neck is capable of turning

Looking Up



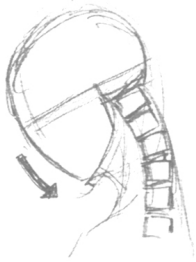


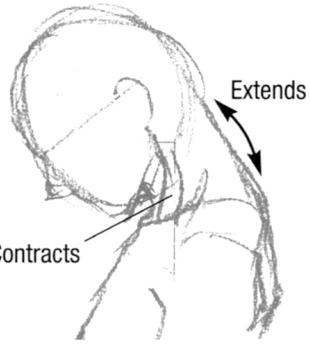


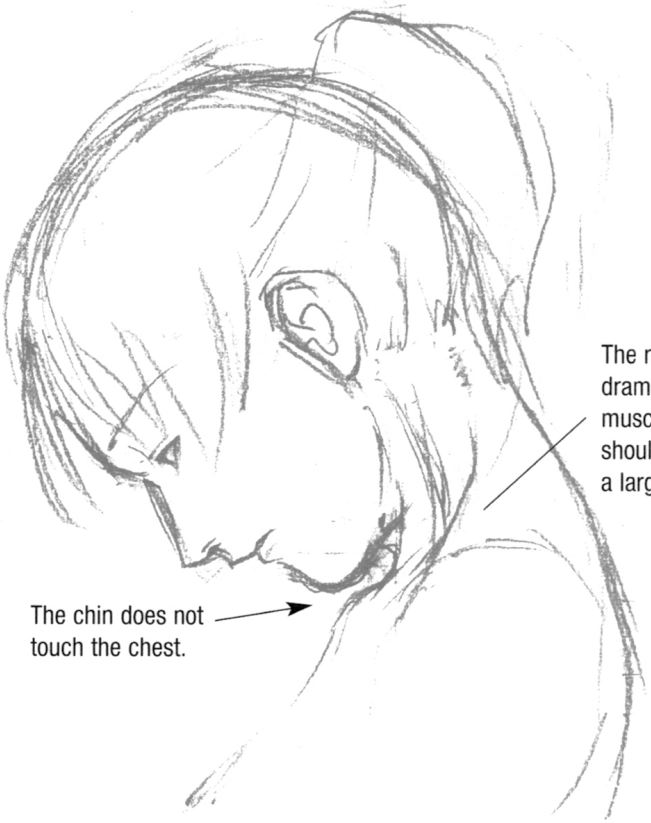


Exaggerating the Adam's apple distinguishes the male character from a female character, even when the neck is slender.

Looking Down









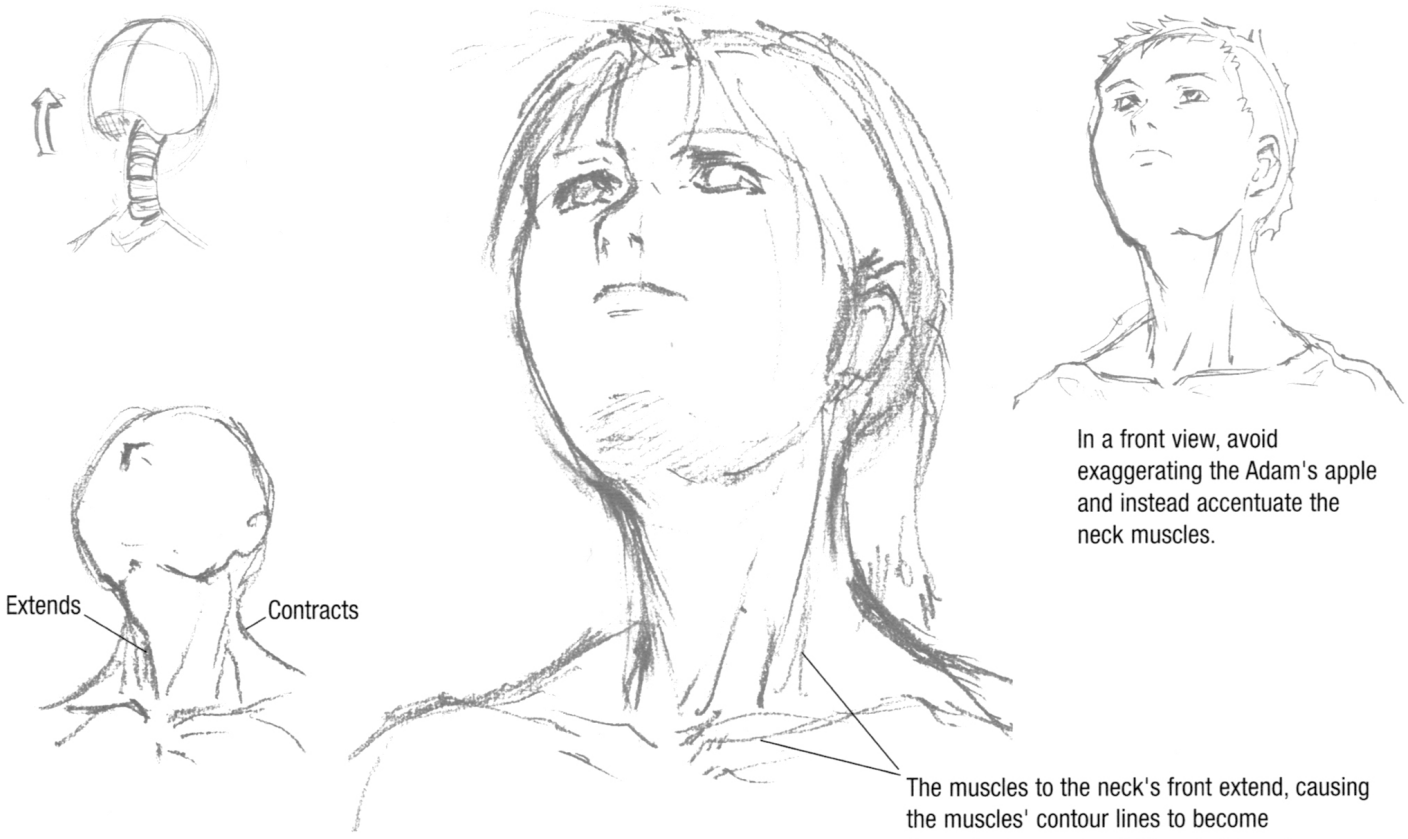


The chin does not touch the chest even when the mouth is open. Show the head rising from the upper jaw, using the lower jaw's position as a reference point.



On overweight characters, the neck might appear buried.

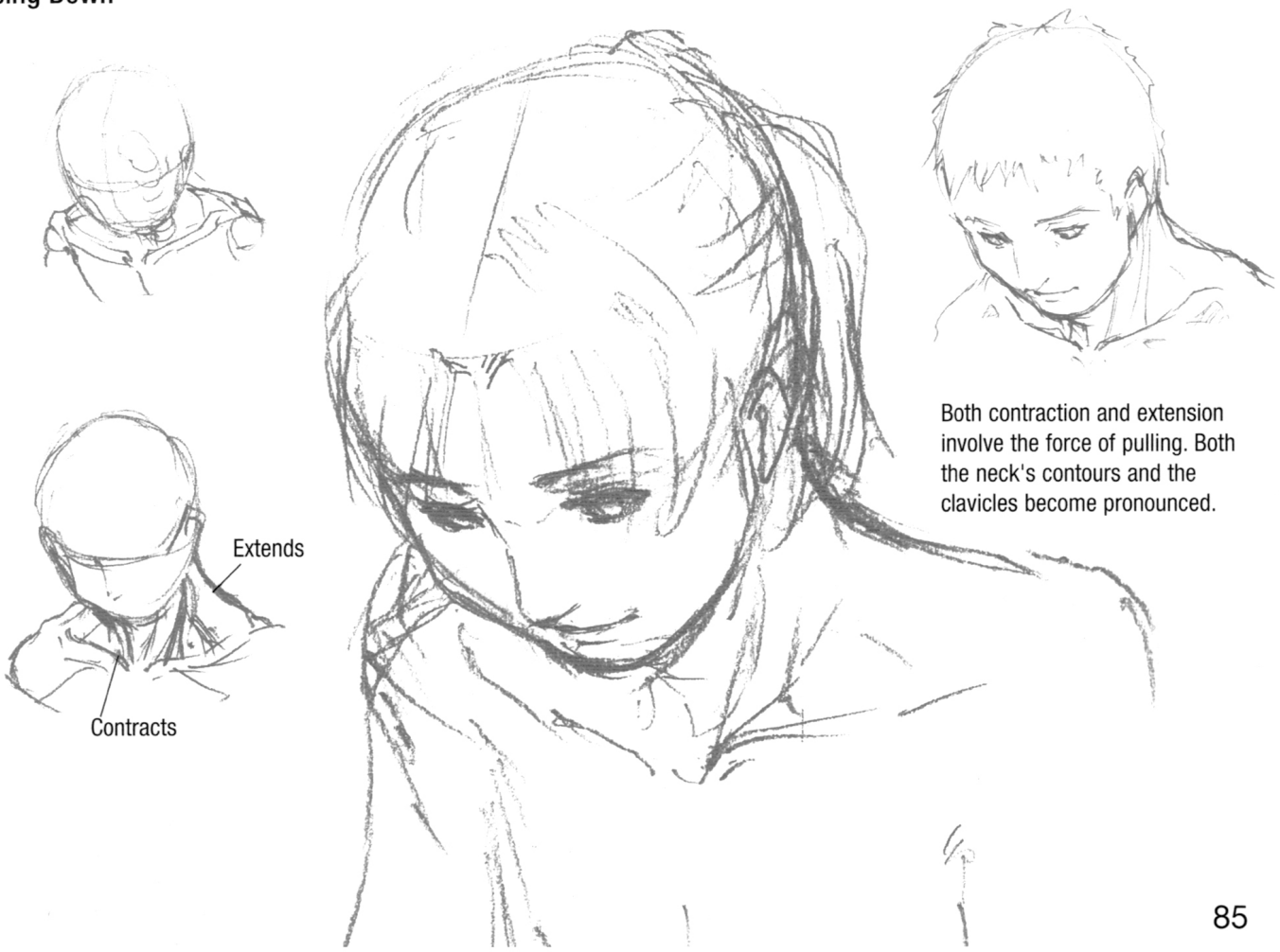
Leaning Back



In a front view, avoid exaggerating the Adam's apple and instead accentuate the neck muscles.

The muscles to the neck's front extend, causing the muscles' contour lines to become dramatically prominent. The clavicles also become prominent.

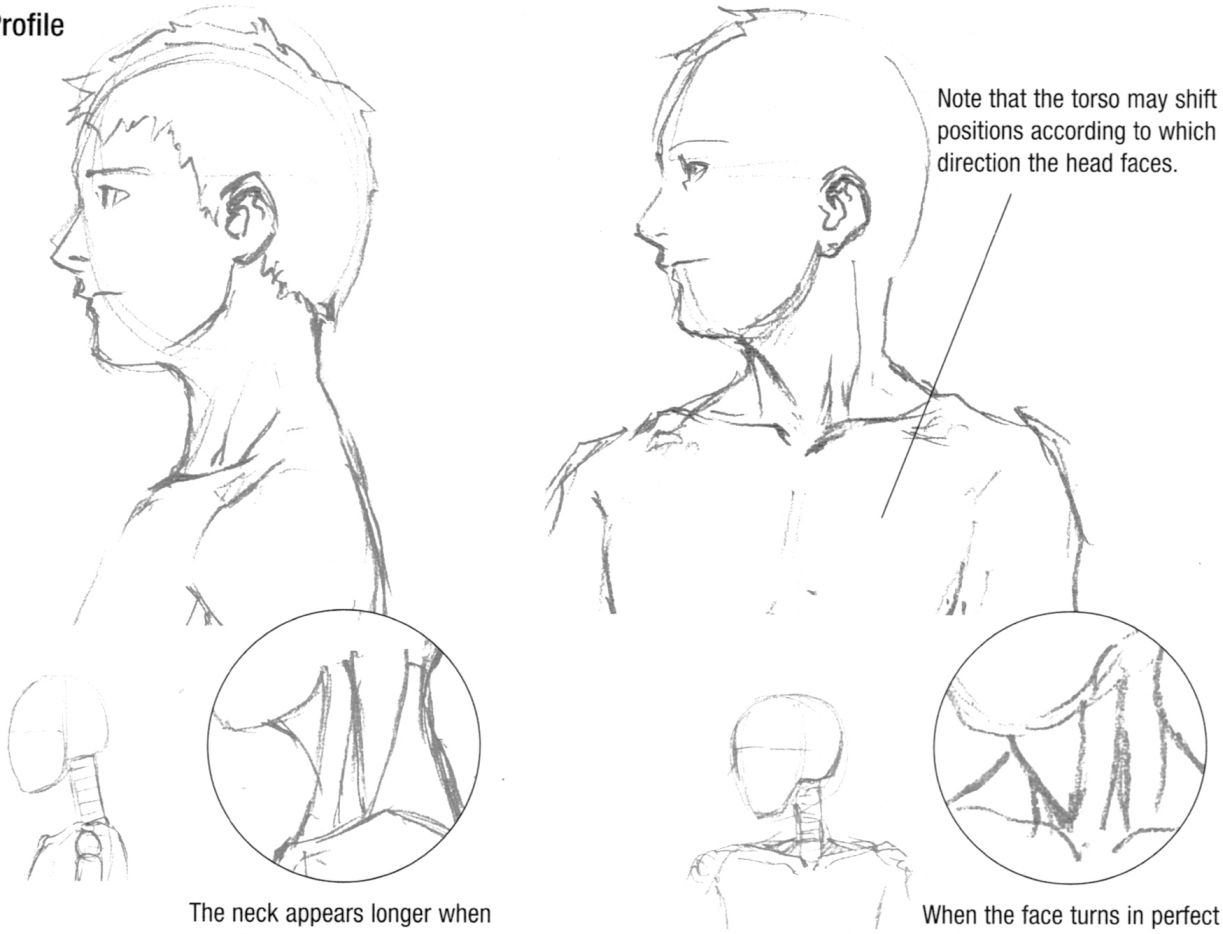
Facing Down



Both contraction and extension involve the force of pulling. Both the neck's contours and the clavicles become pronounced.

Conceiving of the Head, Neck, and Torso as a Unit

Head in Profile



The neck appears longer when both the head and torso are turned in profile.

Note that the torso may shift positions according to which direction the head faces.

When the face turns in perfect profile, the torso tends to turn slightly sideways as well (the torso should not face perfectly forward).

Head Facing Forward

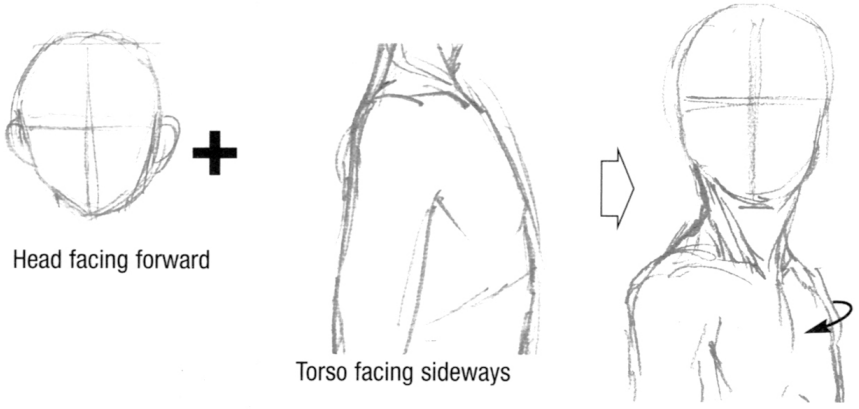


Head facing forward

Torso facing forward

Correct

When both the head and torso face forward, the neck attaches normally to the head and torso.



Head facing forward

Torso facing sideways

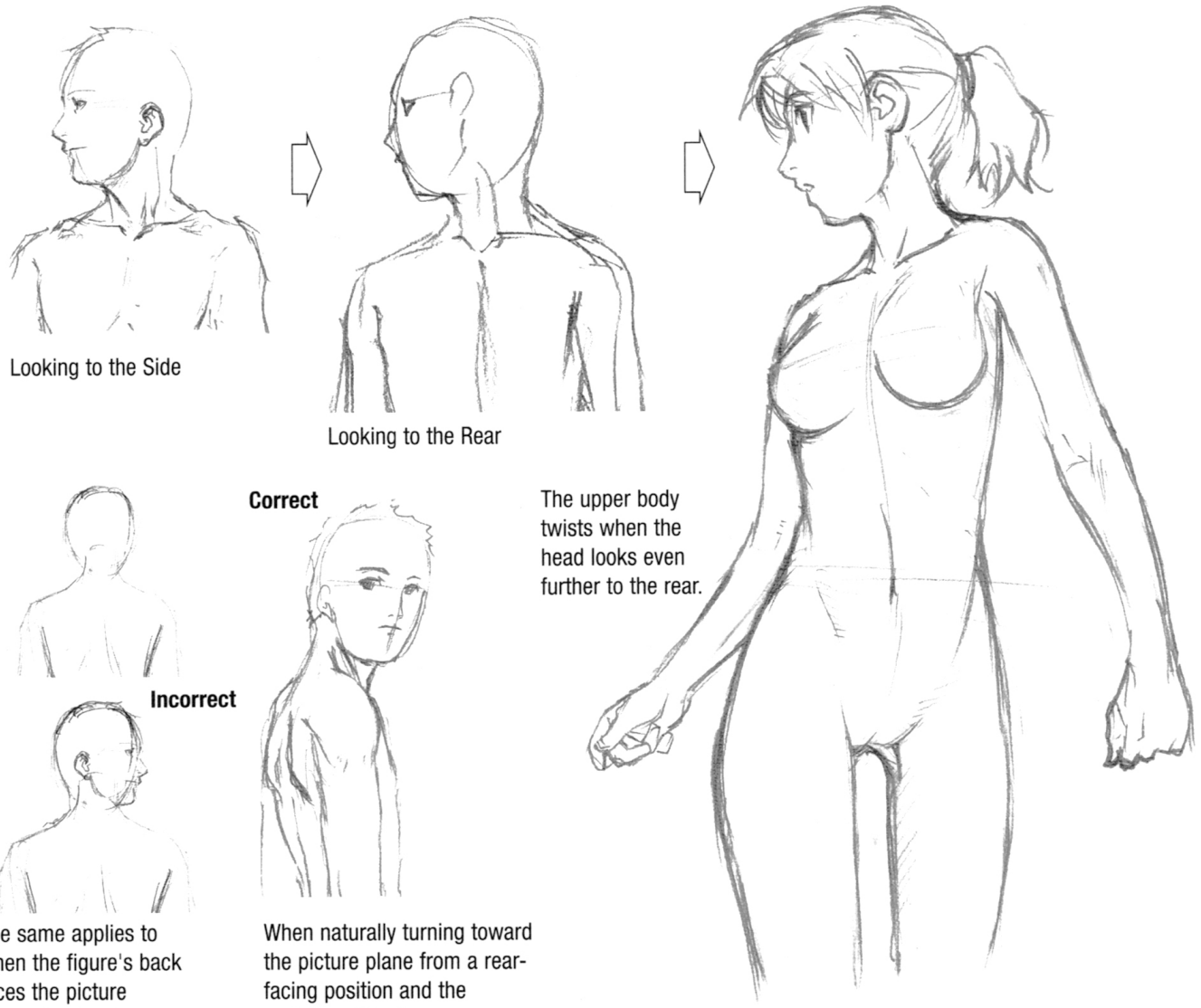
Correct

When turning the head from a perfect profile position toward the picture plane, the torso should shift slightly toward the picture plane as well, causing the neck's silhouette to take on a sideways "V" shape.

Incorrect

Note that the head can never face perfectly forward while the torso remains in perfect profile.

The Torso Follows the Direction of the Head



Looking to the Side

Looking to the Rear

The upper body twists when the head looks even further to the rear.

Correct

Incorrect

The same applies to when the figure's back faces the picture plane. The head never turns in perfect profile.

When naturally turning toward the picture plane from a rear-facing position and the majority of the face comes into view, the torso turns until it is almost in perfect profile.

Assorted Neck Silhouettes

The neck functions to connect the head to the torso. The neck's shape and contour lines change according to the direction faced by the torso, even if the head is positioned at a consistent angle.

2. Basic Spine Structure and Torso Movement

Make an effort to master the torso's basic motions with the spine at their core.

Studying the Spine from a Rough Sketch of the Skeleton

In a high-angle composition looking at the figure's back, the spine appears perfectly straight.

When standing in a moderately relaxed (i.e. bent) position, the spine arcs.

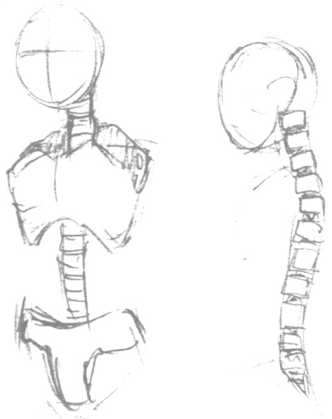


Diagram Showing the Head, Spine, Chest, and Waist

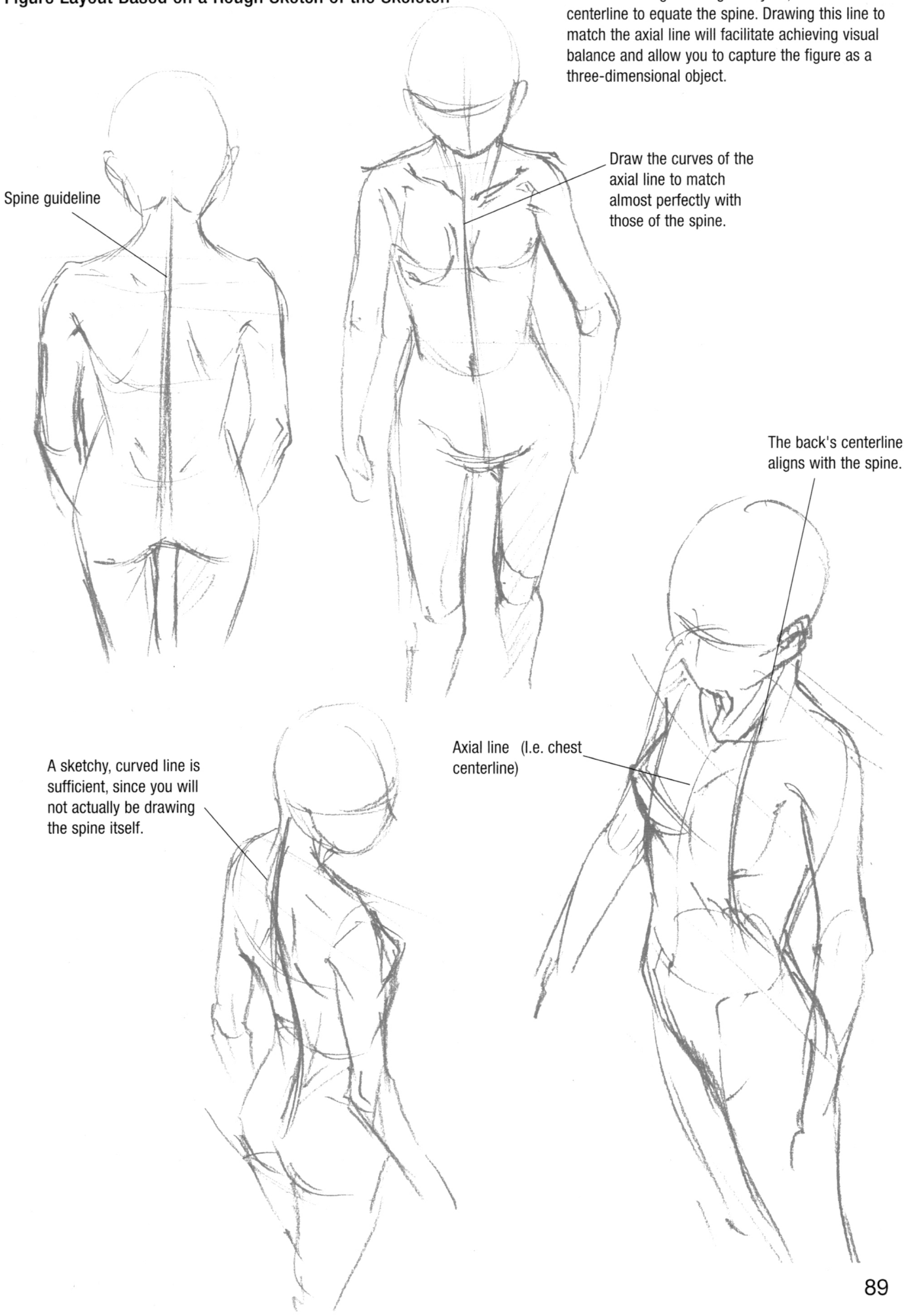
From a rear, 3/4, overhead angle, the spine takes on an "S" curve.

The manner in which the spine curves changes according to the figure's pose and angle of composition. How you draw the spine's curve also helps determine the pose.

The spine appears arced when viewed from a front, 3/4, moderately overhead angle.

Figure Layout Based on a Rough Sketch of the Skeleton

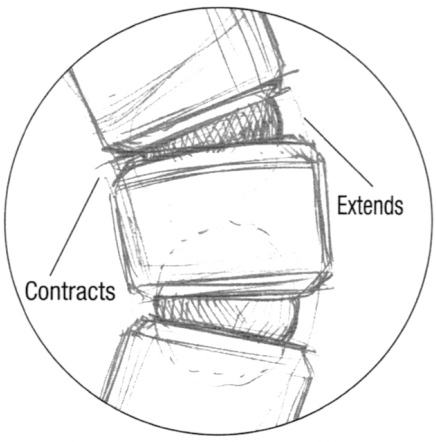
When sketching a full-figure layout, draw a centerline to equate the spine. Drawing this line to match the axial line will facilitate achieving visual balance and allow you to capture the figure as a three-dimensional object.



Right and Left Motions



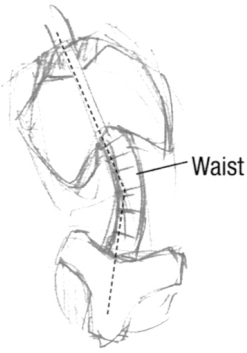




The entire spine bends a little between each vertebral segment.

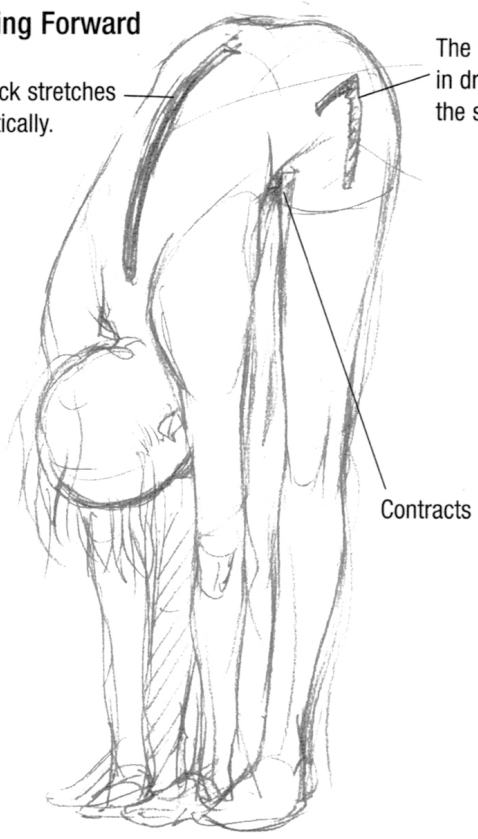
The waist constitutes a key point when drawing. The spine itself bends little. Rather, conceive of the body as bending dramatically at the waist.

The human body does not bend perfectly to the side. A 45° angle seems to be the limit.



Forward and Backward Motions

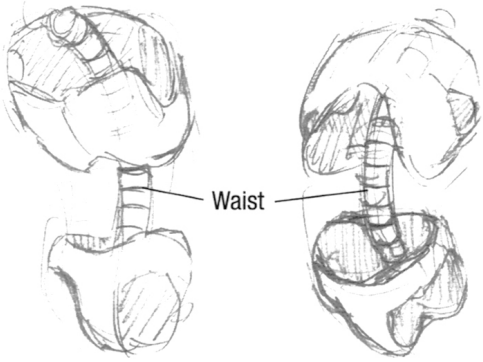
Bending Forward



The back stretches dramatically.

The hip plays an important role in dramatic motions. Note that the spine does not form a "U".

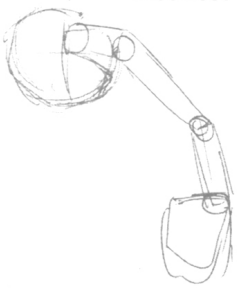
Contracts



Use a gentle curve for the spine.



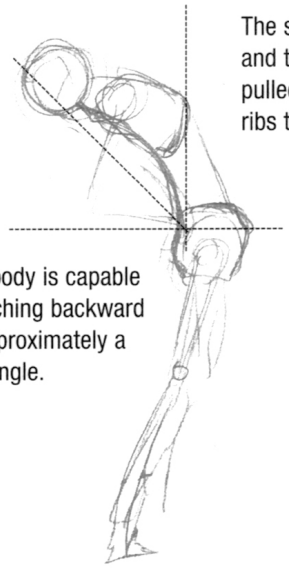
Incorrect



The spine does not bend from the waist in a straight line.

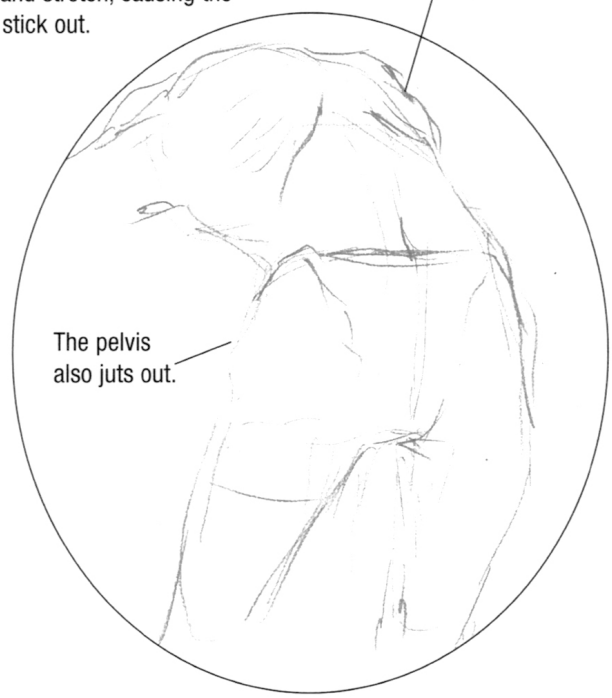
Arching Back

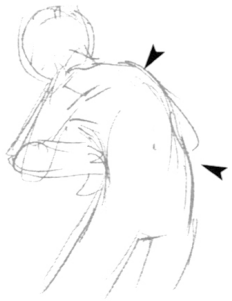




The body is capable of arching backward to approximately a 45° angle.

The skin covering the stomach and the abdominal muscles are pulled and stretch, causing the ribs to stick out.





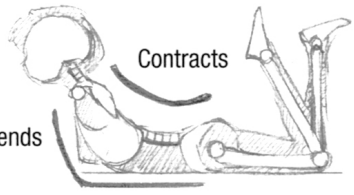
When sketching the layout, use curved lines to draw the chest and the pelvis.

Poses with the Back Arced

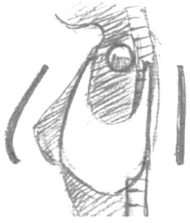




When lying on the stomach, the back arcs.



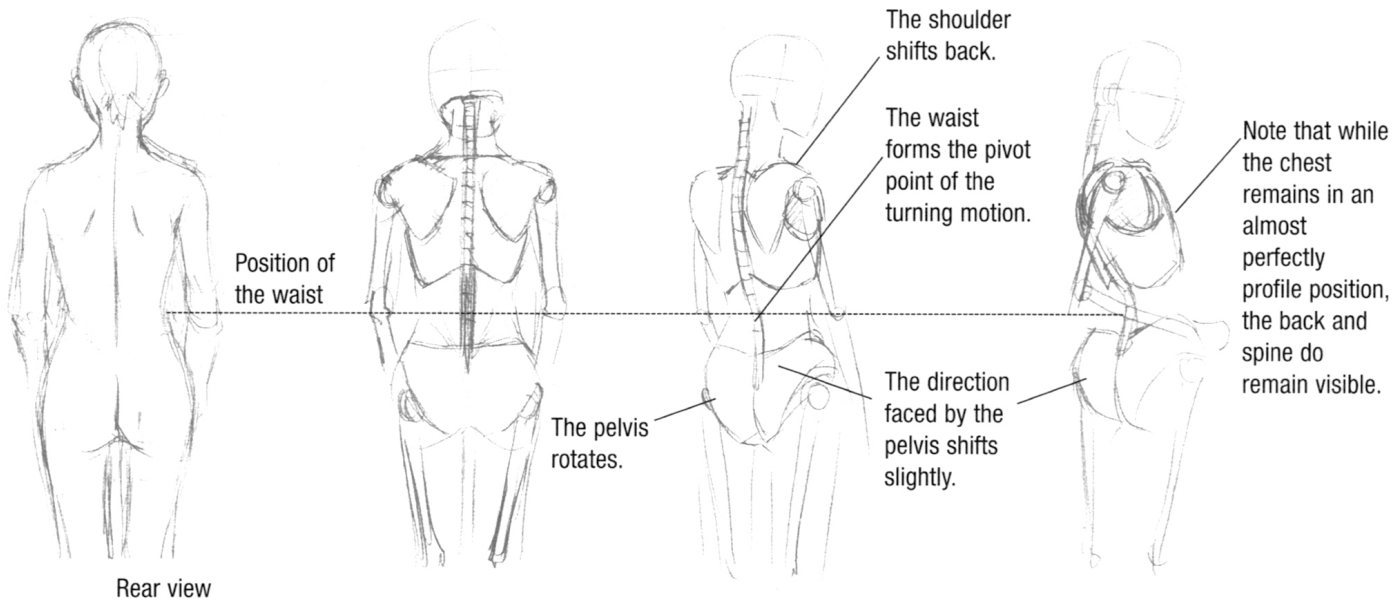
The front of the body seems to be held erect, making the back appear significantly arced.

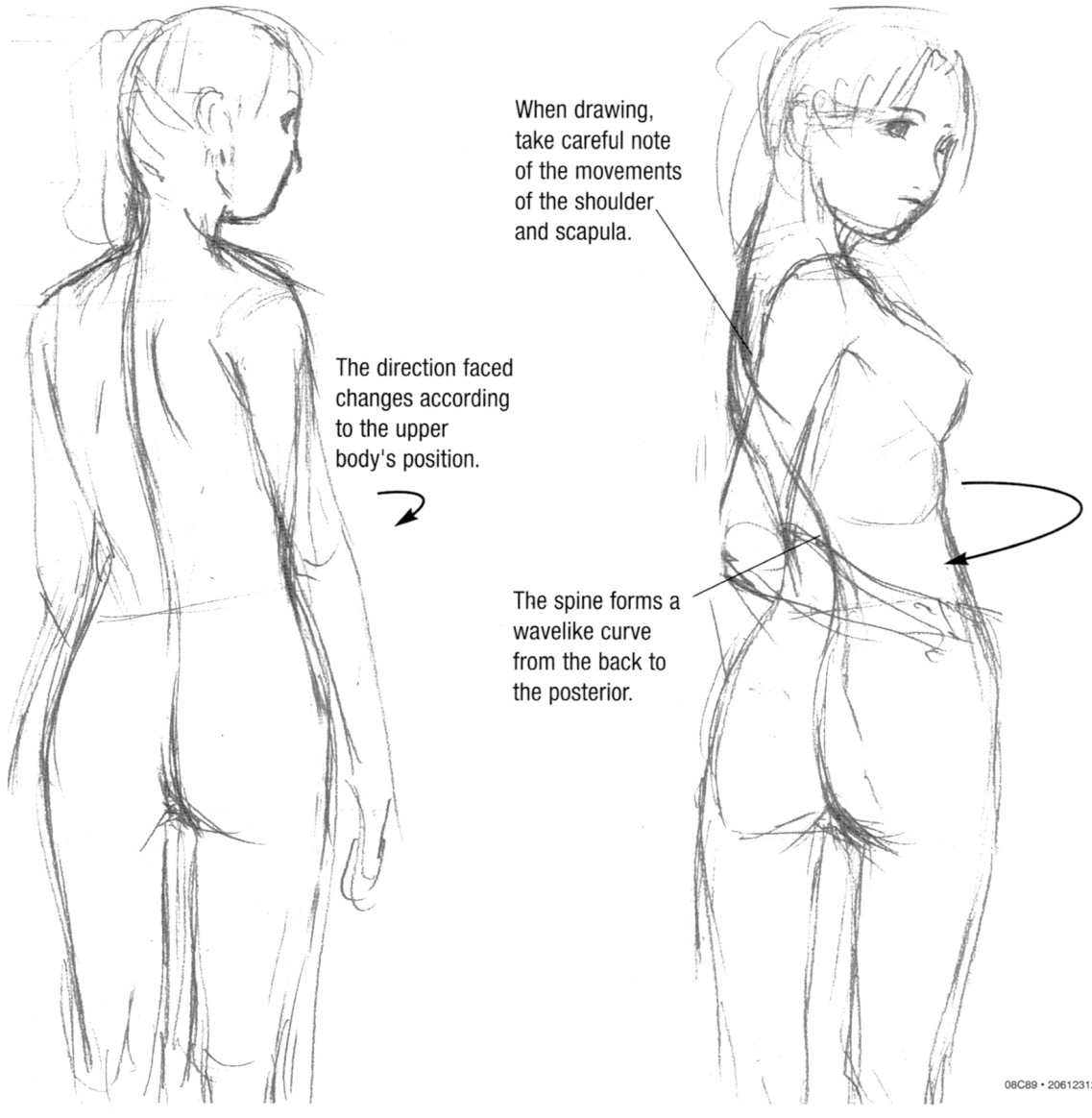


The inverted "V" shape of the silhouette makes the backward arc appear even more pronounced.



Looking Back A Full-Body Action Involving Coordination of the Waist, Shoulders, and Neck





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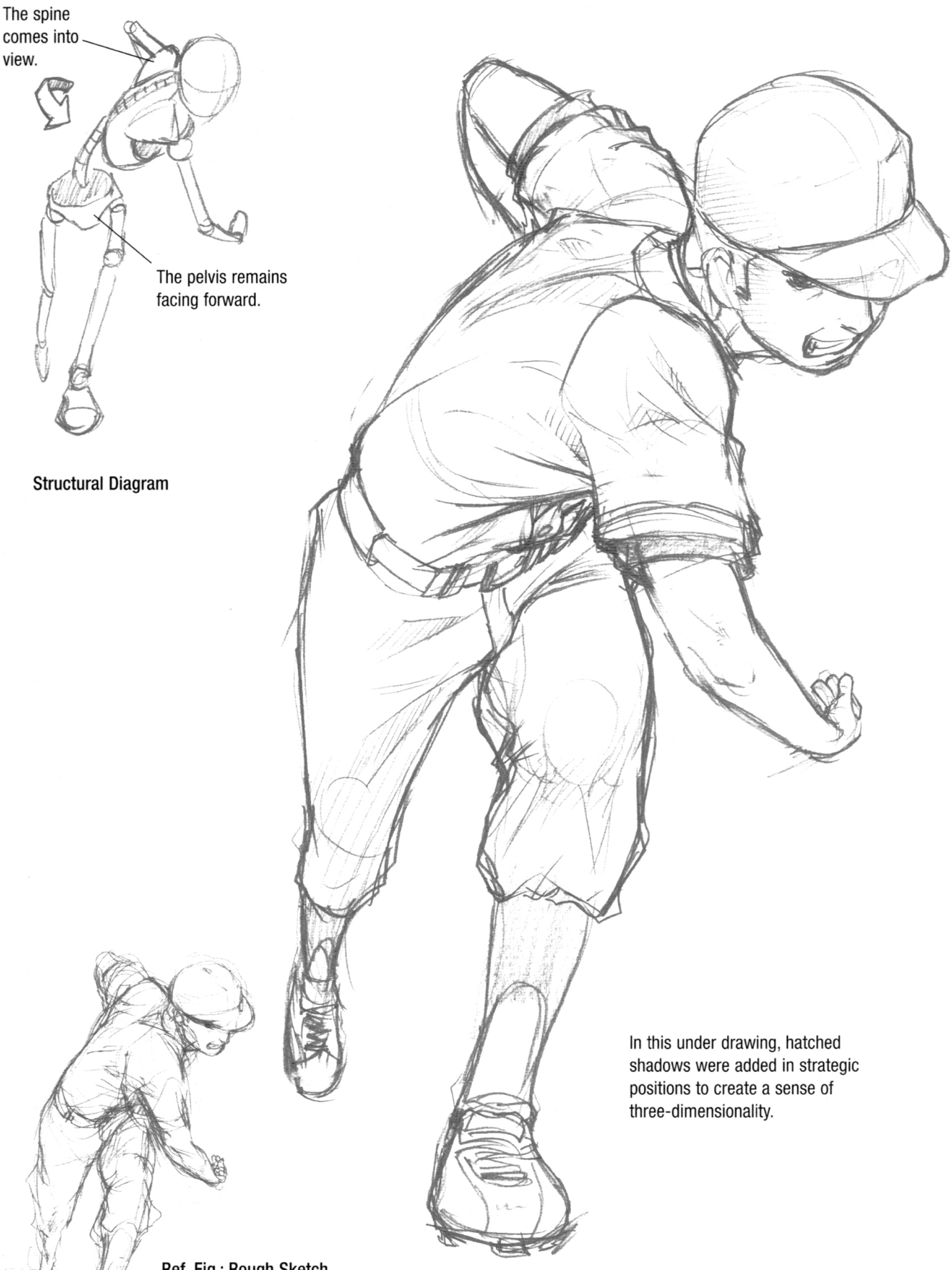
Throwing



Structural Diagram

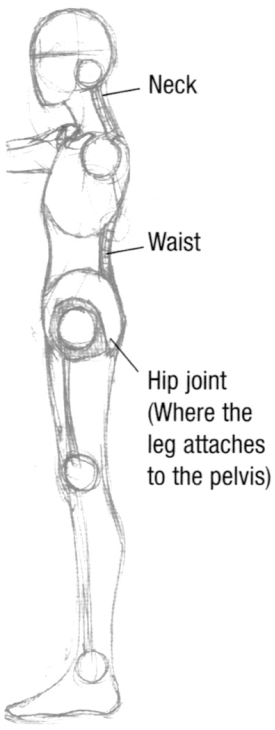
In this under drawing, hatched shadows were added in strategic positions to create a sense of three-dimensionality.

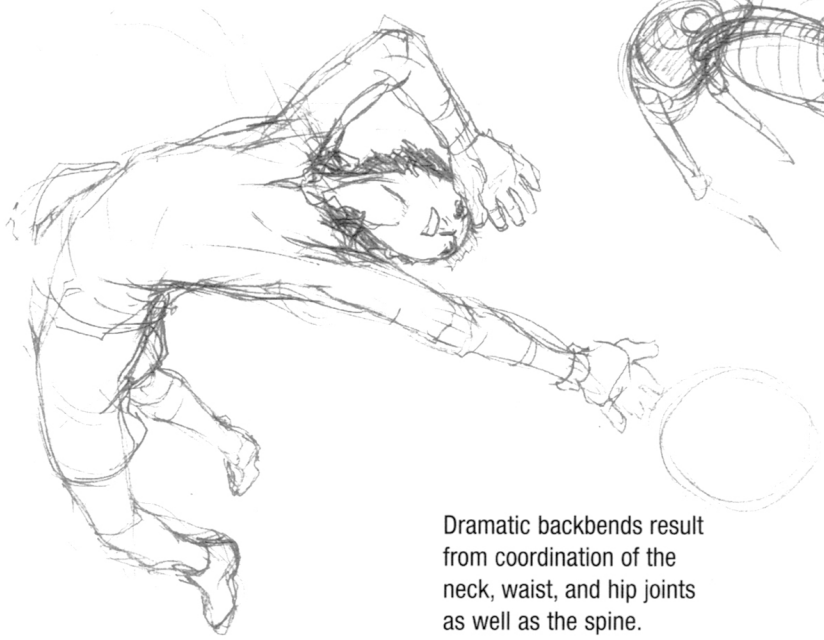
Ref. Fig.: Rough Sketch

Motions Created by Bending and Twisting

Movement Resulting from a Synergy of the Spine, Neck, Waist, and Hip Joints

This imbues unaffected, unconscious actions as well as dramatic motions with a sense of movement.



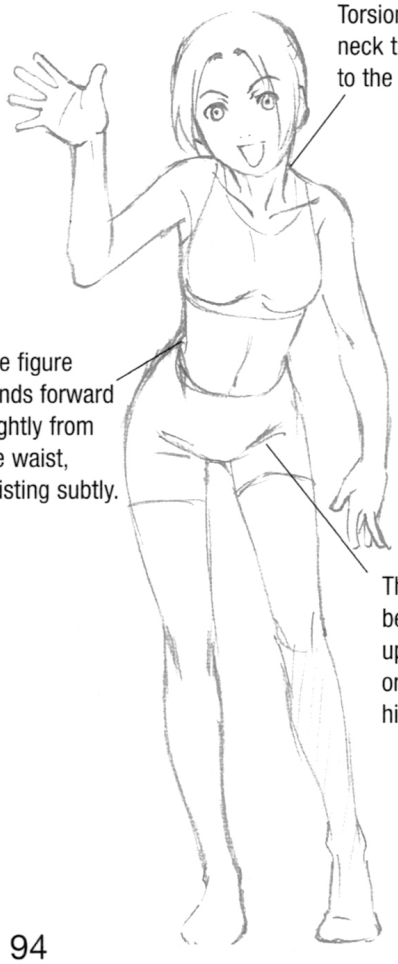


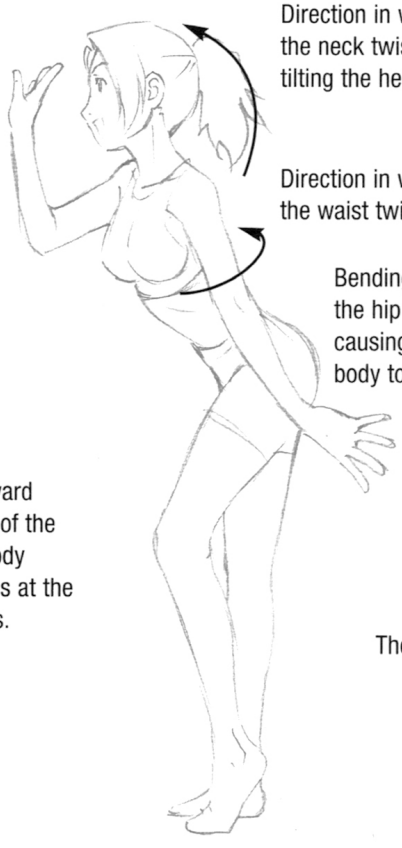


Dramatic backbends result from coordination of the neck, waist, and hip joints as well as the spine.



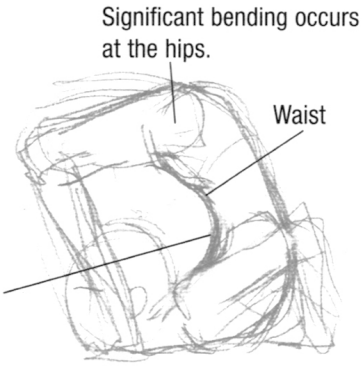
Twisting and Bending Motions





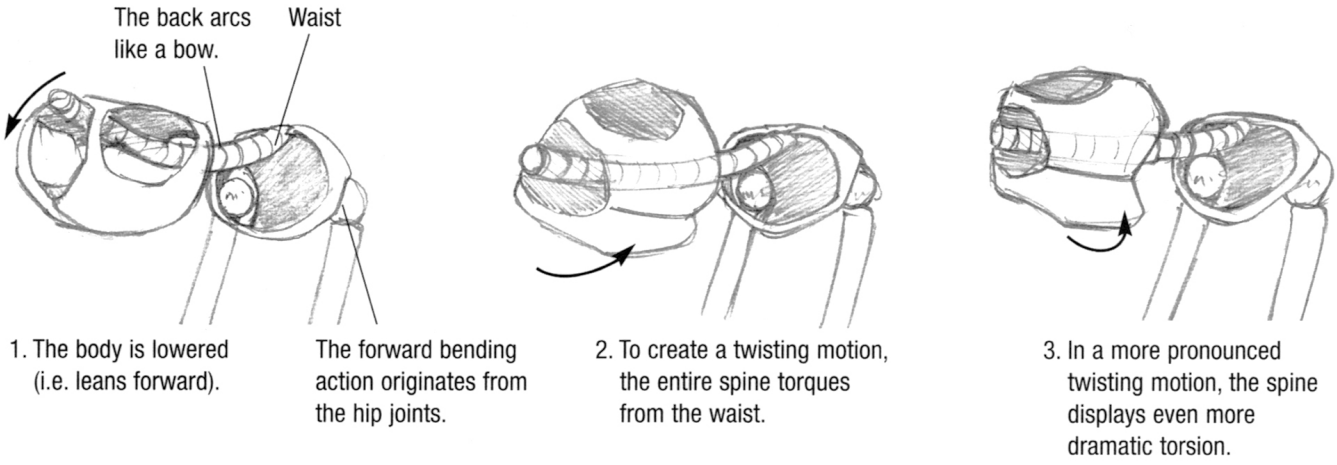


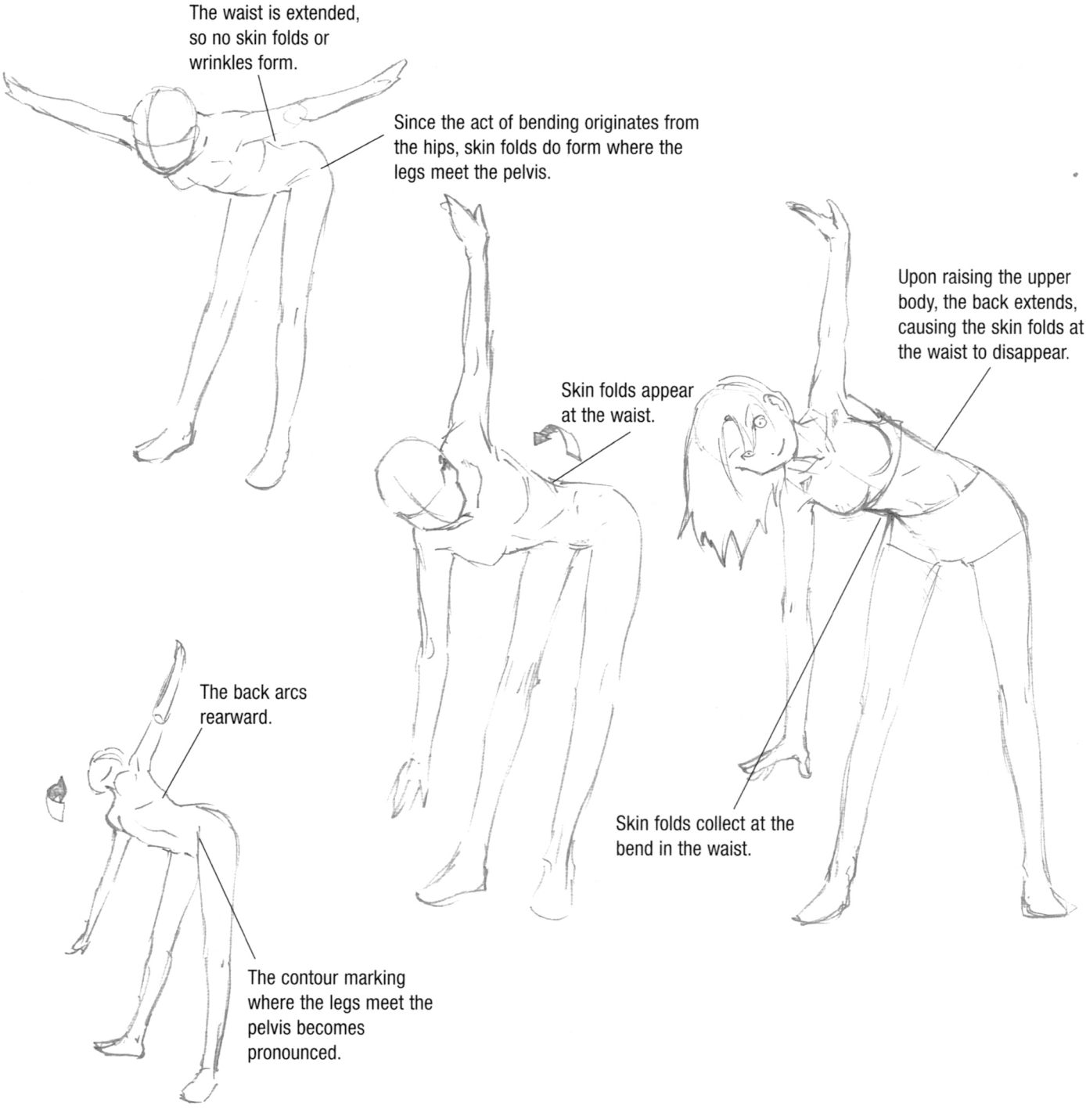
Ref. Fig.: The above image shows a figure with the upper body twisting in the opposite direction as the one to the left.



Someone with training might be capable of bending to the extent shown in the image above. However, the key points to note are the neck and the hips.

Motions Used in Exercise





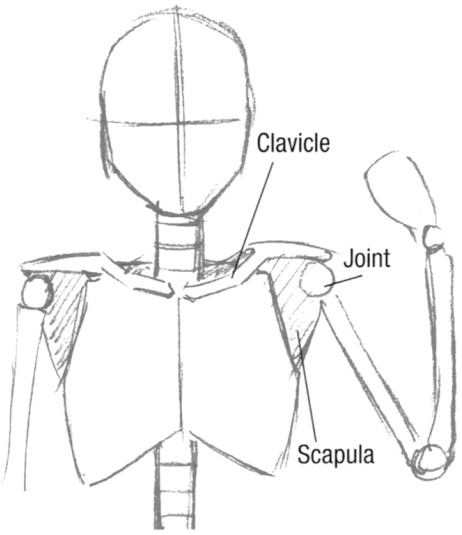
3. Basic Shoulder and Arm Connections and Movement

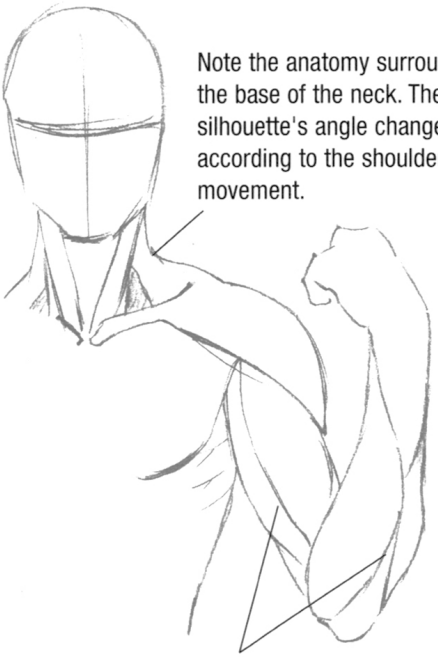
The shoulder's joint comprises the scapula and the clavicle. Take the time to learn the structures of the arm and the shoulder.

Structure of the Shoulder and Muscles of the Arm

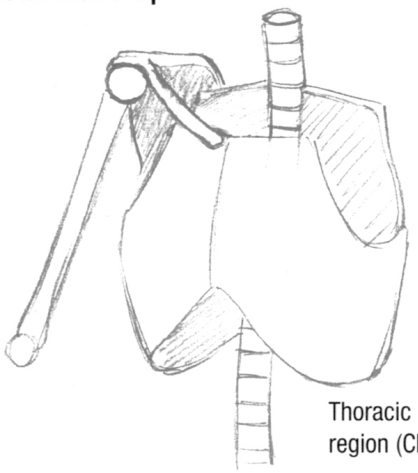
Front View





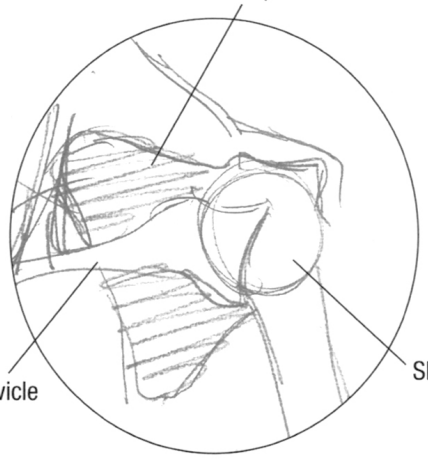


Skeletal Make-up



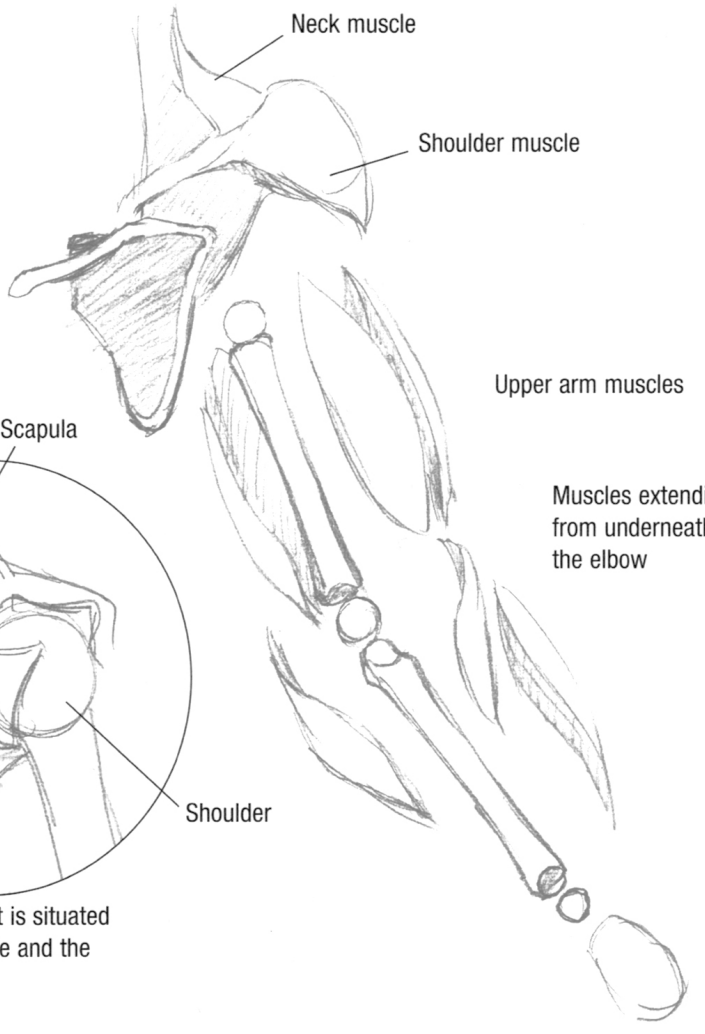


The scapula and clavicle form a pair. Draw them overlapping the thoracic region.



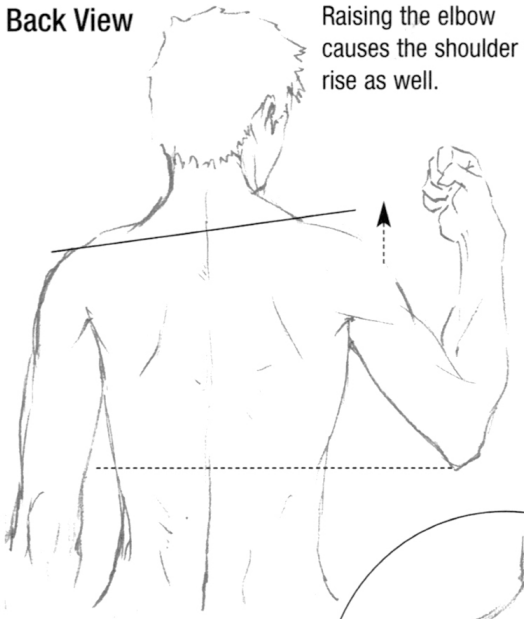
The shoulder's joint is situated between the clavicle and the scapula.

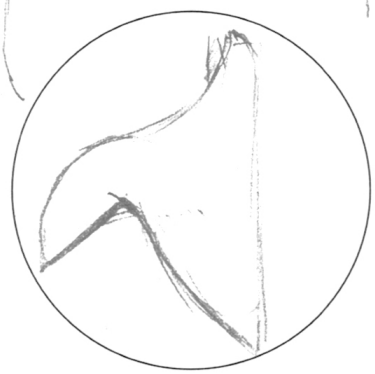
Muscles of the Shoulder and Arm



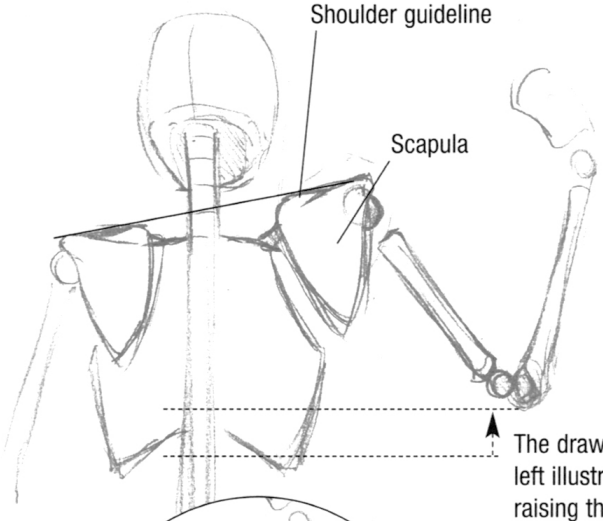
Back View

Raising the elbow causes the shoulder to rise as well.





The muscles of the back expand broadly from the rear of the neck to the shoulders and the back.





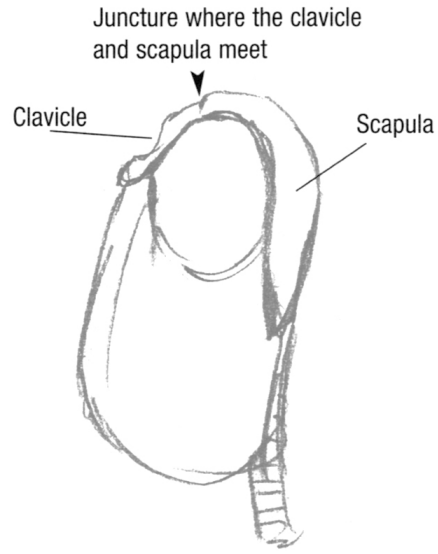
Muscles of the arm

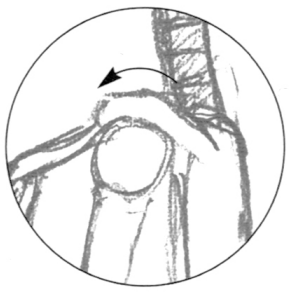
The drawing to the left illustrates that raising the elbow causes the scapula to rise, bringing the shoulder guideline to a sharper oblique angle.

Profile View







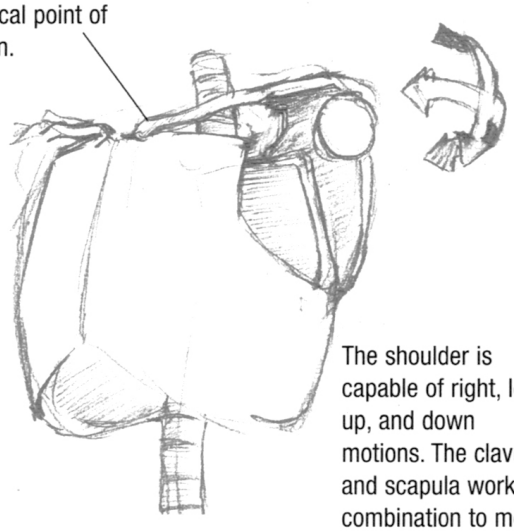


Shoulder joint

The majority of the scapula lies toward the back. However, a portion of the scapula wraps around to the front, forming part of the shoulder.

Shoulder Movement

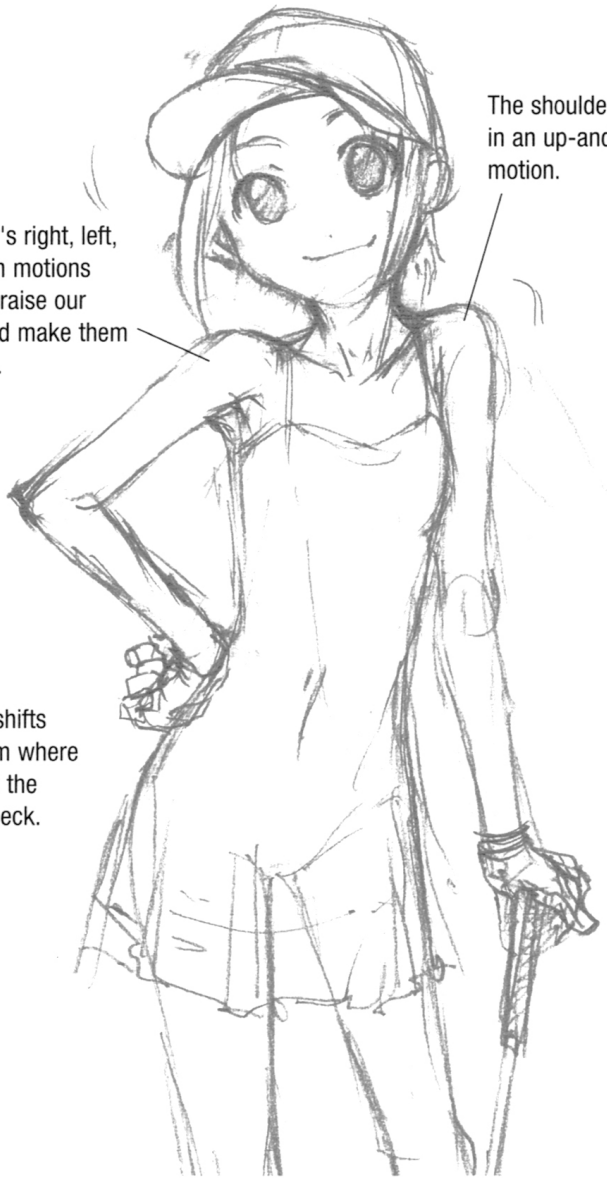
The clavicle marks the focal point of motion.



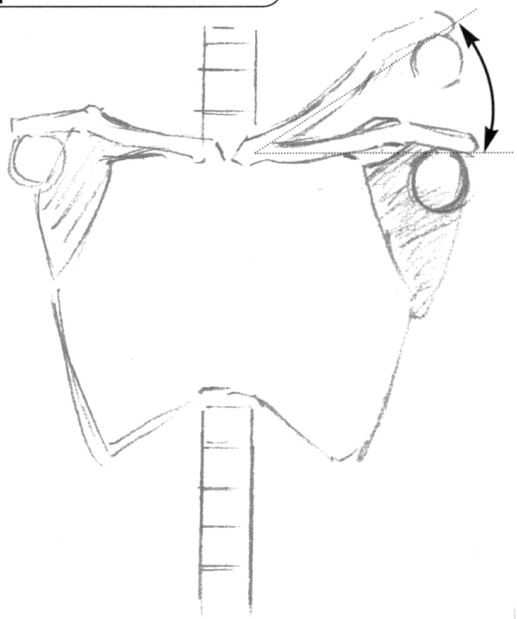
The shoulder is capable of right, left, up, and down motions. The clavicle and scapula work in combination to move along with the shoulder's motions.

The shoulder's right, left, up, and down motions enable us to raise our shoulders and make them shift forward.

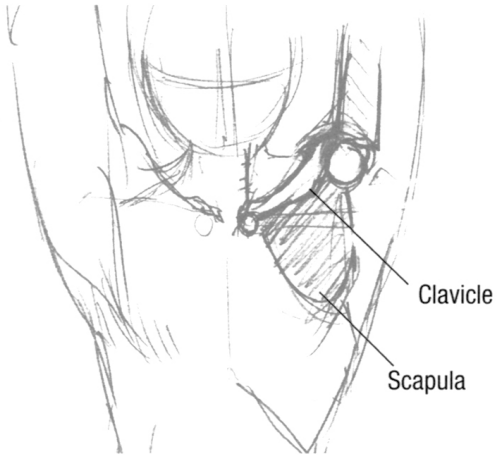
The shoulder rises in an up-and-down motion.



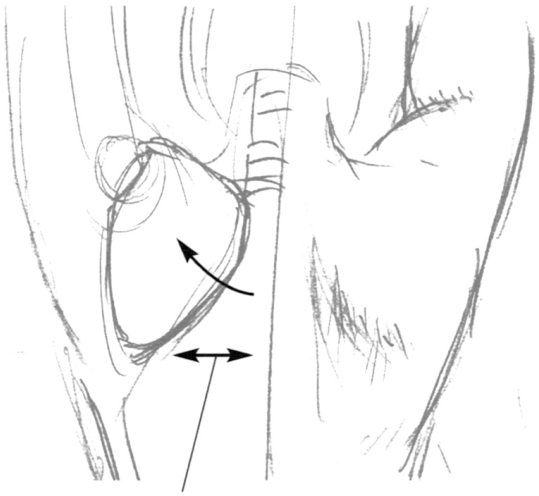
Up and Down Motions



The clavicle shifts obliquely from where it attaches at the base of the neck.



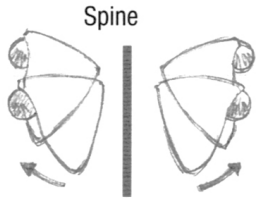
The clavicle and the scapula move in combination.



The distance between the scapula's lower region and the spine changes dramatically in association with the arm's movements. How the back is drawn should also change accordingly.

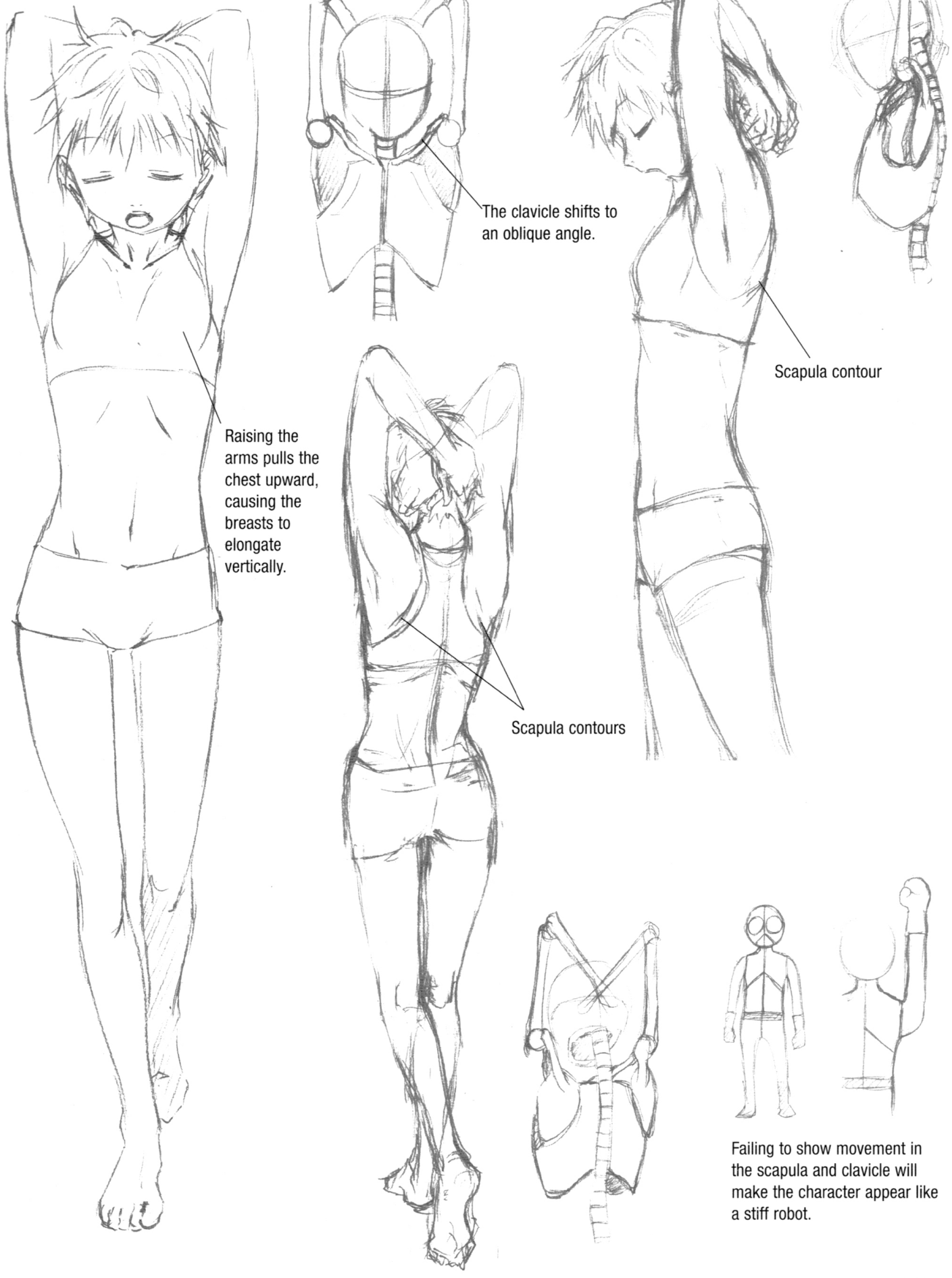


Normal position of the scapula



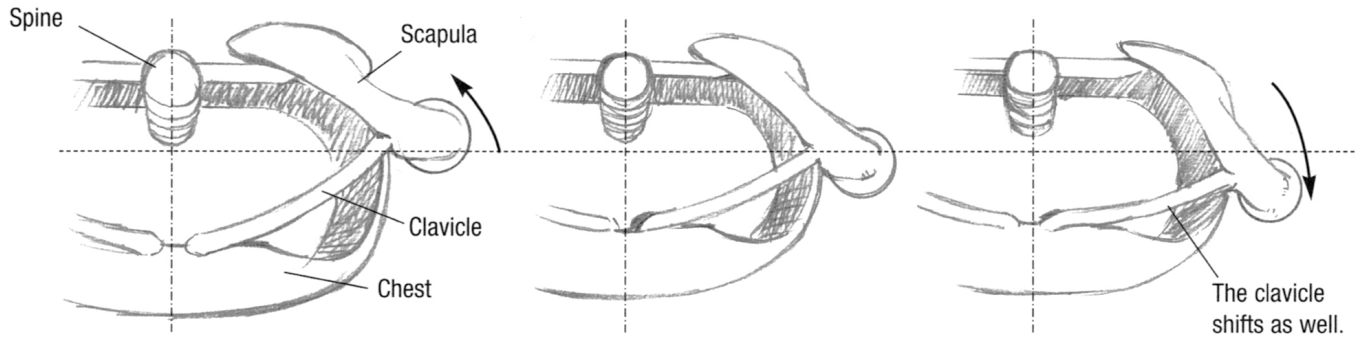
When both arms are raised, the scapulae move away from the spine, forming an inverted "V" shape.

Raising Both Arms



Forward and Backward Motions

The image below shows a cross-section of the torso from above. Note the scapula's scope of movement.

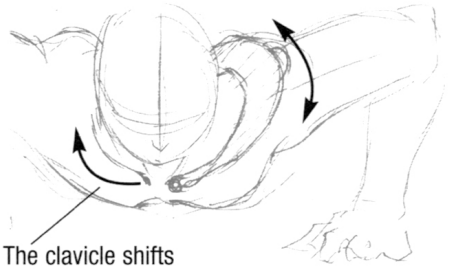


Backward Motion

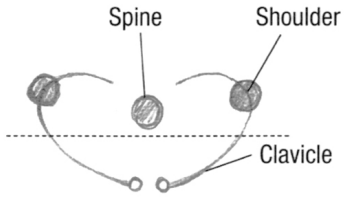
Arms Held Normally

Forward Motion

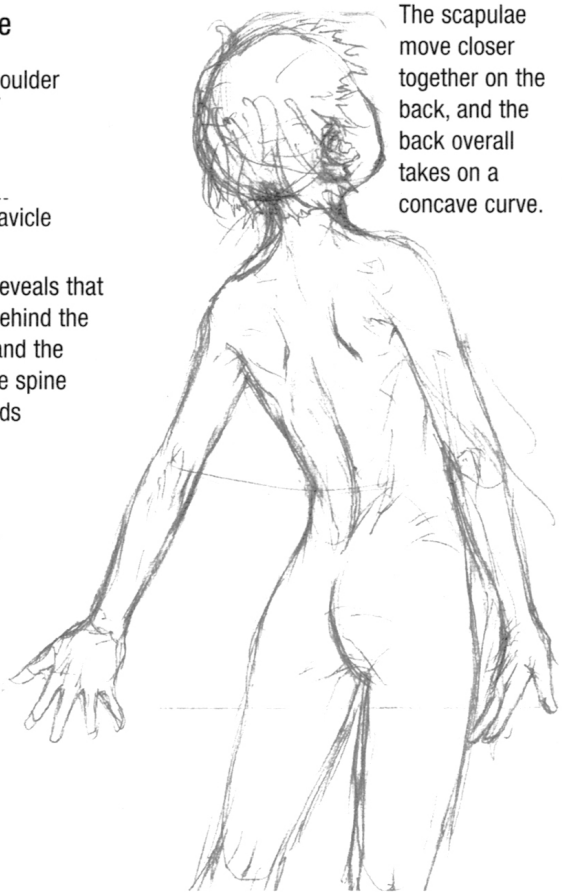
Backward Motion of the Arm: The Scapula Moves toward the Spine



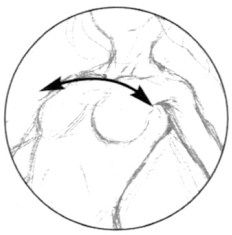
The clavicle shifts rearward.



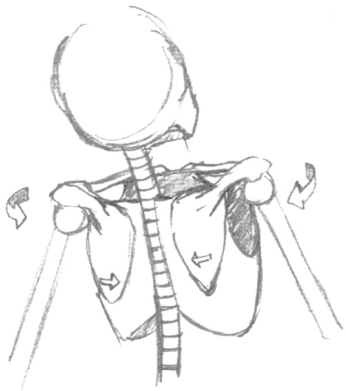
Looking directly down at the torso reveals that the shoulders are actually located behind the spine. The flesh covering the back and the muscles underneath shift toward the spine and contract, while the chest expands considerably.



The scapulae move closer together on the back, and the back overall takes on a concave curve.



The chest expands to the right and left, creating a wide arc.



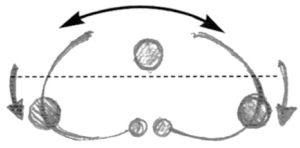
When the arms support the body's weight, the scapulae cause pronounced bulges.



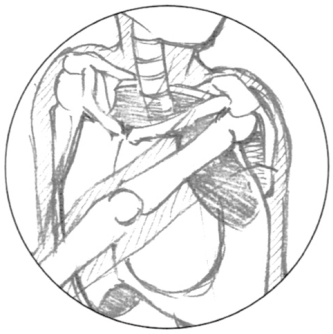
Forward Motions of the Arm: Outward Shifting of the Scapulae



The clavicle projects forward.



When the arms shift forward, the back muscles are pulled, causing the back to round.



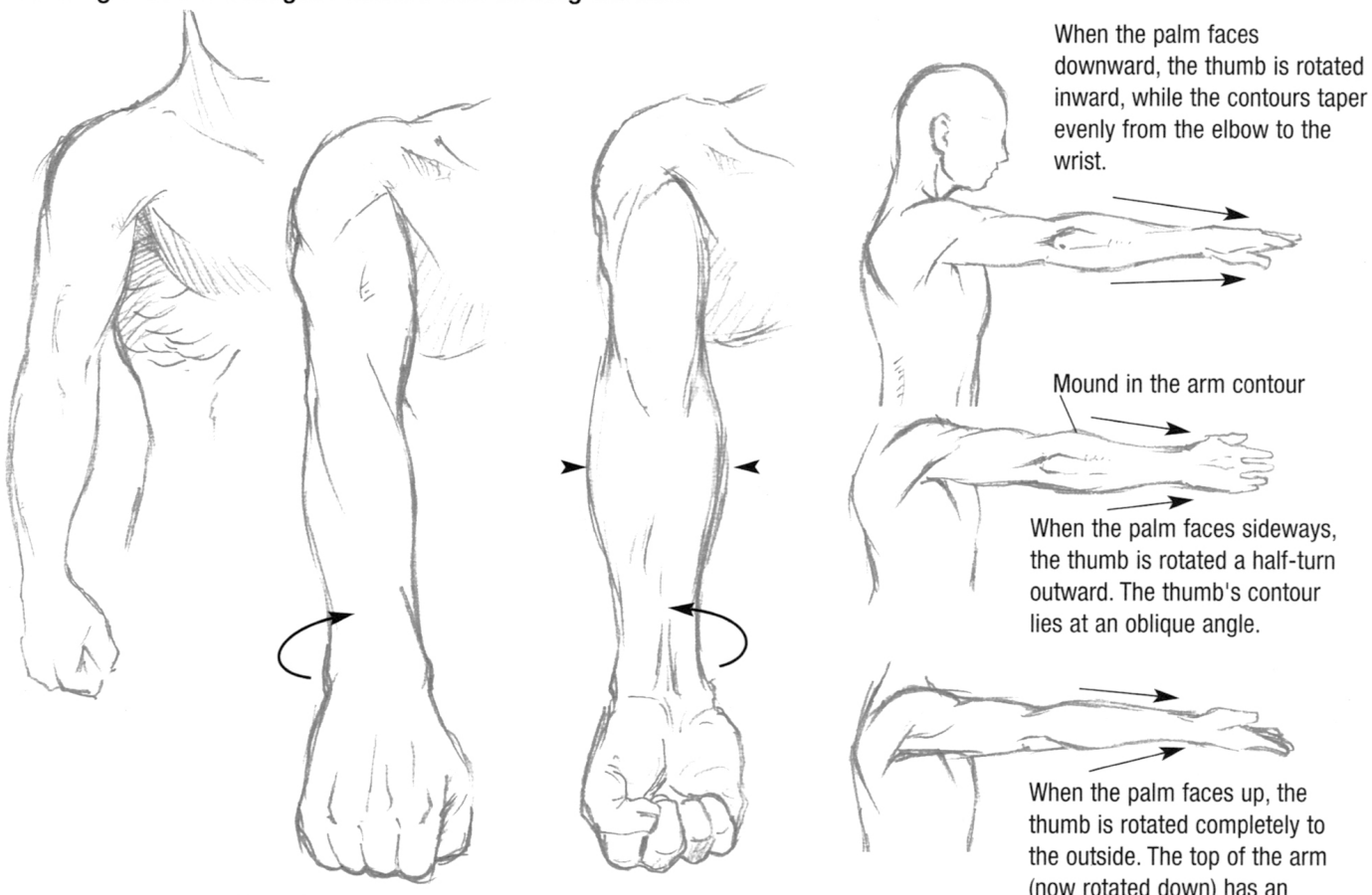
When one arm is extended forward, the clavicle becomes partially hidden by the bulge of the shoulder's muscles.

The rounded back suggests physical might.



The arms contours change when it turns. In particular, take careful note of the dramatic changes that occur in the contour lines from the elbow to the wrist.

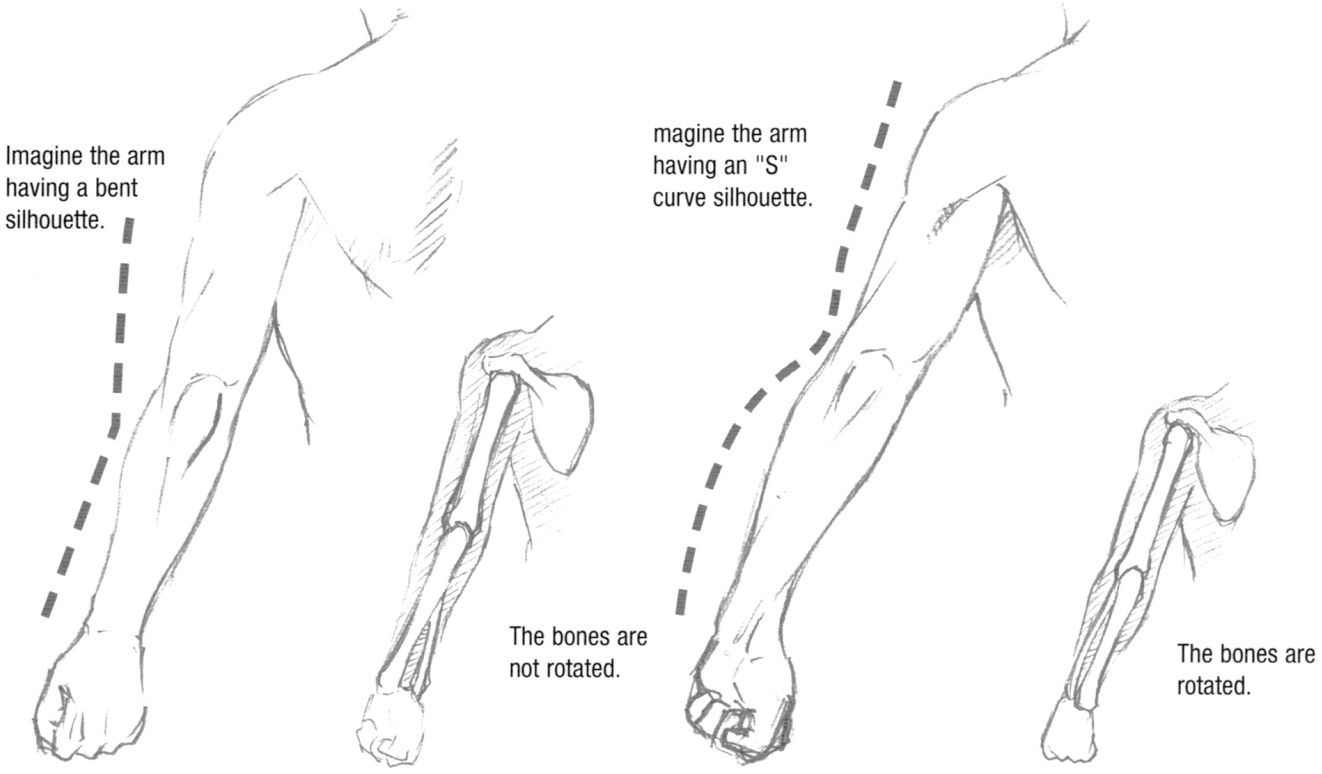
Extending the Arm Straight Forward and Turning the Arm



When the thumb is rotated inward, the muscles torque, and the arm's resulting silhouette contours are relatively straight.

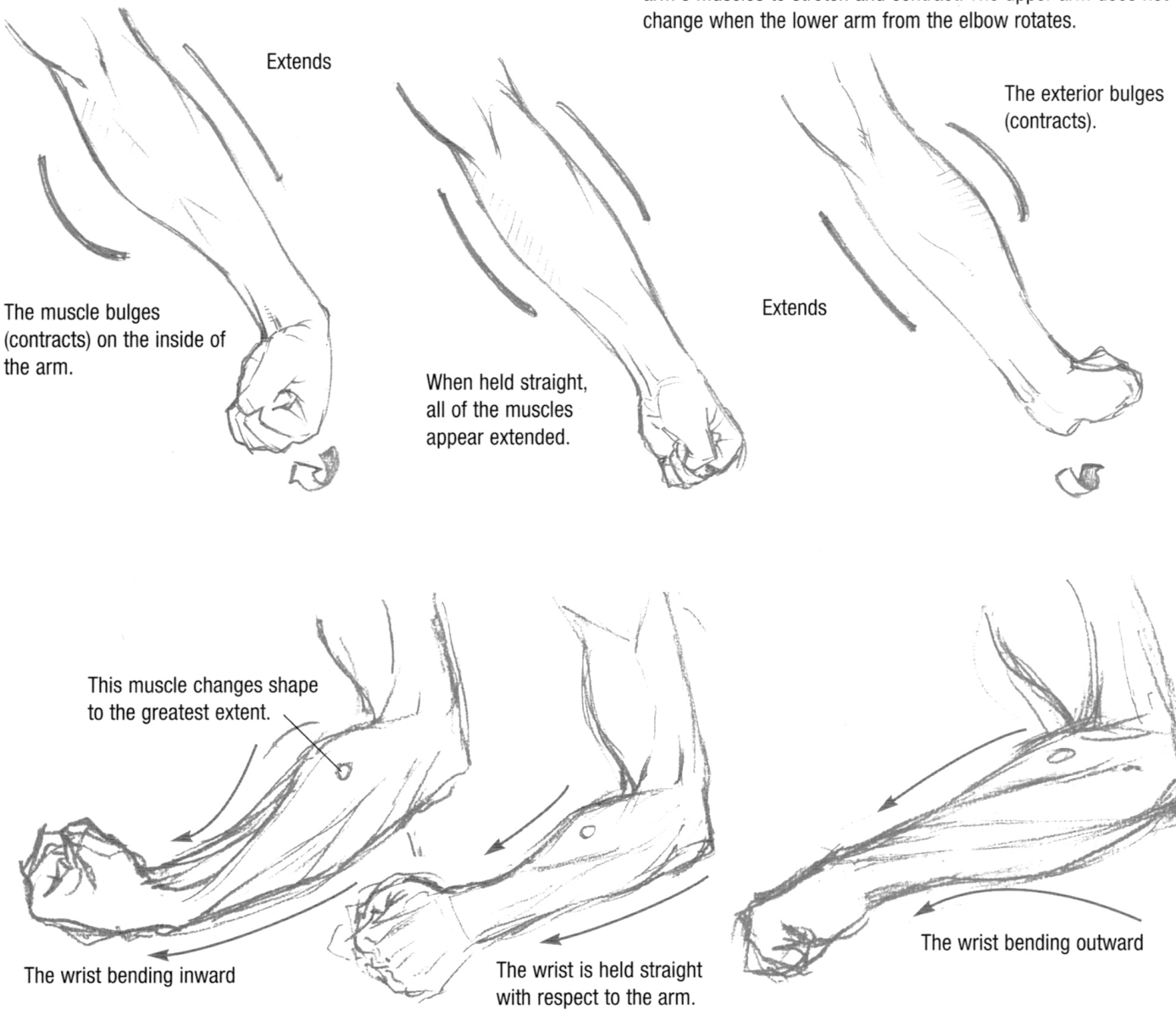
When the thumb is rotated outward, the muscle contours are straight, and the arm's contours form pronounced mounds on either side just below the elbow.

Rotating the Arm While Extended

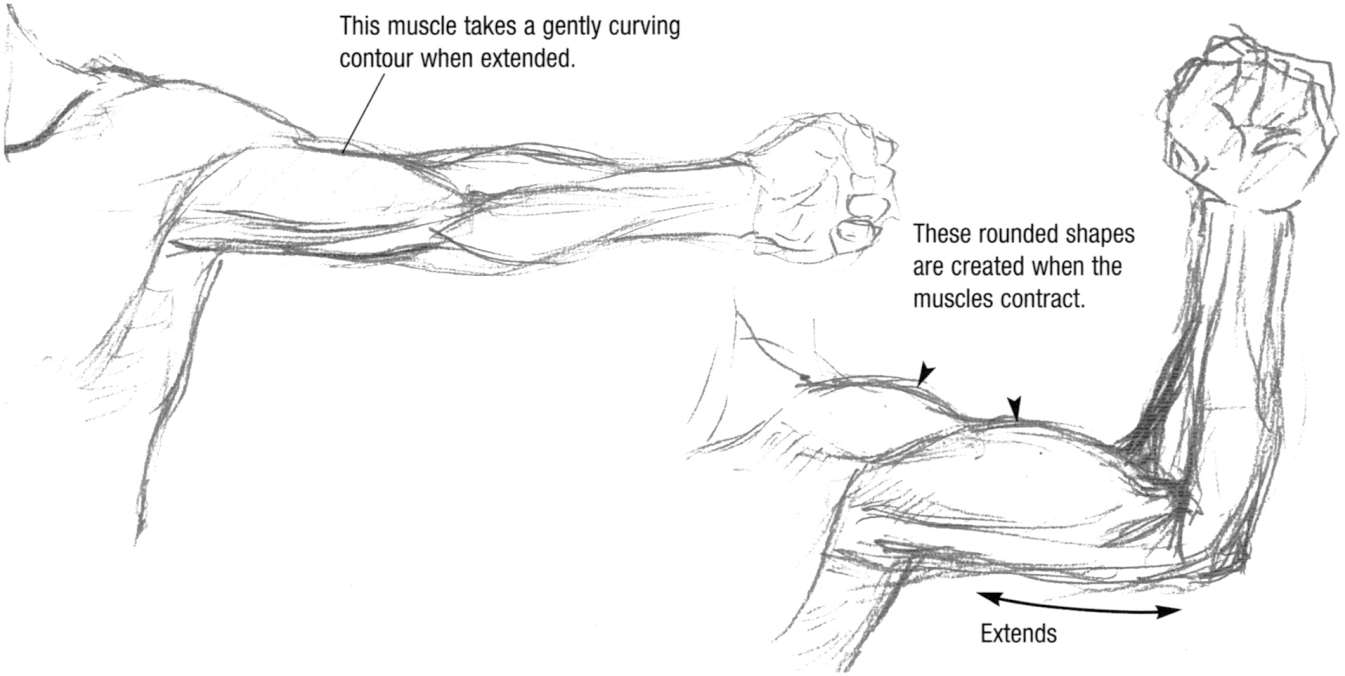


Rotating the Wrist

The arm's silhouette changes when the wrist moves, causing the arm's muscles to stretch and contract. The upper arm does not change when the lower arm from the elbow rotates.



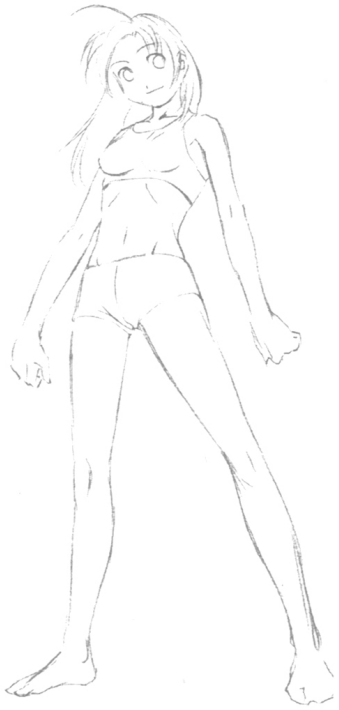
Bending the Arm

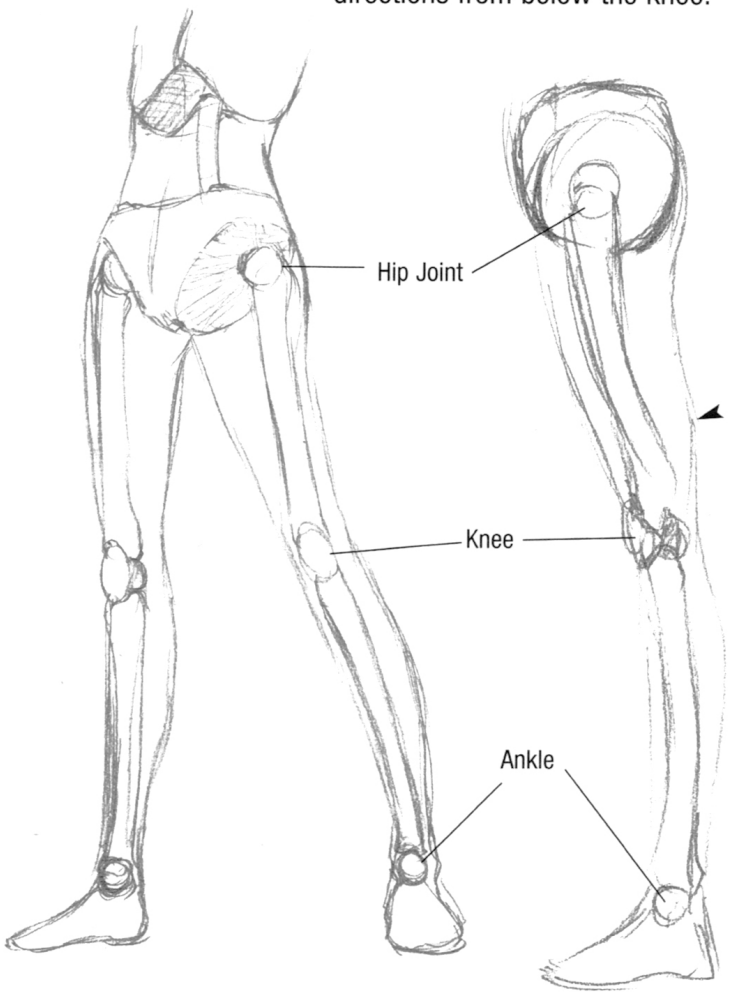


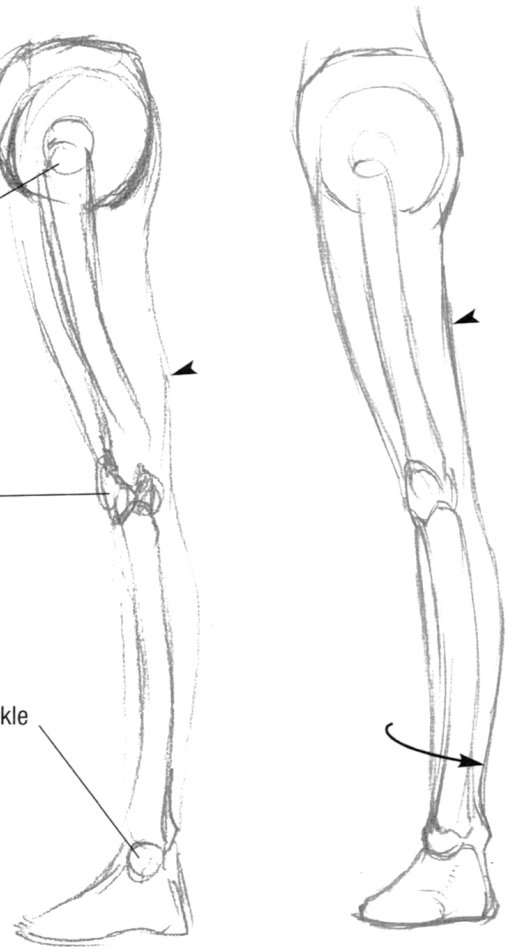
4. Basic Leg Structure and Movemen

The legs' contours change as the leg shifts (i.e. changes direction) at the hip. Note that the leg does not shift directions from below the knee.

Hip and Leg Joints



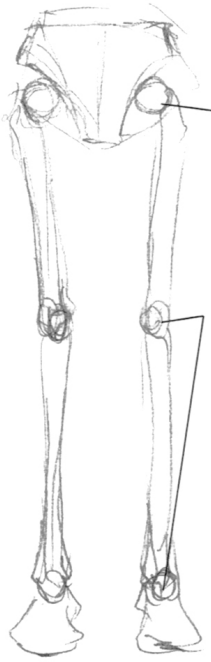




The swell of the calf becomes prominent in profile view.

When the toes are turned out, the legs' silhouettes follow flowing, curvilinear contours.

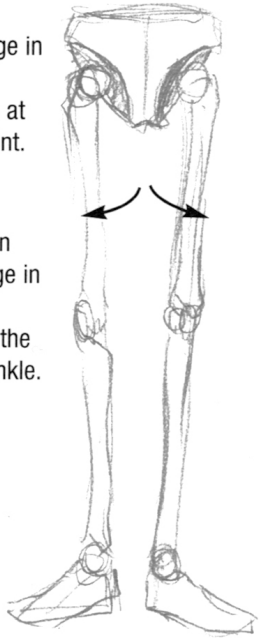
Shifting Directions from the Hip



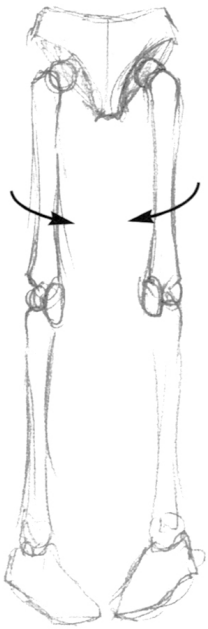
The change in direction originates at the hip joint.

No rotation (i.e. change in direction) occurs at the knee or ankle.

The leg held straight



The above shows the legs (toes) turned outward. This illustrates the extent to which a normal human can turn the toes outward without special training.



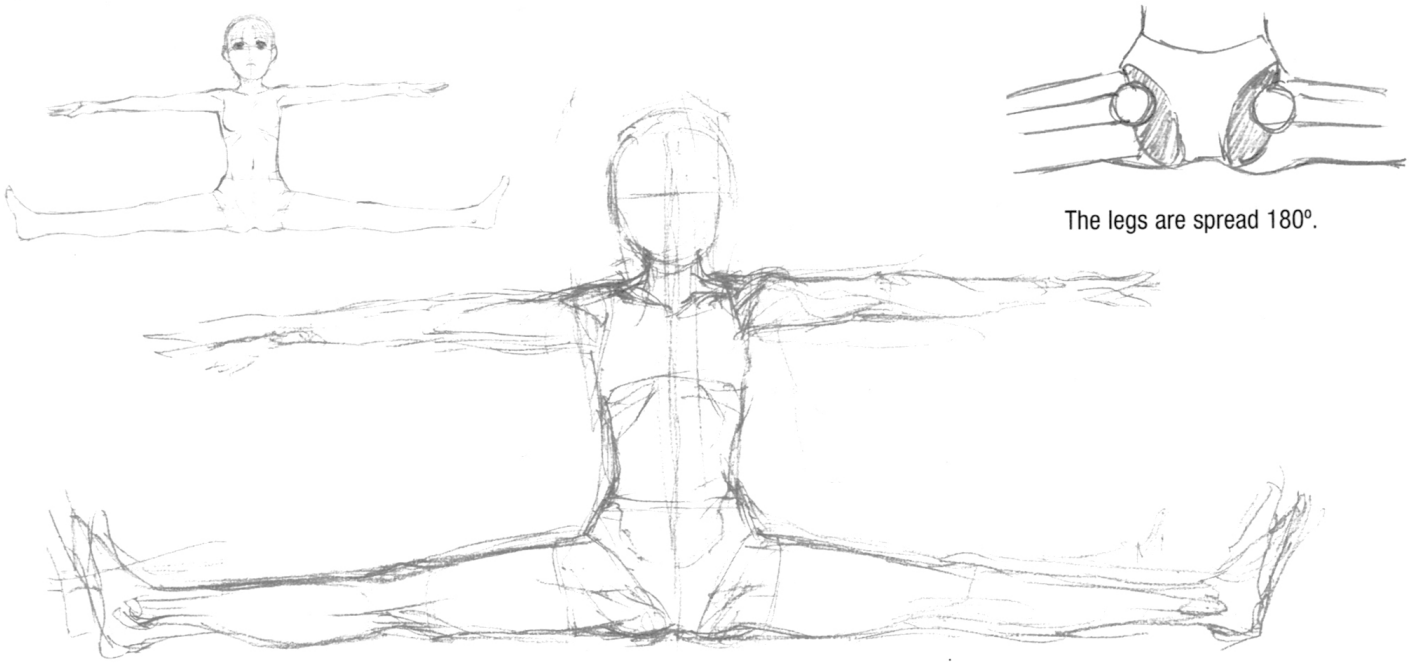
Toes turned inward (i.e. held pigeon-toed)



Major Leg Muscles



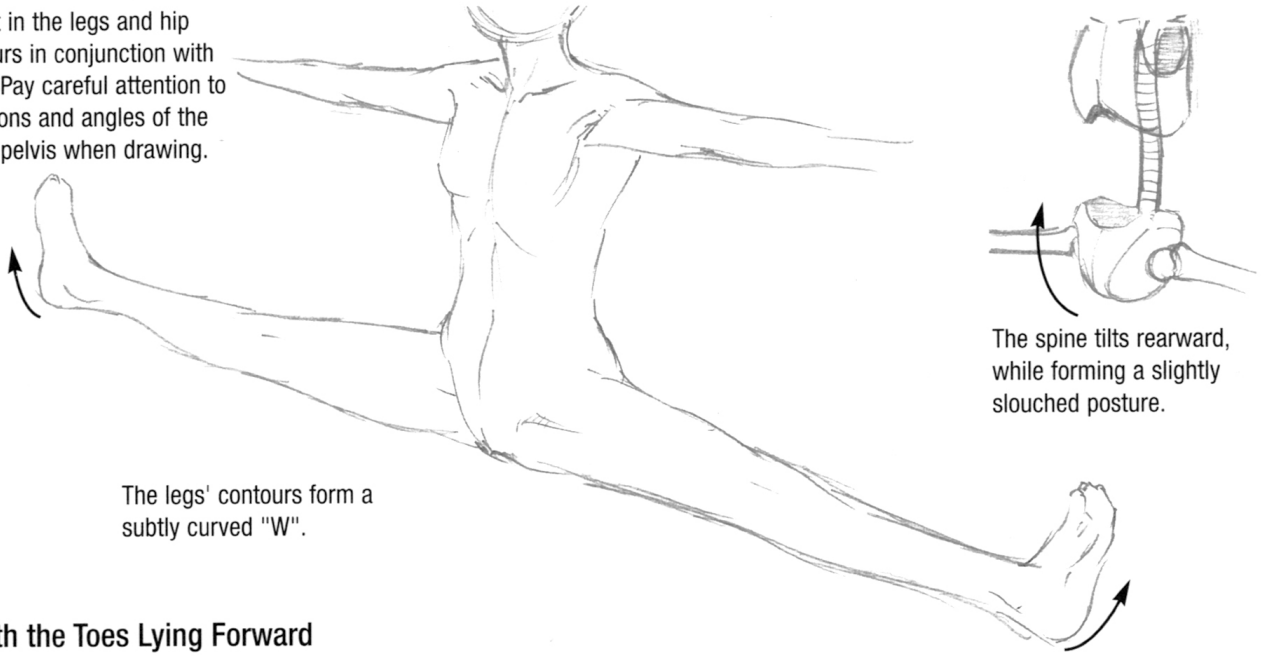
Side (Straddle) Split



The legs are spread 180º.

Split with the Toes Pointed Up

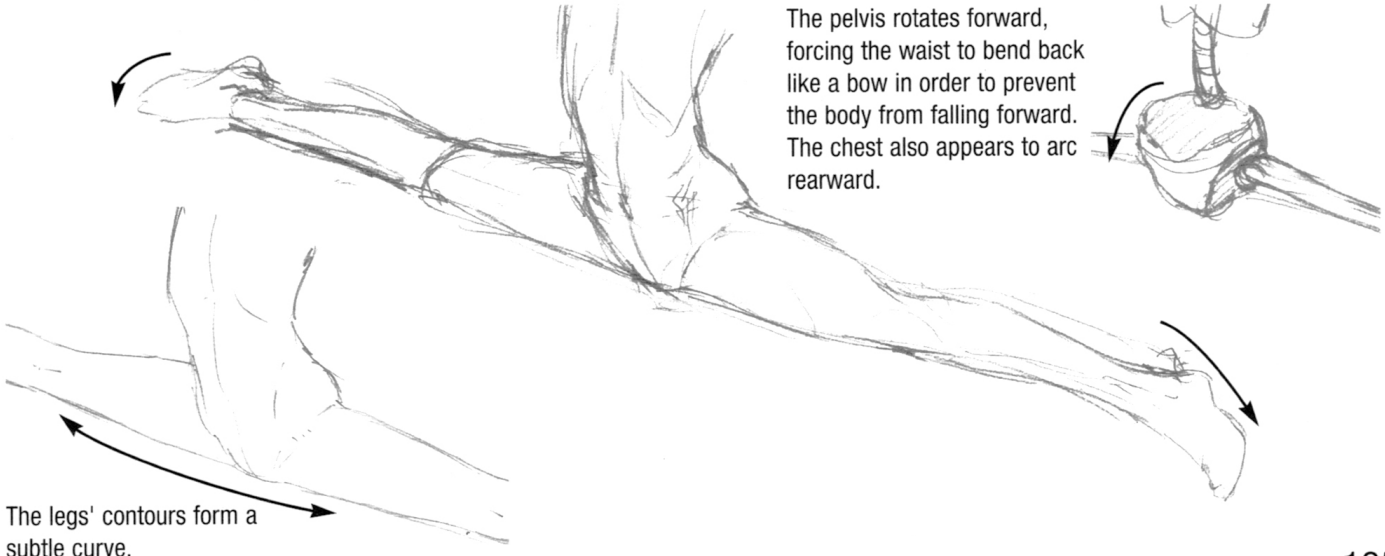
Movement in the legs and hip joints occurs in conjunction with the waist. Pay careful attention to the directions and angles of the waist and pelvis when drawing.



The spine tilts rearward, while forming a slightly slouched posture.

The legs' contours form a subtly curved "W".

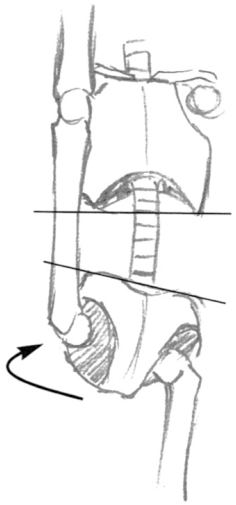
Split with the Toes Lying Forward



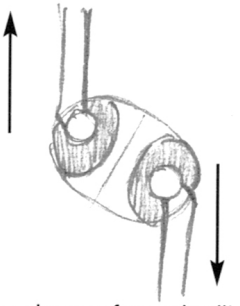
The pelvis rotates forward, forcing the waist to bend back like a bow in order to prevent the body from falling forward. The chest also appears to arc rearward.

The legs' contours form a subtle curve.

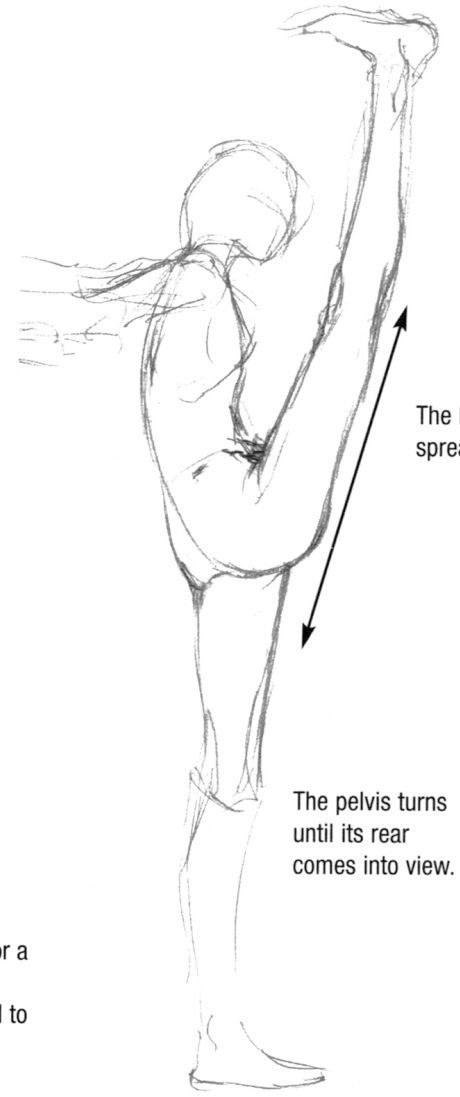




Torsion occurs at the waist when a leg swings forward or back.



The above shows a forward split from directly beneath the figure or a high kick looking straight at the figure. The waist (pelvis) is forced to torque so that he raised and lowered legs can be held in a vertically straight position.



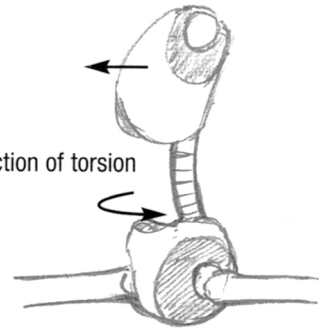
The legs are capable of spreading to almost 180°.

The chest turns to an almost perfectly profile position.



The pelvis turns until its rear comes into view.

Turned to profile

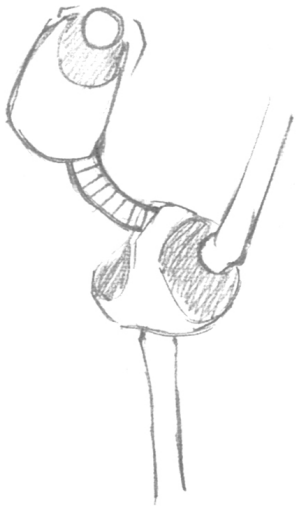


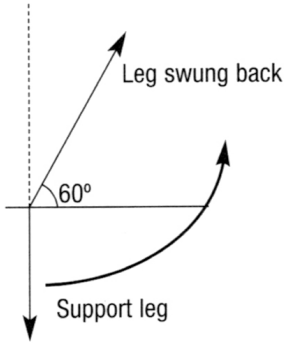
Direction of torsion

As with a forward high kick, when doing a split on the ground, the waist turns, allowing the legs to spread both forward and back.

Arabesque



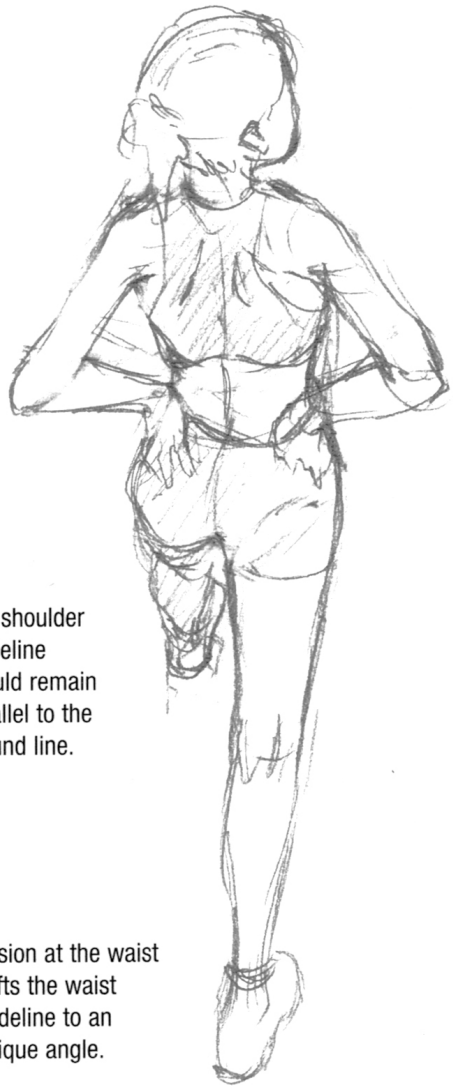


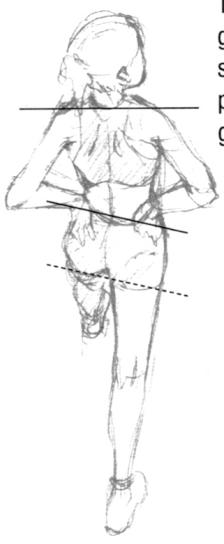


Torsion at the waist makes arabesque poses possible. However, unlike a forward high kick, the legs do not spread to a 180° angle.

Forward Lunges







The shoulder guideline should remain parallel to the ground line.

Torsion at the waist shifts the waist guideline to an oblique angle.

5. Basic Hand and Finger Structure and Movement

Visualize the hand as solid segments when attempting to capture its shape. Imagine the palm as divisible into four segments allowing movement.

Basic Hand Structure

Palm

The thumb segment looks like a bull's horn.

Knuckle segment: band shaped

Main palm segment takes on a wedge shape

Creases appear where the palm connects to the wrist.

Fingers (conceived as a single segment)

Thumb segment

Conceive of creases as appearing where one "segment" meets another.

Palm segment

Knuckle segment

Finger segment

Steps in Drawing

Thumb segment

Knuckle segment

Finger segment

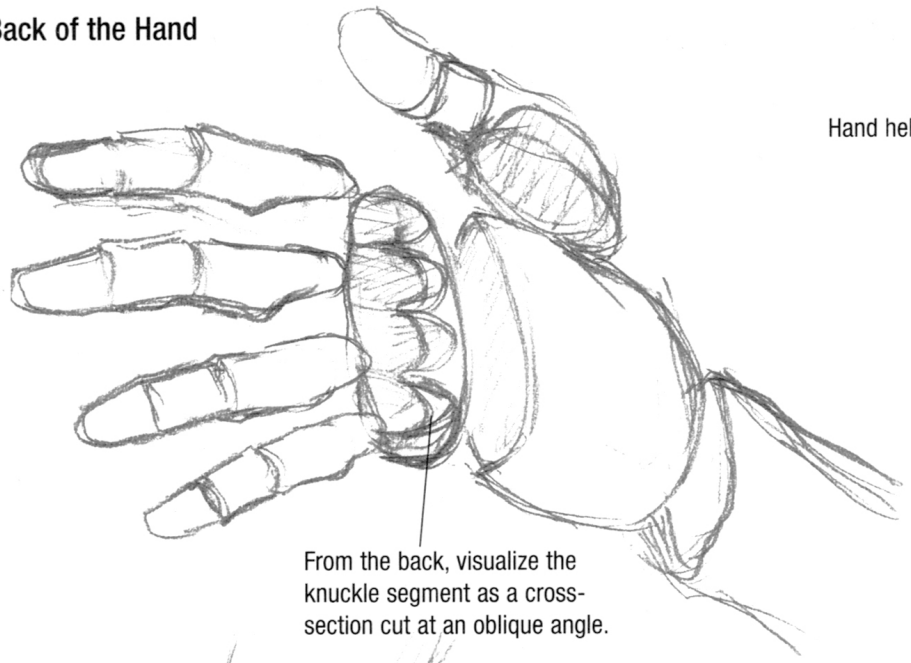
Palm segment

① The layout sketch consists of the exterior contours of the form overall and offers a rough illustration of the borders between the four main segment-types.

Take care when drawing where the base of each finger.

② This curved contour defines the swell at the thumb's base and creates a sense of three-dimensionality.

Back of the Hand



From the back, visualize the knuckle segment as a cross-section cut at an oblique angle.



Hand held in a relaxed position

Tensed hand



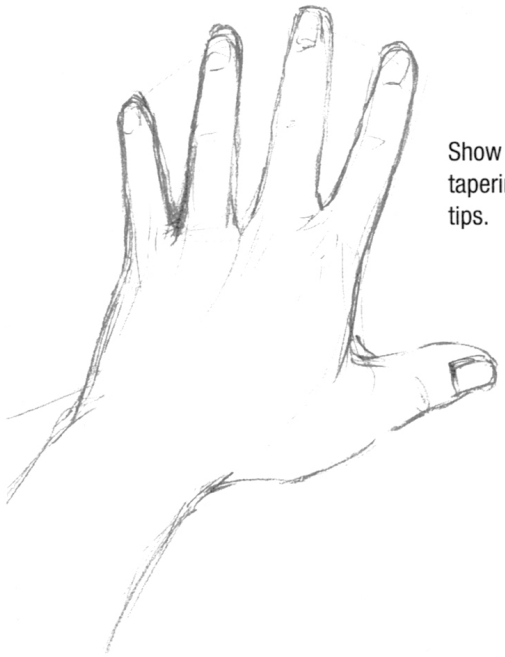
When the hand is rotated back, it tenses, causing muscle contours, etc. to appear on the back of the hand.



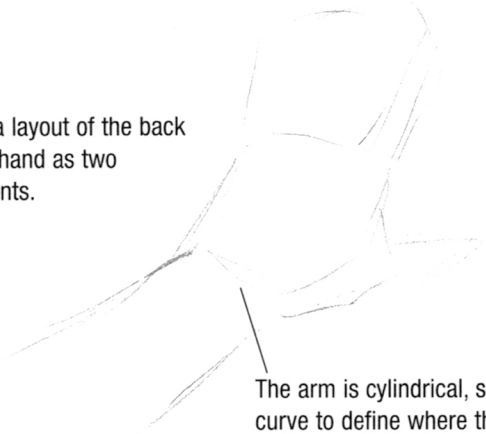
The silhouette of the back of the hand changes according to whether the hand is relaxed or tense.



Contours of muscles, bones etc. appear when the hand tenses.



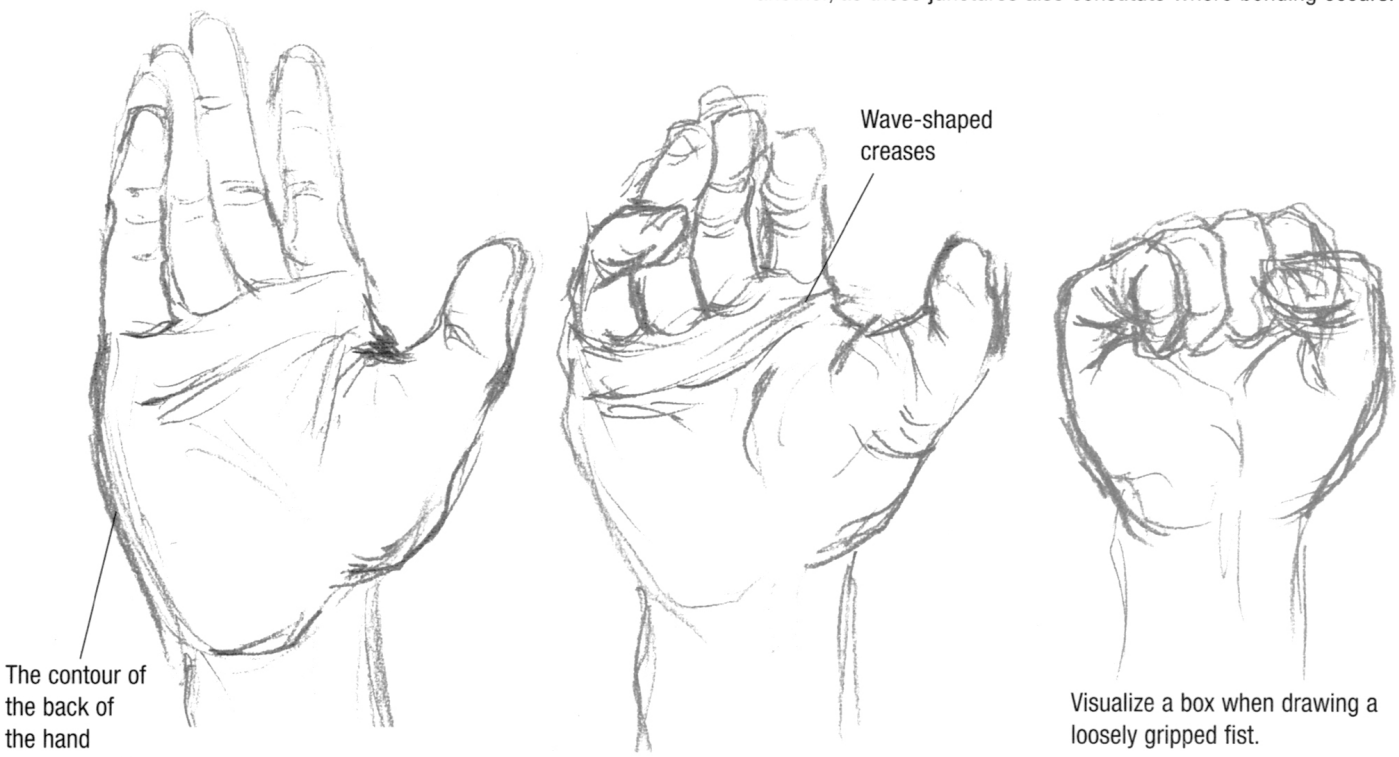
Show the fingers tapering toward the tips.



Draw a layout of the back of the hand as two segments.

The arm is cylindrical, so use a curve to define where the arm meets the wrist.

Creases in the skin form where one basic "hand segment" meets another, as these junctures also constitute where bending occurs.



Creases Form on Four Locations

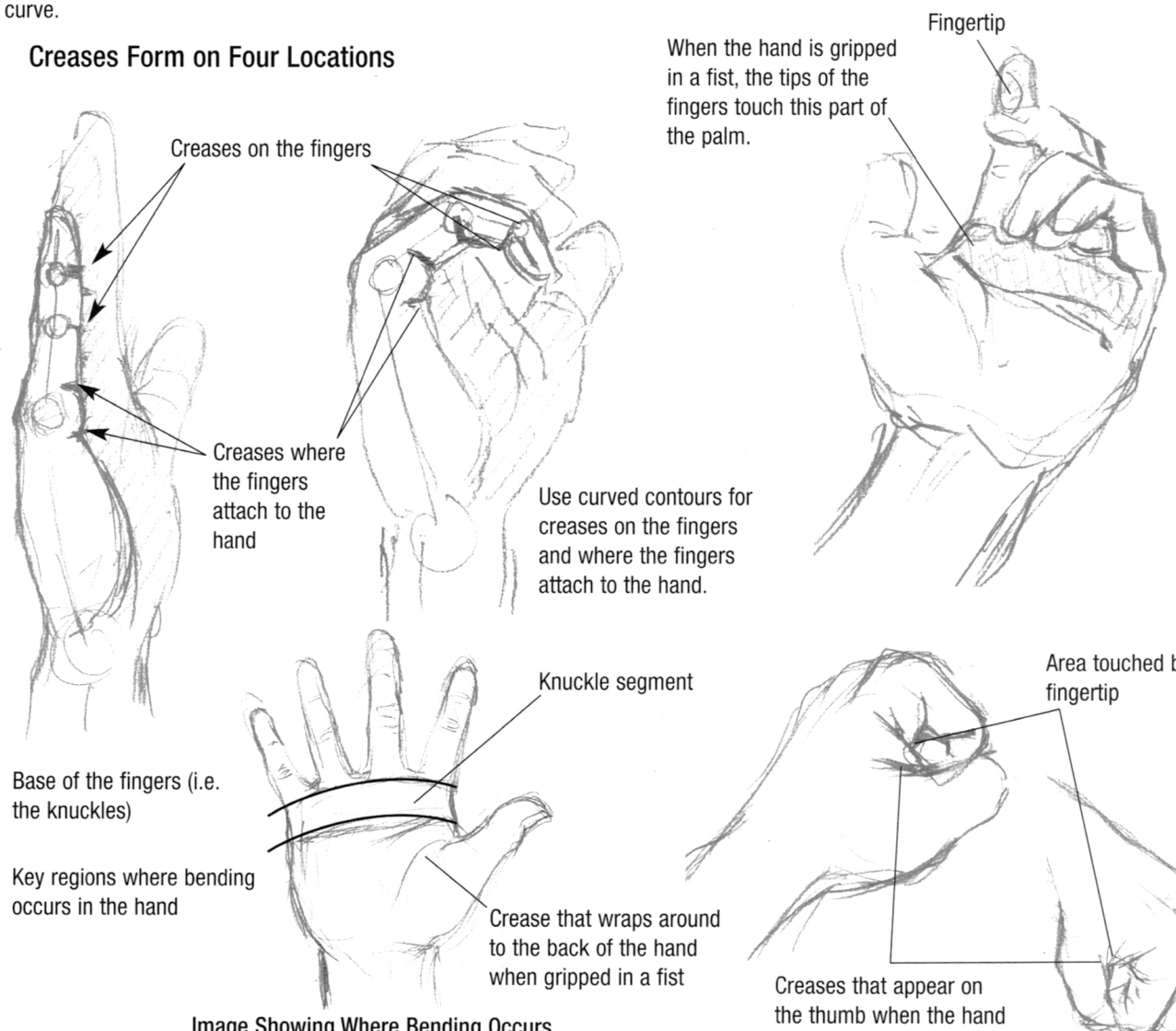
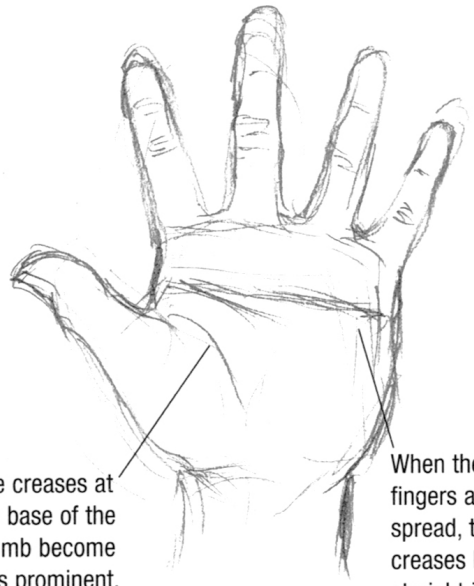


Image Showing Where Bending Occurs When the Hand Forms a Fist

Spreading and Contracting the Hand

Palm



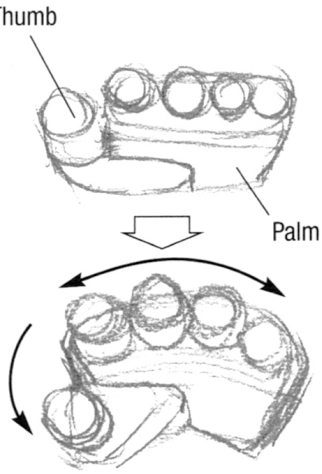
The creases at the base of the thumb become less prominent.

When the fingers are spread, the creases become straight in form.



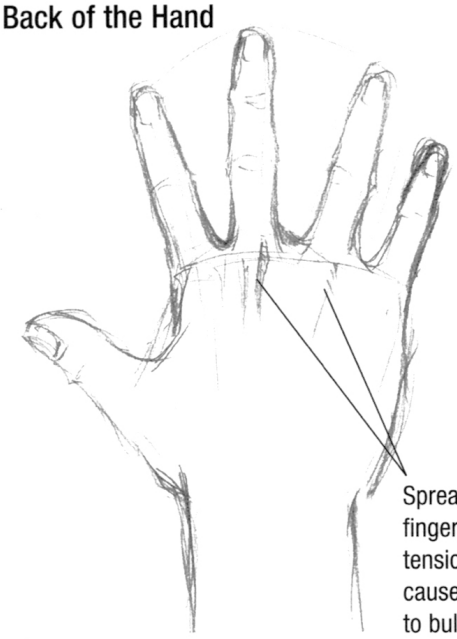
This crease takes an "S" curve.

Creases form in abundance when the hand bunches together.



The palm contorts to a smaller size than the back of the hand.

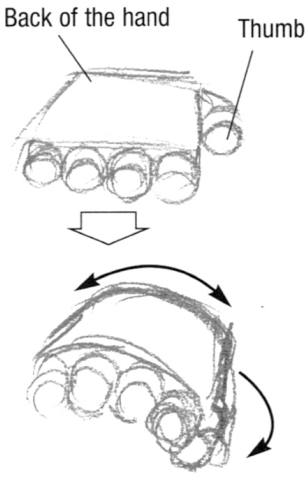
Back of the Hand

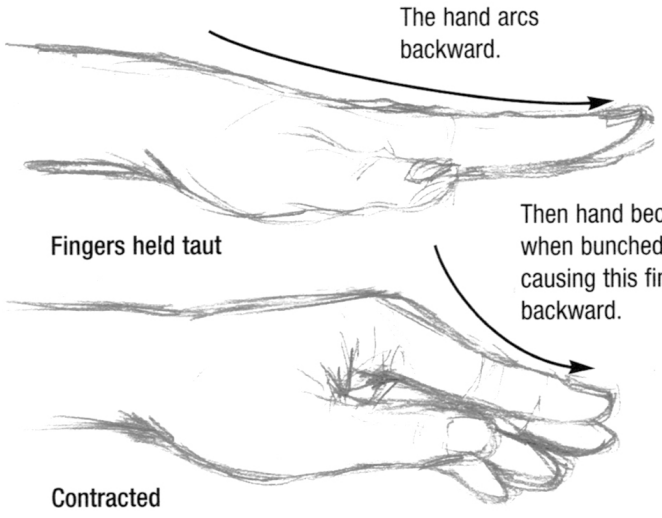


Spreading the fingers requires tension, which causes tendons to bulge.



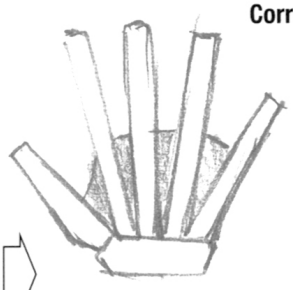
Tendons bulge on the back of the fingers that are tensed. When the fingers are relaxed, the tendons are no longer visible.







The hand is not a flat board but rather muscle and skin covering fingers, etc., enabling it to move dexterously.



Correct

The palm should spread proportionally as the fingers spread.



Incorrect

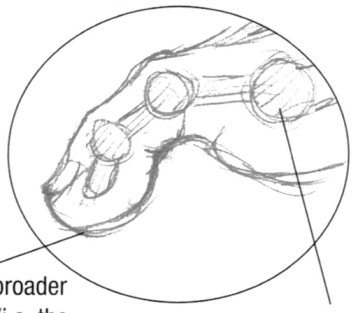
Note that the fingers will never spread without the palm broadening in area as well.

6. Basic Leg Structure and Movement

Like the hand, conceive of the foot as including a segment where the toes attach to the foot.

Basic Foot Structure

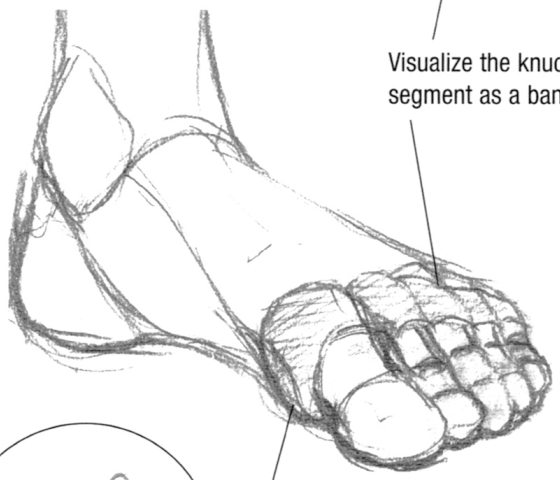




The toes become broader past the first joint (i.e. the knuckle).

First joint (knuckle)

Visualize the knuckle segment as a band.



Sole (underside) view of the knuckle segment



Toe knuckle layouts

Foot arch



As with the hand, actions such as bending and spreading the toes originate from the knuckle segment.



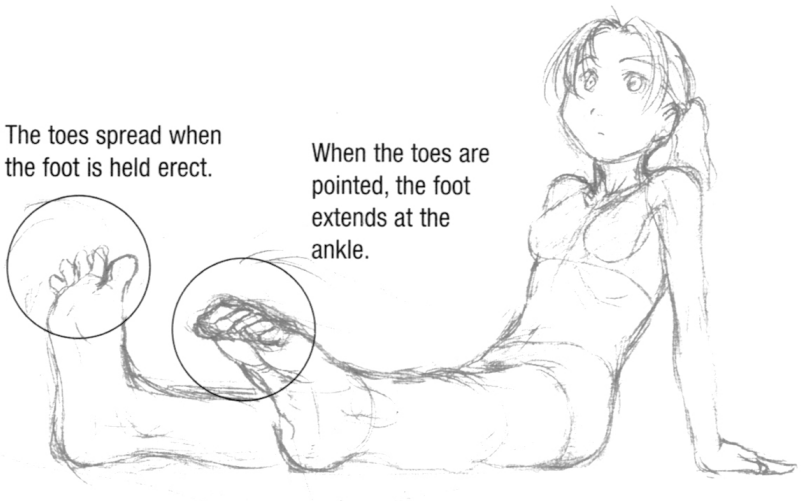
Toes spread

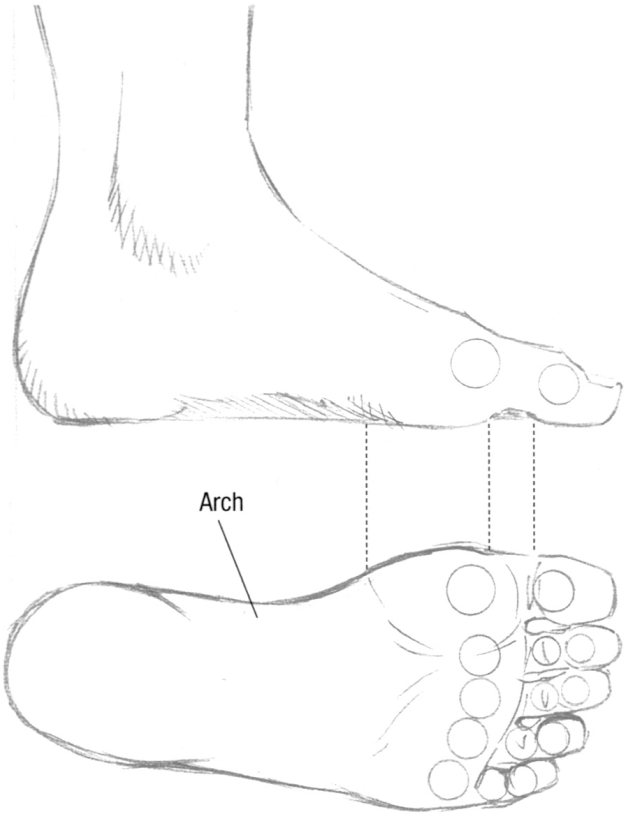
The toes bend inward.

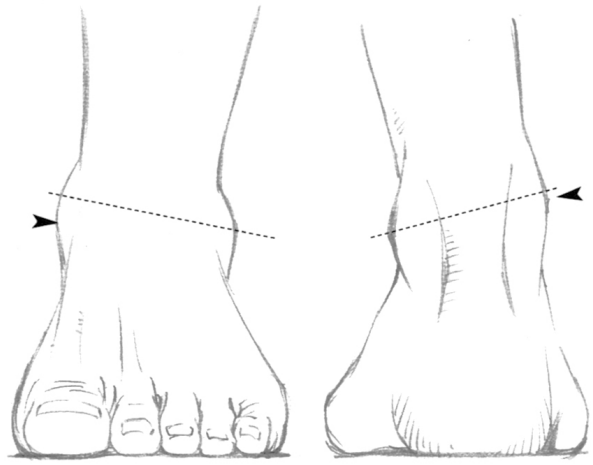


The toes spread when the foot is held erect.

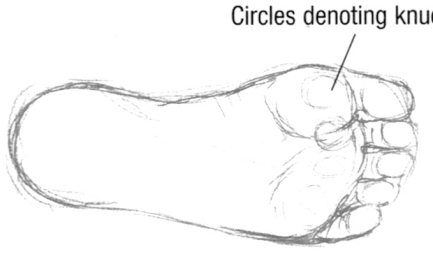
When the toes are pointed, the foot extends at the ankle.







The ankle's bony projection on the big toe's side is situated higher than that on the little toe's side. Draw an oblique line connecting both sides of the ankle at the layout sketching stage to use as a guide for the ankle.

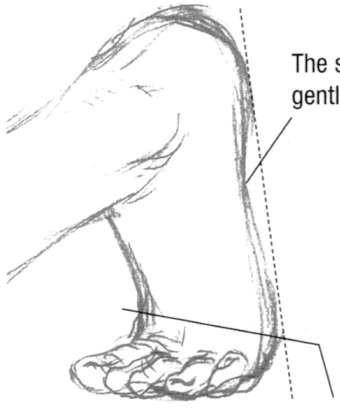


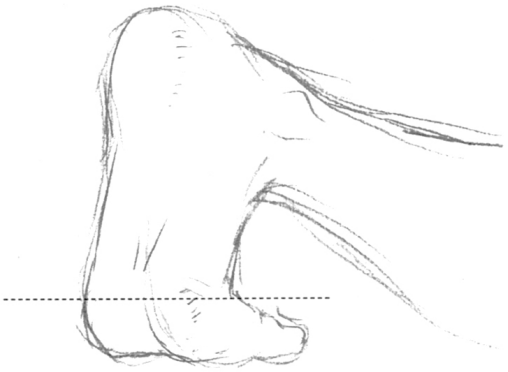


Draw the sole of the foot following the ground's contour almost perfectly when showing the foot planted on the ground.

When showing the foot rising, use a curved arc for the sole's contour.



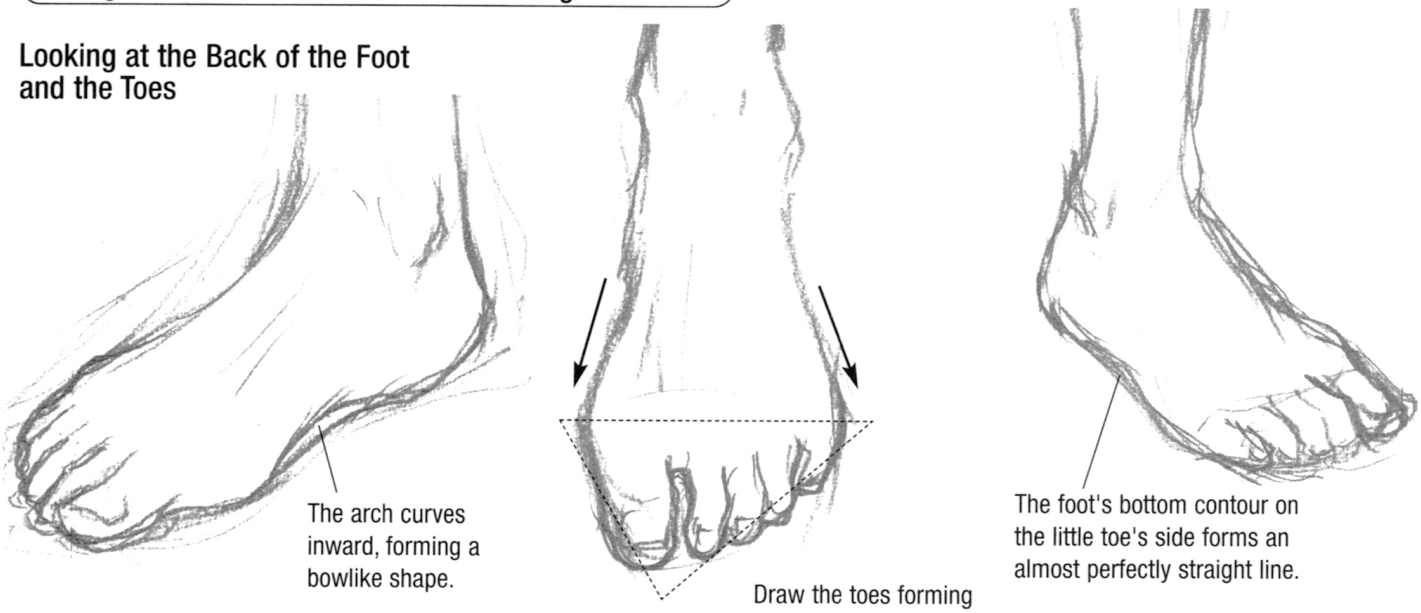




The toes should begin to bend from this position.

Changes in the Foot's Silhouette According to Position

Looking at the Back of the Foot and the Toes

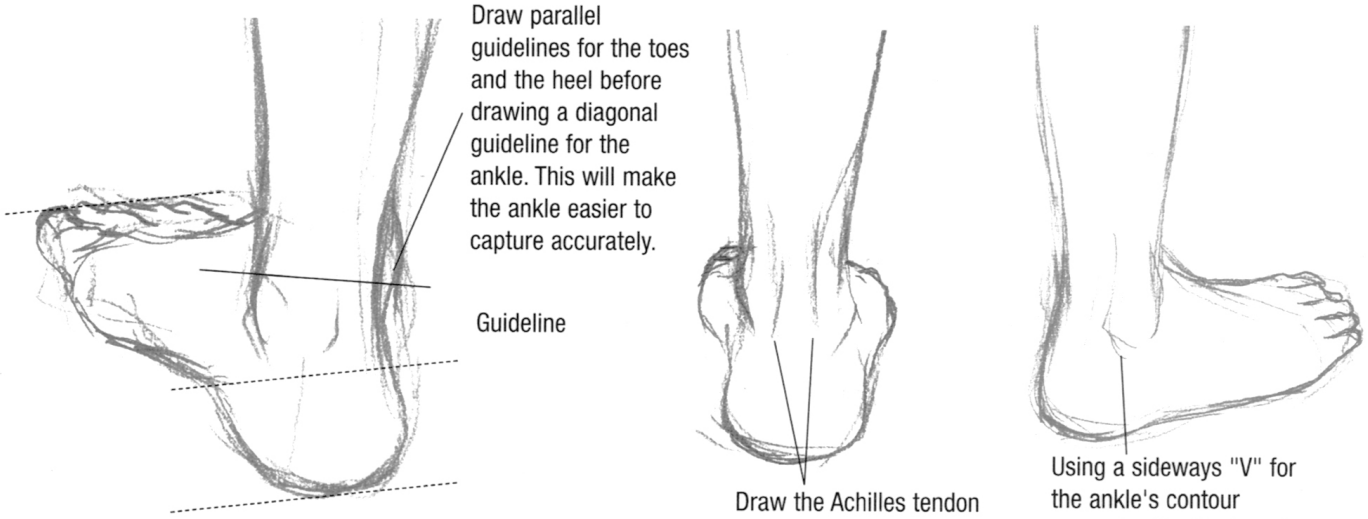


The arch curves inward, forming a bowlike shape.

Draw the toes forming a triangle with the big toe at its apex.

The foot's bottom contour on the little toe's side forms an almost perfectly straight line.

Looking at the Heel



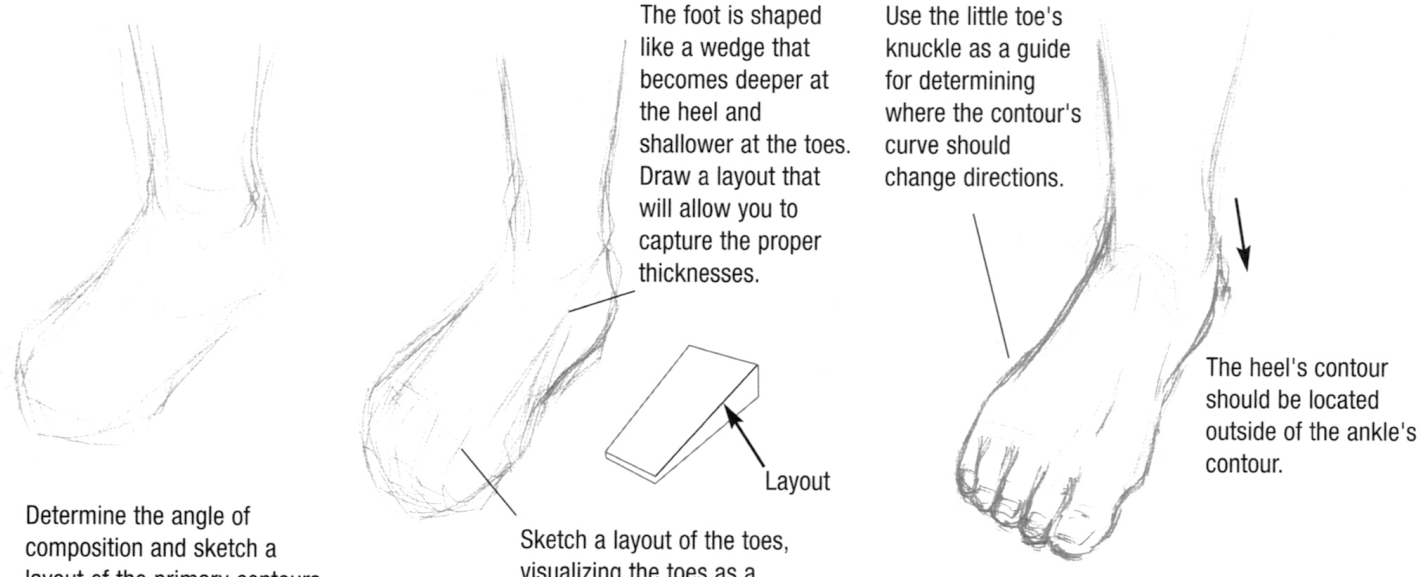
Draw parallel guidelines for the toes and the heel before drawing a diagonal guideline for the ankle. This will make the ankle easier to capture accurately.

Guideline

Draw the Achilles tendon as if it were dividing the heel into thirds.

Using a sideways "V" for the ankle's contour generates the illusion of a bony projection.

Giving the Foot Form



Determine the angle of composition and sketch a layout of the primary contours.

Sketch a layout of the toes, visualizing the toes as a single segment.

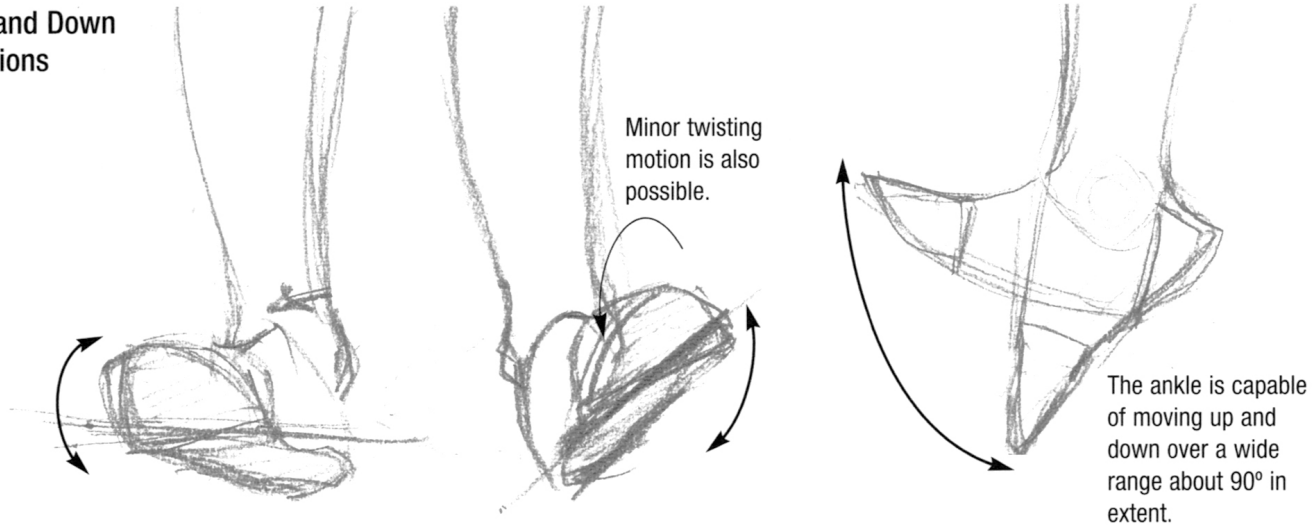
Layout

The foot is shaped like a wedge that becomes deeper at the heel and shallower at the toes. Draw a layout that will allow you to capture the proper thicknesses.

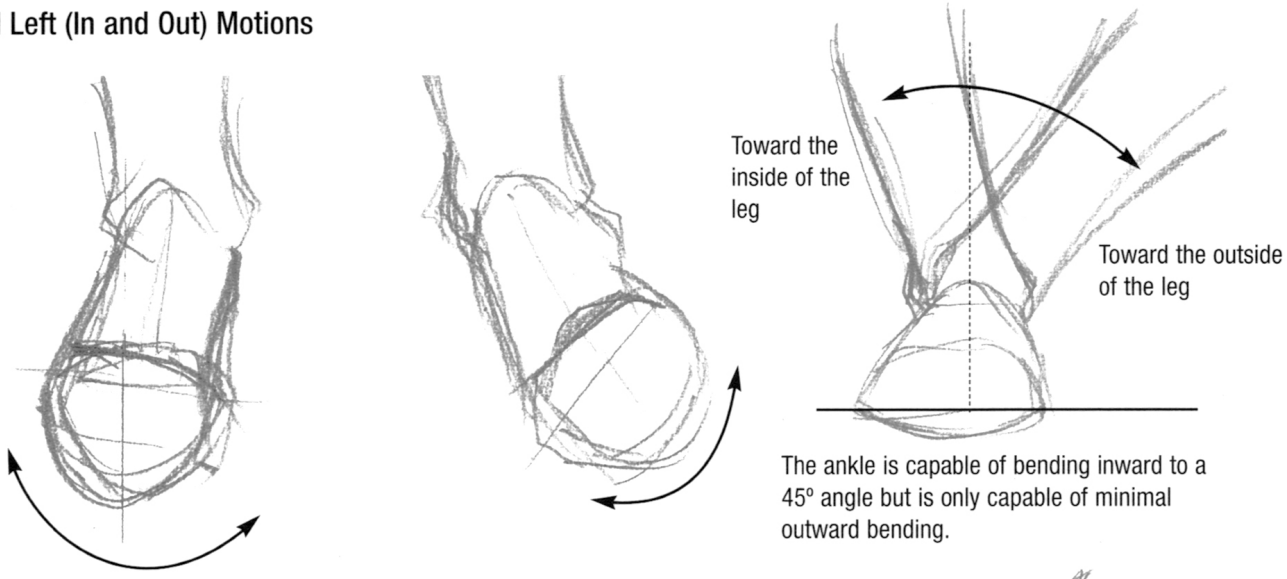
Use the little toe's knuckle as a guide for determining where the contour's curve should change directions.

The heel's contour should be located outside of the ankle's contour.

Up and Down Motions

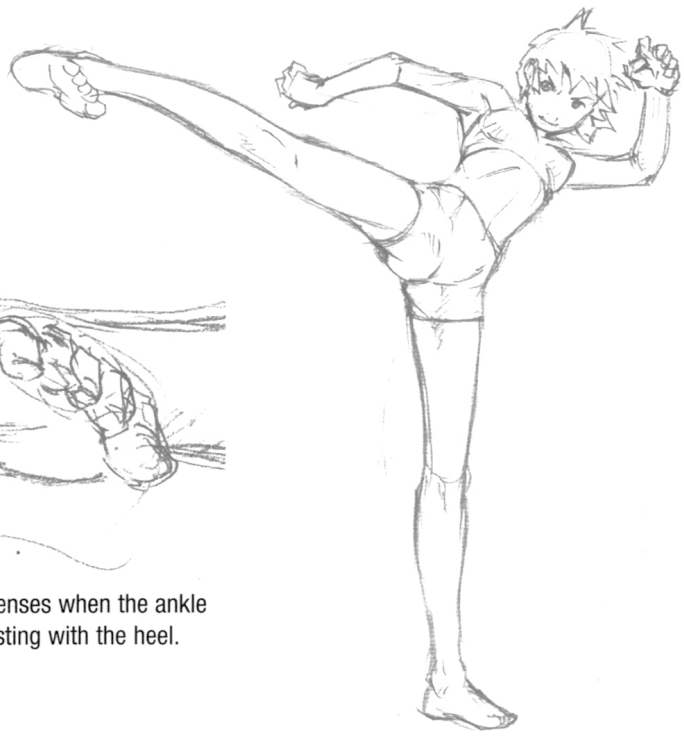


Right and Left (In and Out) Motions

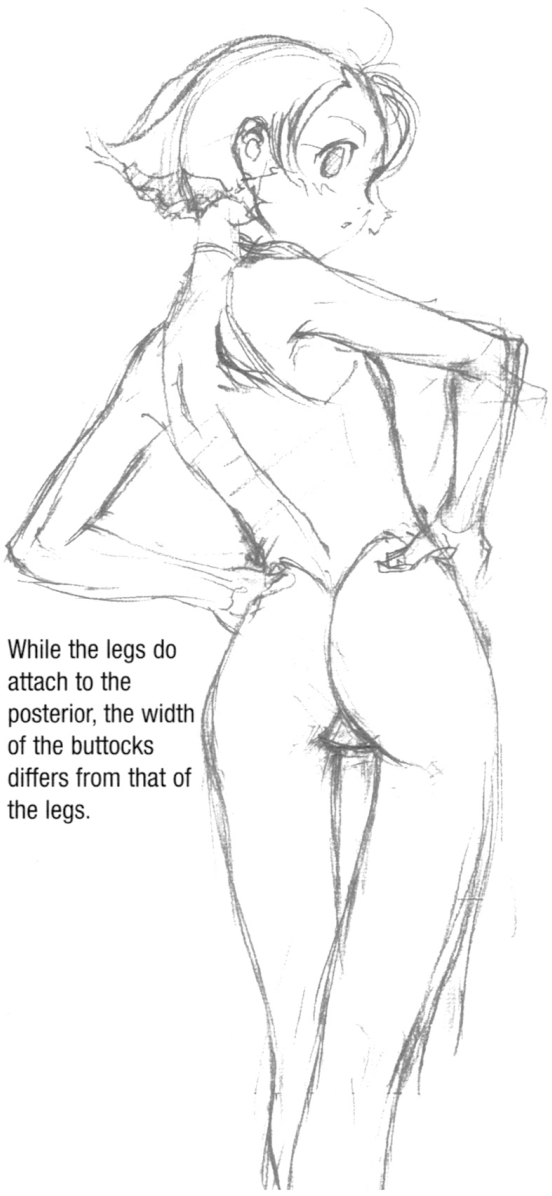




The exterior of the foot tenses when the ankle bends inward while thrusting with the heel.



Creating a Sense of Three-Dimensionality at the Posterior and the Top of the Legs

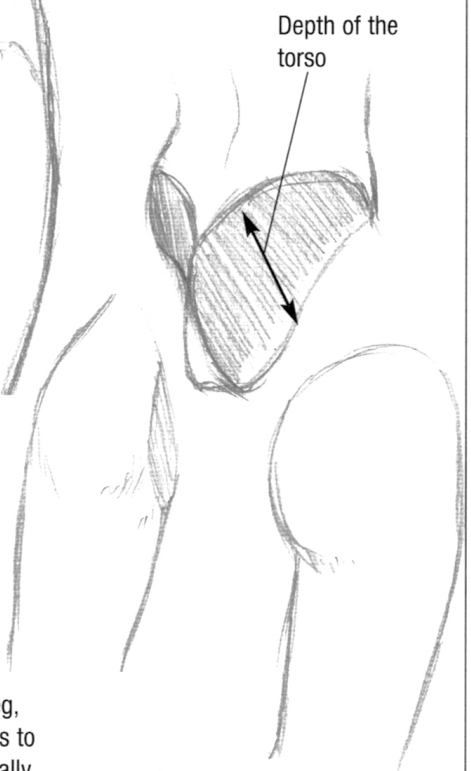


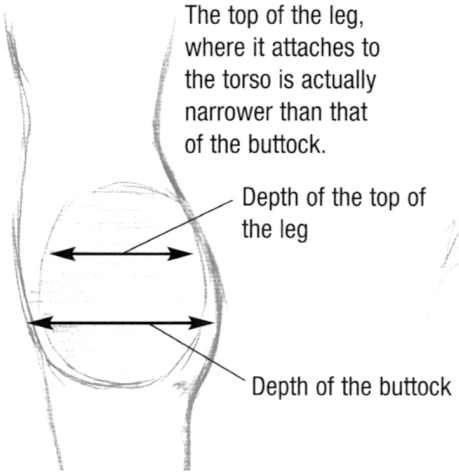
While the legs do attach to the posterior, the width of the buttocks differs from that of the legs.



The volume of the posterior overshadows the torso's own thickness.

Make an effort to impart the lowermost regions of the torso with a sense of volume.

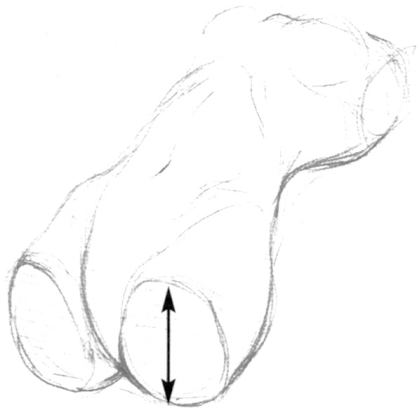




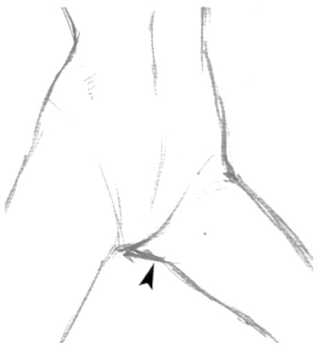
Keeping the top of the leg on the narrow side will make the thigh appear slender even if the buttock is plump.



Exaggerating the juncture where the posterior and leg meet (i.e. the difference in volume between the two) makes the leg appear slender.



A cross-section of the thigh reveals that it is not perfectly round but rather an ellipse that is longer in depth than width.



Ref. Fig.: The above shows a figure with the same-sized posterior, but even slimmer legs.

Chapter 4

From Sketch to Design



Countless characters designed with proportionally implausible yet still appealing faces and bodies appear in the world of *manga* and *anime*. Artists require a wide repertoire of portrayal techniques in order to give birth to appealing characters, richly varied in design and who seem to live and breathe on their own.

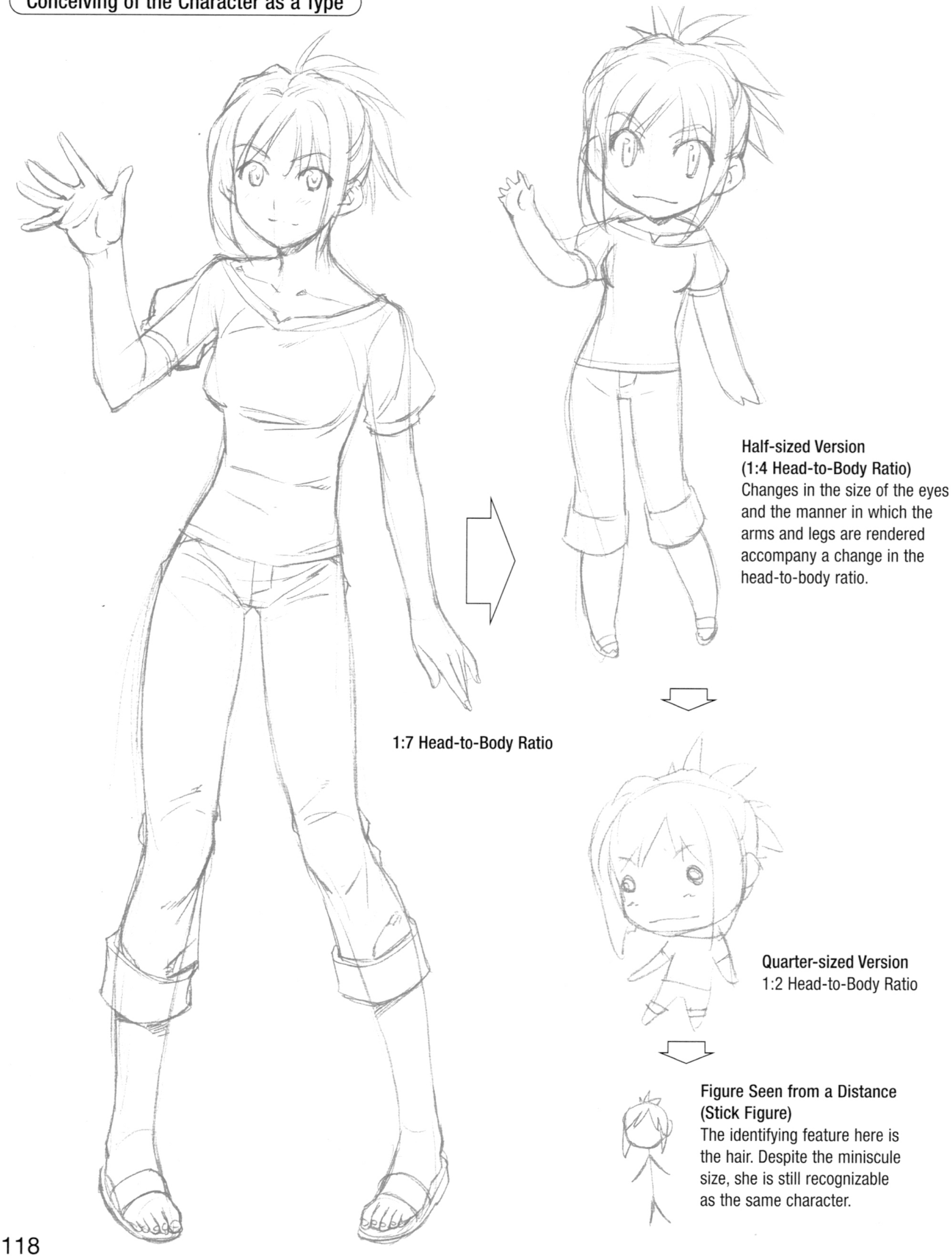
But, how can an artist create a character with a sense of presence that is able to make an impact on the reader? There are various elements at the artist's disposal, such as giving each character a different body type or hairstyle, dressing the characters in eccentric or individualistic wardrobes, or using compositions that impart a sense of three-dimensionality. Yet, there are aspects that make these elements difficult to master solely on one's own. However, the reader has nothing to fear. Using *manga* sketching as the foundation of character design will allow you, as an artist, to acquire these skills.

This chapter covers techniques of representation, including effective adjusting of the character's hairstyle, costume, etc. and stylization, using *manga* sketching as the point of departure. The reader should make an effort to learn these skills, which allow artists to create appealing characters teeming with originality.

The Fundamentals of Stylization

This next section covers how to miniaturize a normal-sized character. Learning to consider how to indicate the miniaturized version is the same character as the original will allow the reader to improve artistically.

Conceiving of the Character as a Type



1:7 Head-to-Body Ratio

Half-sized Version
(1:4 Head-to-Body Ratio)
Changes in the size of the eyes and the manner in which the arms and legs are rendered accompany a change in the head-to-body ratio.

Quarter-sized Version
1:2 Head-to-Body Ratio

Figure Seen from a Distance
(Stick Figure)
The identifying feature here is the hair. Despite the miniscule size, she is still recognizable as the same character.

Three Elements of Stylization

Stylization of a character consists of simplification. The general atmosphere projected by the character becomes distilled and intensified as the degree of abstraction is increased.

1. Minimize contour lines
2. Simplify complicated lines
3. Exaggerate: Draw out and emphasize the character's identifying features

• Stylization of the Face: Simplification and Exaggeration



Realistic Rendition

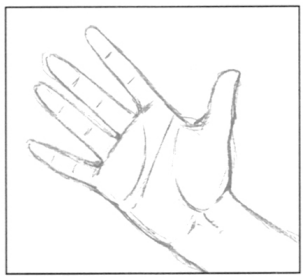


To create the above, 1. minimize the number of contour lines and 2. simplify complicated lines. When drawing the face, simplify the shape's face (i.e. the jaw) and the hair. Often, artists will omit contours for the bridge of the nose or the nostrils, etc.



To create the above, 3. exaggerate (i.e. enlarge the head). Exaggerate the tufts of hair and the ears through increasing their sizes. Another effective technique is enlarging the mouth, making it an identifying feature of this character.

• Stylization of the Hand: Simplification



Realistic Rendition



1. Reduce the number of creases on the fingers and wrist, etc.

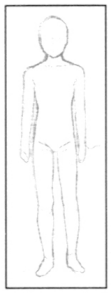


2. Simplify complicated contours.



3. To exaggerate, enlarge the size of the palm and fatten the fingers.

• The Head-to-Body Ratio and Stylization: Exaggeration (Shape-changing, Growing to Enormous Proportions, and Simplifying)



Realistic Rendition
1:5~1:6 Head-to-Body Ratio



Idealized Proportions
1:7~1:8 Head-to-Body Ratio
Accentuate the musculature and skeletal structure while adjusting the overall proportions.



***Manga*-Style Character**
1:4~1:5 Head-to-Body Ratio
Draw the arms and legs as simplified poles, while enlarging the hands, feet, and head.



***Chibi* ("Super-deformed" or "Ultra-stylized") Character**
1:2~1:3 Head-to-Body Ratio
Shorten the height of the body relative to that of the head and simplify the arms and legs even further.

Character Design Techniques Using Stylization

The face alone does not make a character unforgettable. This section covers stylizing the hair, figure, clothing, and all other aspects of a character's design to make him or her memorable.



Face and Hair

Draw out features that generate a sense of form (e.g. big eyes, a large mouth, long hair, etc.).

Build

Draw out features that generate a sense of form (e.g. big eyes, a large mouth, long hair, etc.).

Costume

Dress the character in clothing that offers hints toward his or her personality and potential behavior. Add props that are particular to the character.

An Exercise in Actual Character Design



Character Drawn with No Particular Concept



To create the above, first the character was given short hair with slightly upward slanting eyes to create the impression of an energetic personality. But she still seemed to be lacking that certain *je ne sais quoi*, so the goggles were added.

Final Rough Design

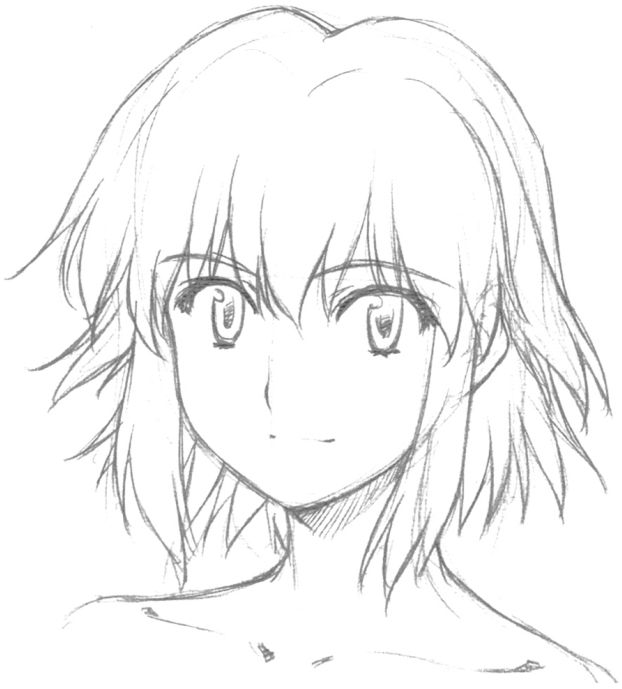
Key Points of Consideration

1. How quickly can this character be drawn? (This might not necessarily apply in the case of a book or magazine illustration, where the character only needs to be drawn once. However, in the case of *manga* or anime where the character will be drawn over and over again, ease of drawing should be taken into consideration.)

2. How pleasing is the final character design to you? (Do you like the way the character looks?)

In order to gain an objective perspective and select those aspects of the design you like, it is vital (critical) that after having finished drawing a character, you set it aside of a short time and then go back for a second look.

For this exercise, you, the reader, should add anything that comes to mind, while taking into consideration the design's goals. Play around with the character's facial expression, clothing design, and other elements.



In the above, the hair was lengthened and drawn with the edges swept outward to create a distinctive silhouette. The outward swept hair creates the impression of a vivacious personality.



The above is a compromise containing aspects of all three elements.

Stylized Face Design

Characters' faces must be designed so that they can be identified just through their silhouette. There are two approaches to designing a distinctive head: determining the design beforehand and adding to the design while drawing.

1. Determining the Design Beforehand: Establishing the Shape of the Head and Face before Drawing the Character

This approach involves using a variety of layout shapes, such a rectangle, instead of beginning solely with a standard circle-and-X layout. A basic oval is suited to this approach.



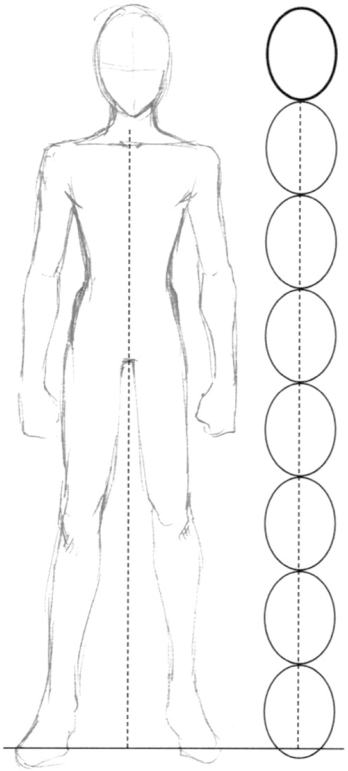
Establish the silhouette or target look beforehand and then start by drawing a rectangular layout.





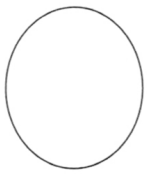


When drawing a character with a narrow jaw, shave away at the round jaw line while maintaining symmetrical balance. Be certain to identify accurately the ideal angle of the jaw from the cheek to the chin.

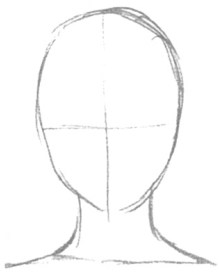


The layout marks the final size of the character's head without further modification. Consequently, this approach offers the advantage of making the figure's overall proportioning easy to capture in that it facilitates establishing the head-to-body ratio.

The Popular Oval Layout



Starting with an oval layout makes drawing characters with oval faces easier.



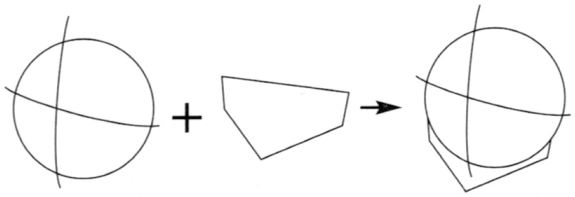


To draw the hair's layout, add volume (i.e. extra area) to the head's layout.

Original oval layout

2. Adding to the Design While Drawing: Adding the Jaw to the Basic Layout

The circle-and-X layout is used to establish only a portion of the "skull," and the jaw is added later.



Head: Circle-and-X layout (Skull)

Jaw

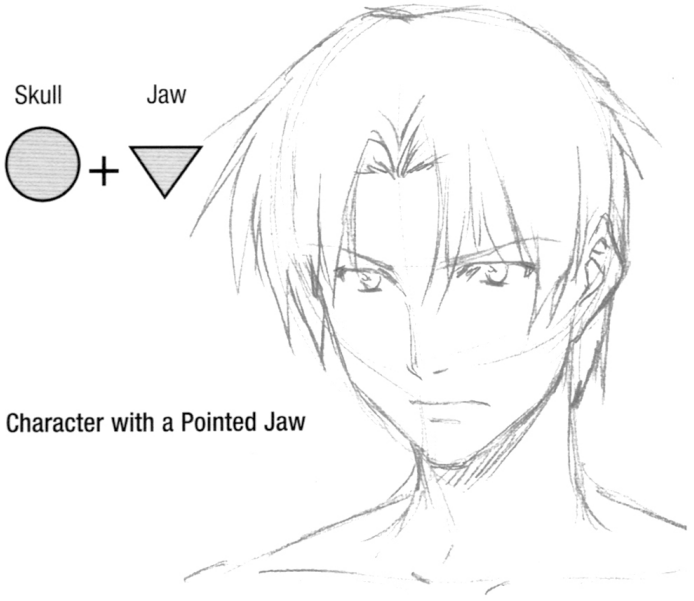
Final head shape



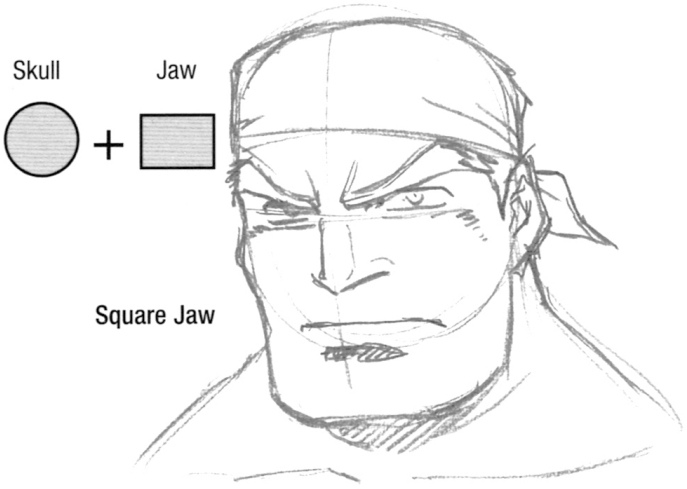
Designing the face using a simplified form for the jaw makes it easy to create a character with a unique face shape.



Because this approach involves adding a simplified jaw to the head, it affords the advantage of making it easier to capture the face from moderately difficult angles, such as an overhead view, etc.



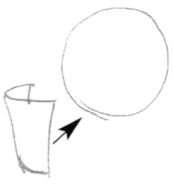
Character with a Pointed Jaw



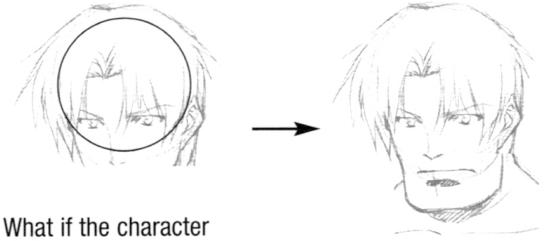
Square Jaw



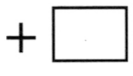
The jaw consists of a stylization of the lower jaw.



Imagine a paper cup cut in half and then attached to the character's head.



What if the character to the upper left was given a square jaw?

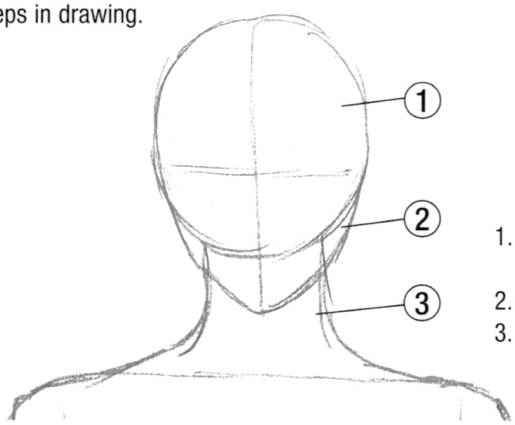


Play around with a variety of jaw shapes when sketching the layout. You might find yourself creating a character you never even imagined.

Tricks to Adding the Jaw

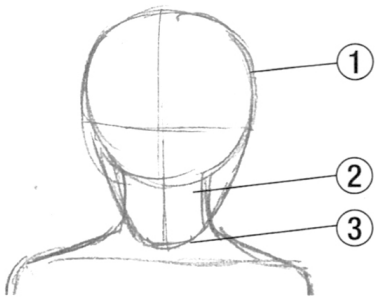
Take careful note of the steps in drawing.

Correct



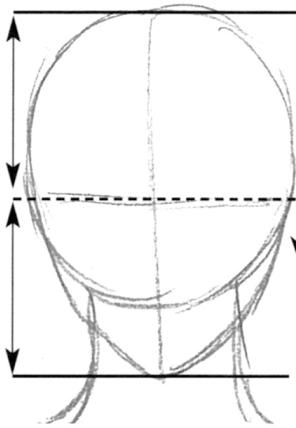
1. Draw a circle-and-X layout.
2. Add the jaw.
3. Draw the neck.

Incorrect



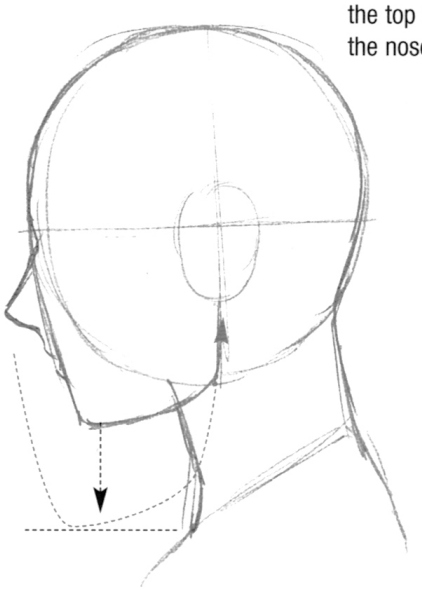
Drawing the neck before adding the jaw resulted in an enormous head.

Note where to add the jaw.



Begin drawing the jaw from this point.

From a front view, the jaw should originate midway along the head.



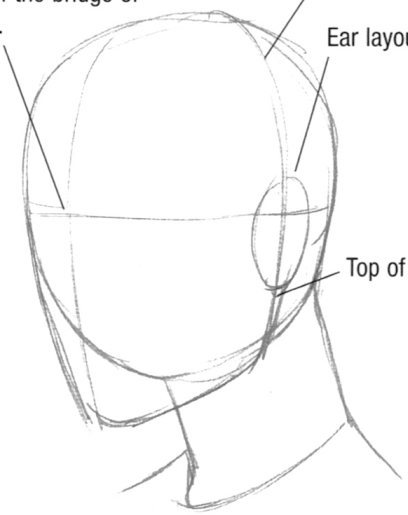
The drawn jaw is equivalent to the skeletal jaw. While the artist may take liberty with the jaw's length and shape, it still must originate from just underneath the ear.

Draw the brow approximately level with the top of the bridge of the nose.

Side centerline

Ear layout

Top of the jaw

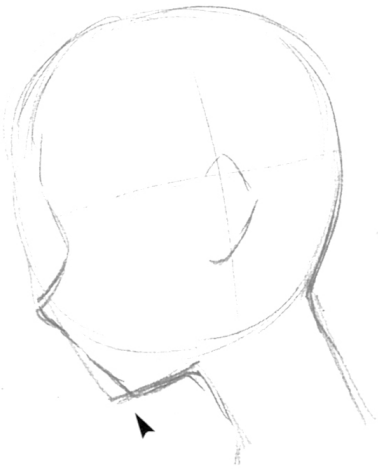


Any size or shape may be used for the ears and nose. However, normal human proportioning still dictates their positions.

Draw the head in profile, while checking the forms and lengths.



The above shows a circle-and-X layout with a jaw line added. This constitutes the design for the face shape of this character.



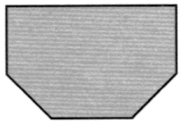
Be certain to draw the character's face in profile with the added jaw. When designing a character, always ensure that you have a firm grasp of the face design you selected.

Layout of the head's rear



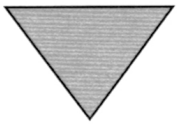
This approach has the advantage of making it easier to capture the head's shape at the layout stage from a variety of views, according to the desired angle of composition.

Popular Jaw Designs Used to Create Individualistic Characters



Home Based-shaped Jaw: Rugged Chin

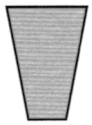
This jaw design is well suited to strong, masculine male characters, such as a reliable middle-aged man.



Triangular Jaw: Pointed Chin

This jaw shape may be used with both male and female characters. In the case of female characters, a triangular jaw works well with tidy, virginal female character types, such as a gentle older girl.





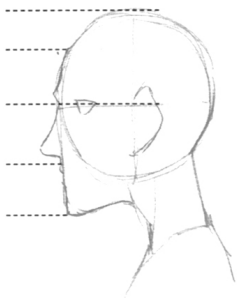
Trapezoidal Jaw: Long Chin



Trapezoidal jaws work well with eccentric characters, such as a villain or scientist.



Once you have grown accustomed to drawing the exterior contours, you should be able to turn out a usable sketch in one go.

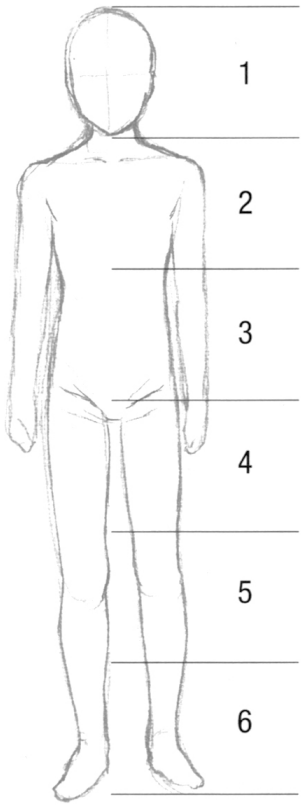


The above is a rough sketch of a face in profile. Be certain to draw guidelines to establish the positions of the eyes, nose, and mouth until you become accustomed to proportioning properly the faces you design.

Stylized Figure Design

Make an effort to play with the head-to-body ratio and design characters with a variety of body types, unique to each and that will inspire descriptions like "good-looking," "cute," or "individualistic," etc.

Designing the Head-to-Body Ratio

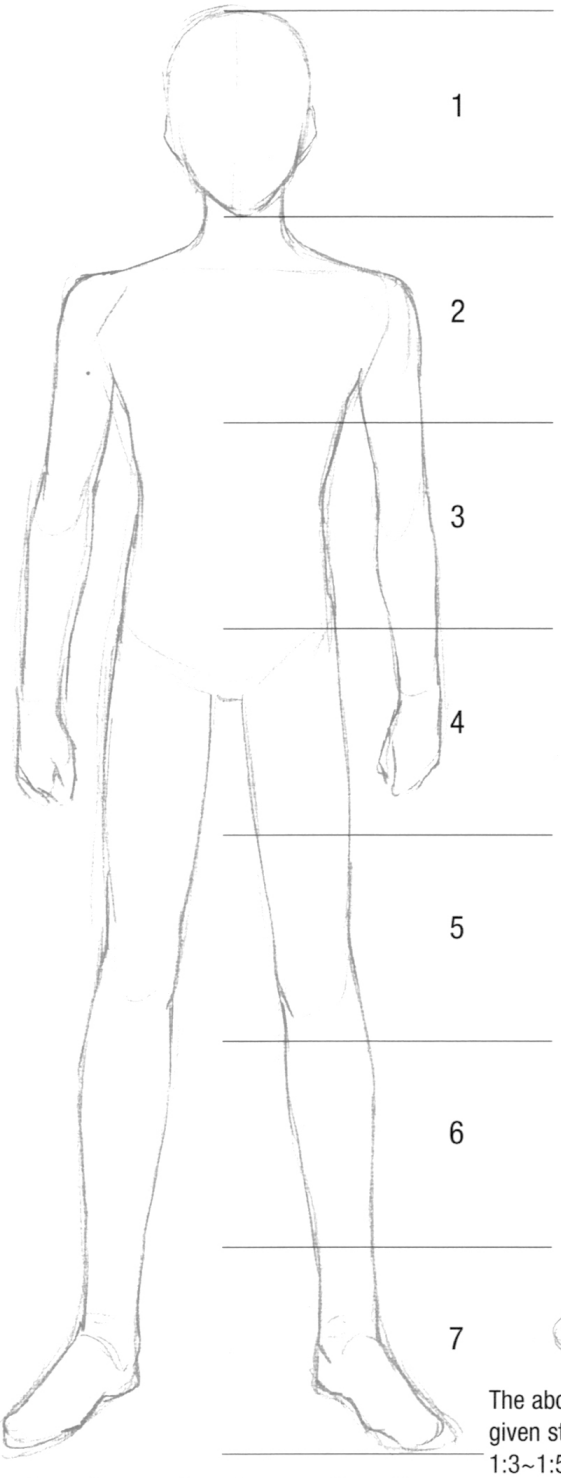


The above shows a figure drawn at a realistic 1:5.5~1:6 head-to-body ratio. The head appears large with respect to the overall figure.

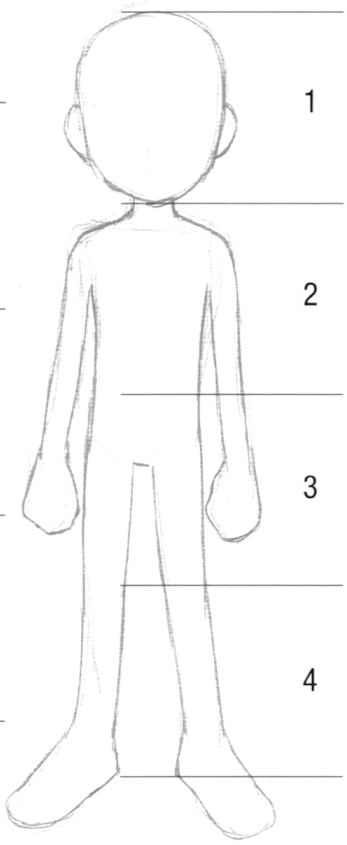


Manga characters often display proportioning that differs from realistic human proportions. This is because adult characters with smallish heads generate the appearance of attractive, agile actors in an action or dramatic context.

Standard Builds: 1:7 and 1:4

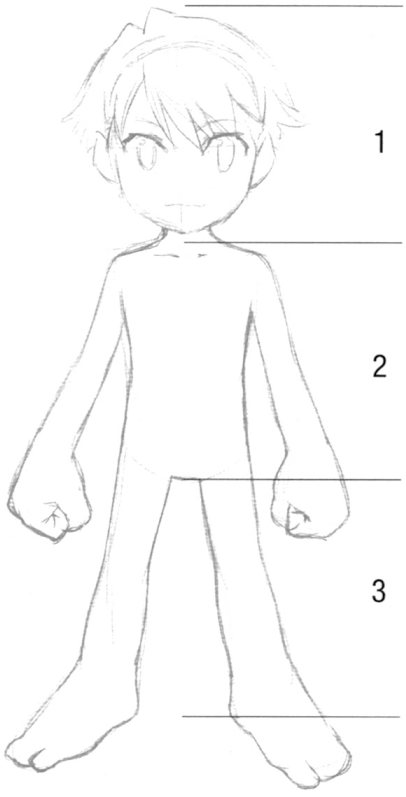


The above shows a character proportioned to a visually pleasing 1:7~1:8 head-to-body ratio. Since there are people in the real world with these proportions, such a character is referred to as "realistic."



The above figure is a type that has been given stylized proportions and drawn at a 1:3~1:5 ratio to generate an "endearing" or "likeable" appearance. The head-to-body ratio is one of a child (of approximately 10 years). Giving the figure long legs and stylizing the body overall produce a visually appealing character.

Chibi ("Super-deformed") Characters



The above shows a character with hands and feet stylized so that they are proportionally large. This is the proportioning frequently used to redesign a 1:8 head-to-body ratio character as a company brand character or character used in advertising.



The above shows a figure with tiny hands and feet, following Kewpie(r) doll proportioning.



Characters with Kewpie(r) doll proportioning lend themselves toward illustrating humorous and sweetly endearing motions or behavior. These characters form the foundation of character drawing practice.

Tricks to Indicating a Figure of Different Head-to-Body Ratios Is the Same Character

Maintain consistency in the hairstyle and eyes.

Realistic rendition



Draw the head on the small side and add clearly defined joints.

***Shonen manga* rendition**



Draw the head and hands on the large side and omit muscle contour lines.

Realistic rendition



As the head becomes larger and the torso shortens, the limbs become increasingly cylindrical. Draw the character to have an overall roundish silhouette.

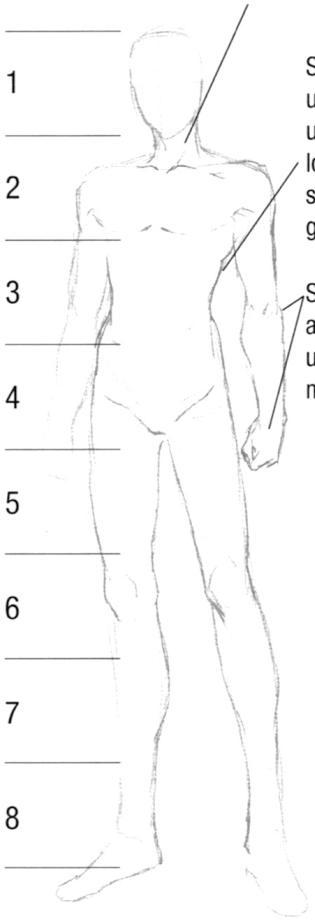
***Shonen manga* rendition**



***Chibi* rendition**



Using a 1:8 Head-to-Body Ratio for an Attractive Male Character

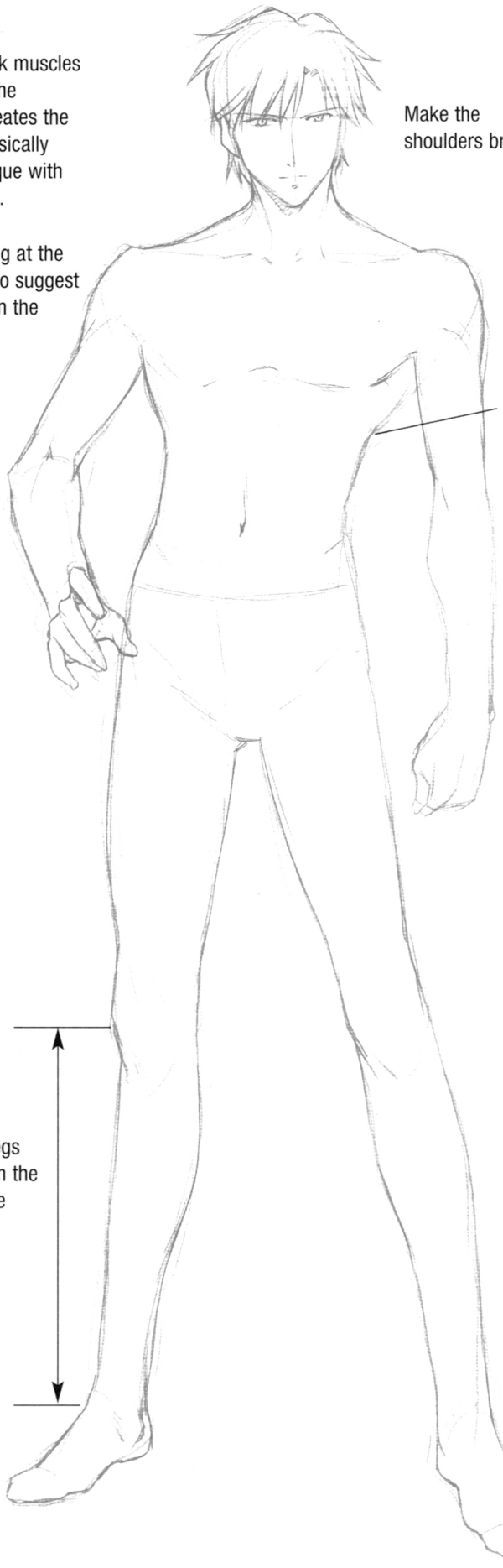


The throat should be long enough so that the Adam's apple is visible.

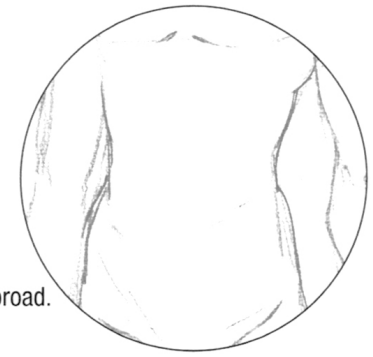
Showing back muscles underneath the underarm creates the look of a physically strong physique with good posture.

Show tapering at the arm's joints to suggest undulations in the muscles.

The muscles of the above figure are rendered so as to avoiding giving the character a brawny look.



Make the shoulders broad.



Male bodies store less fat, and showing the pelvic bones jut out a little produces a bonier, more rugged look.

Draw the figure to appear taut at the waist. The torso should be relatively straight from the waist down with only minor widening.



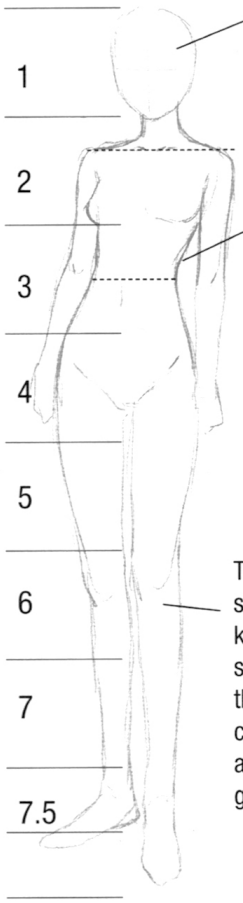
Average Build



Make the legs longish from the knees to the ankle.

The neck and legs are short. The arms are cylindrical with little undulations in the musculature. The hands and feet are small, projecting a physically feeble impression.

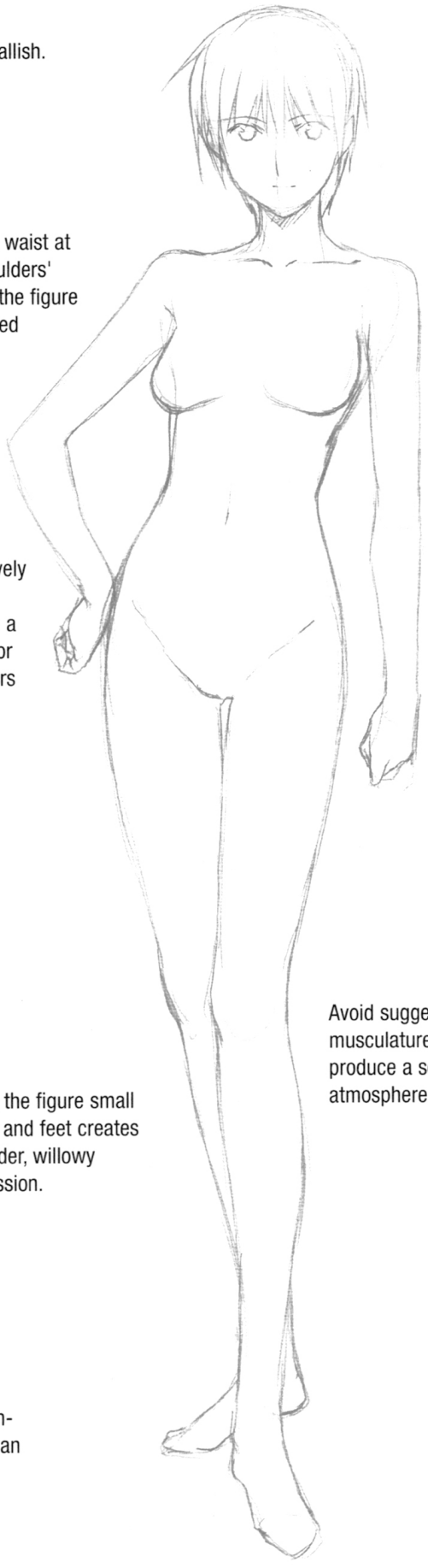
Using a 1:7.5 Head-to-Body Ratio for an Attractive Female Character

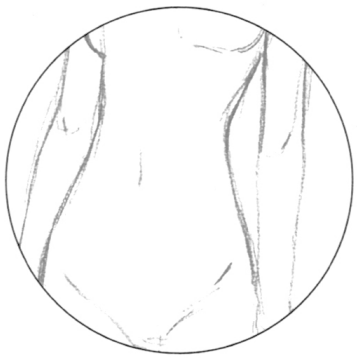


The head is smallish.

Drawing the waist at half the shoulders' width gives the figure clearly defined curvature.

The legs are relatively straight from the knees down. Using a subtle "X" shape for the exterior contours creates the appearance of graceful legs.



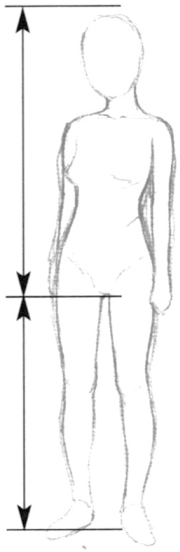


Suggesting a delicate layer of fat covering the abdominal muscles and pelvis produces the look of soft curves at the waist.



Avoid suggesting musculature to produce a soft, supple atmosphere.

Average Build



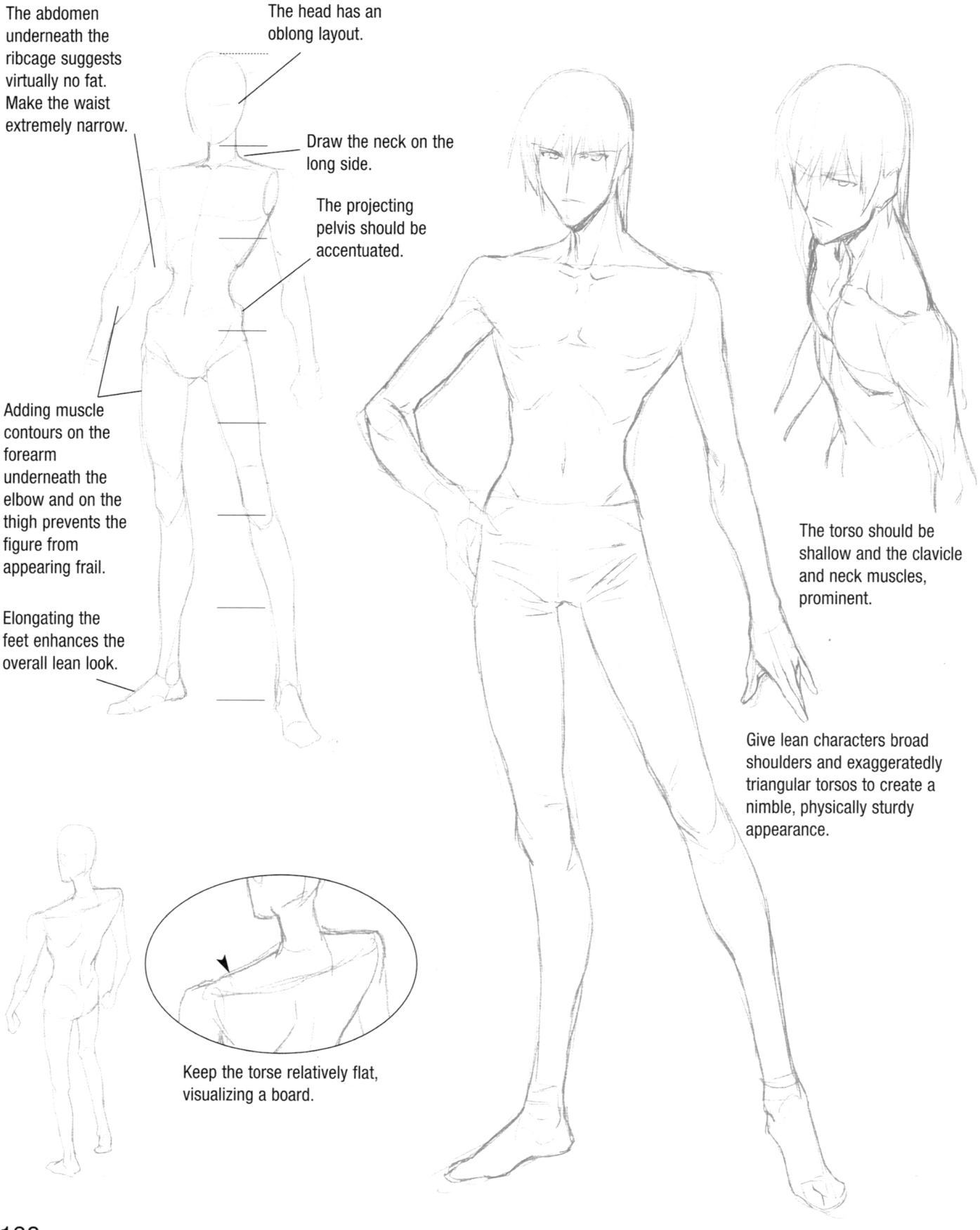
Giving the figure small hands and feet creates a slender, willowy impression.

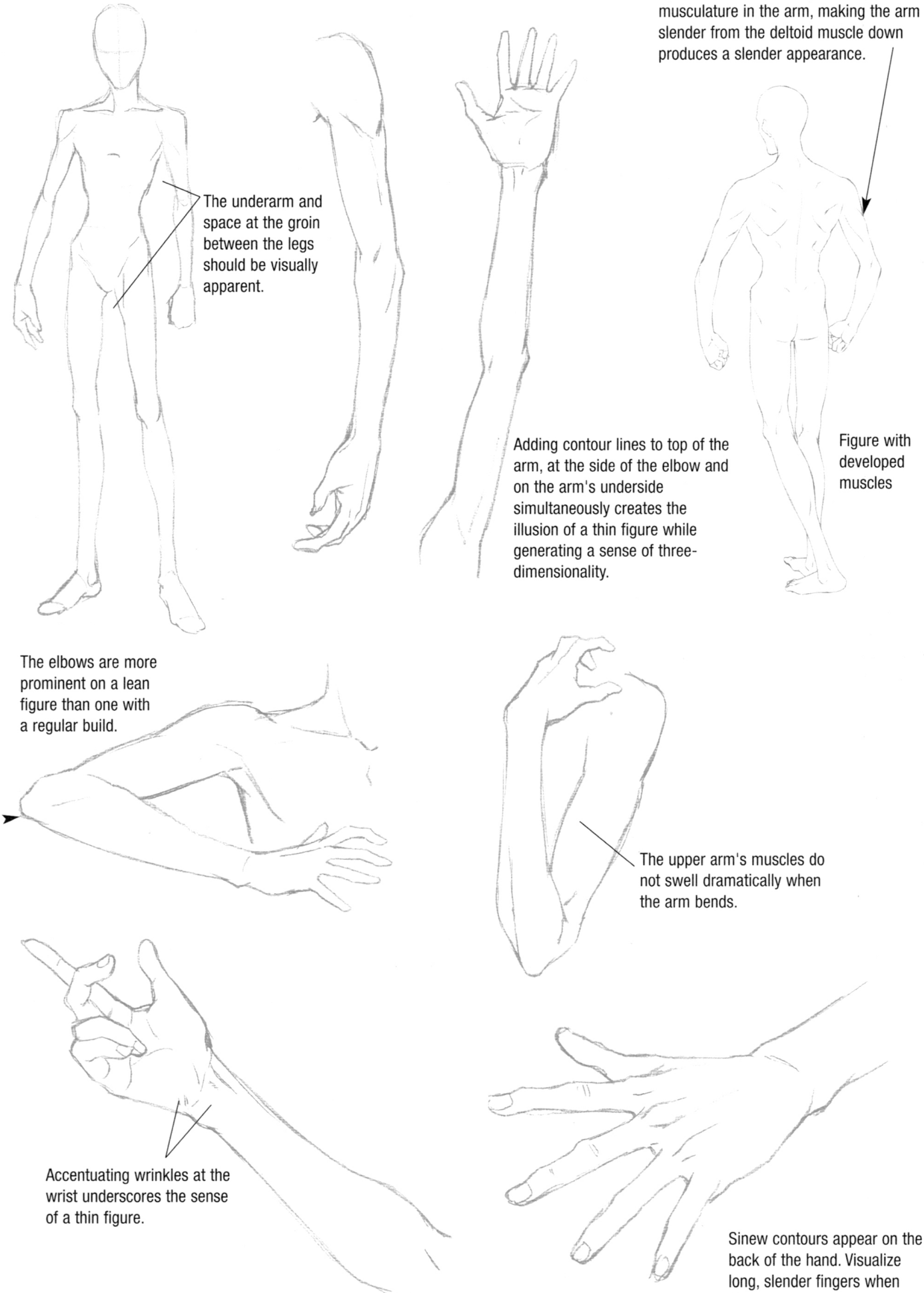
The legs are short, and the arms are cylindrical up to the hands. The waist is thick, and the pigeon-toed stance creates an "O" from the knees down.

Stylize the lengths and widths of the various body parts.

Thin and Trim Build

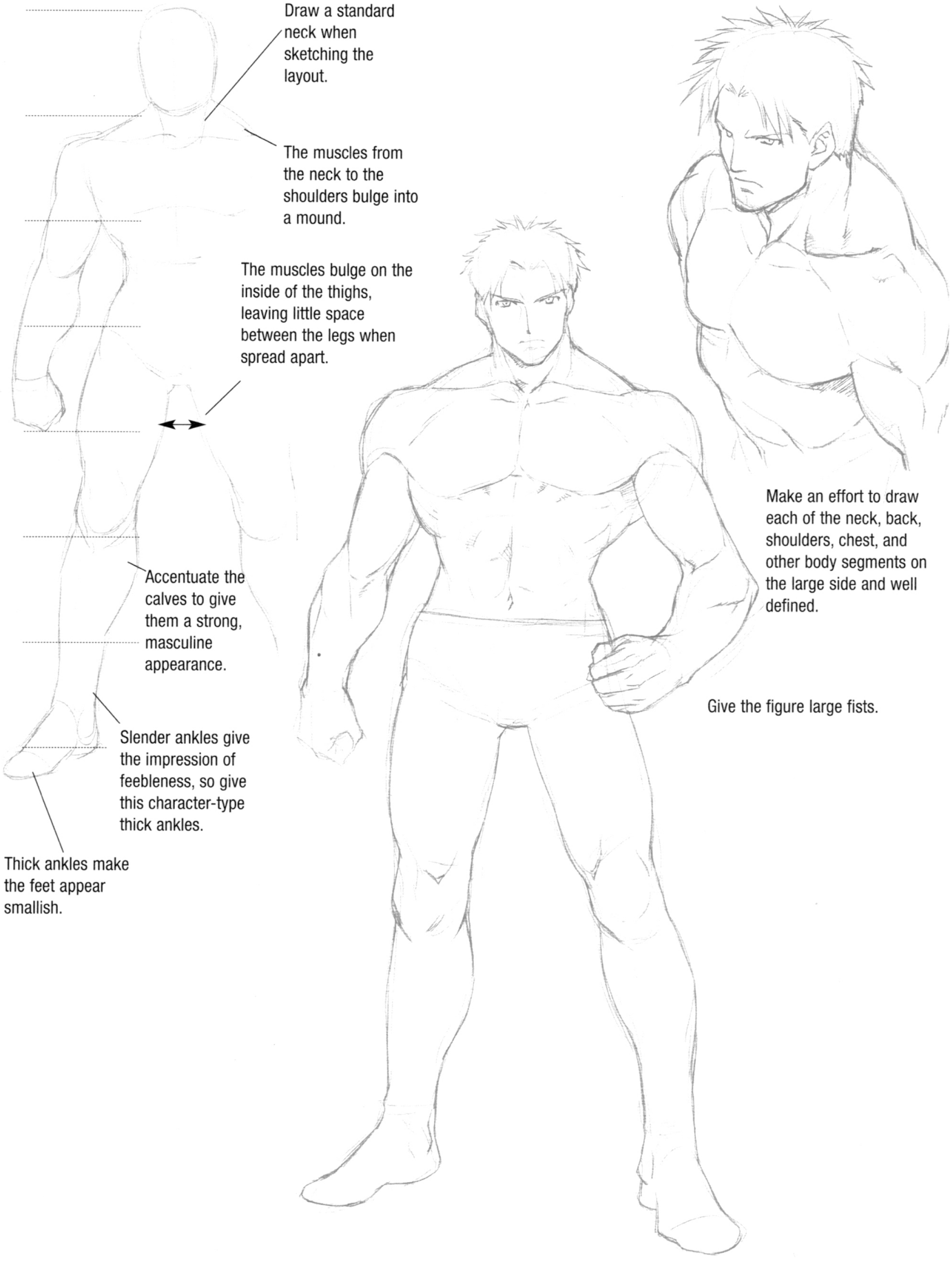
Draw characters who are meant to be lean but not feeble and emaciated at a 1:7 head-to-body ratio.

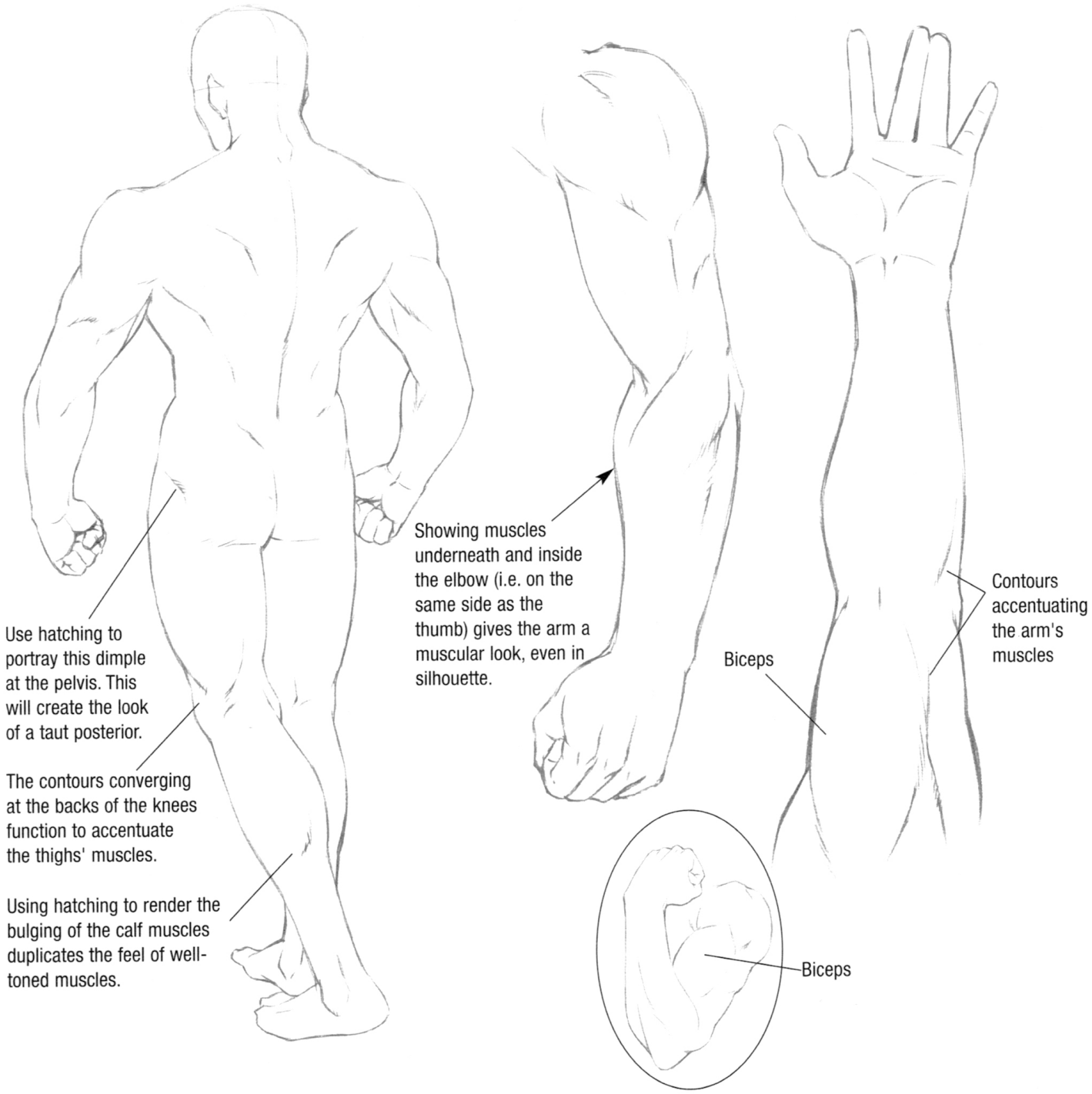



When intending to downplay the musculature in the arm, making the arm slender from the deltoid muscle down produces a slender appearance.
The underarm and space at the groin between the legs should be visually apparent.
Adding contour lines to top of the arm, at the side of the elbow and on the arm's underside simultaneously creates the illusion of a thin figure while generating a sense of three-dimensionality.
Figure with developed muscles
The elbows are more prominent on a lean figure than one with a regular build.
The upper arm's muscles do not swell dramatically when the arm bends.
Accentuating wrinkles at the wrist underscores the sense of a thin figure.
Sinew contours appear on the back of the hand. Visualize long, slender fingers when drawing.

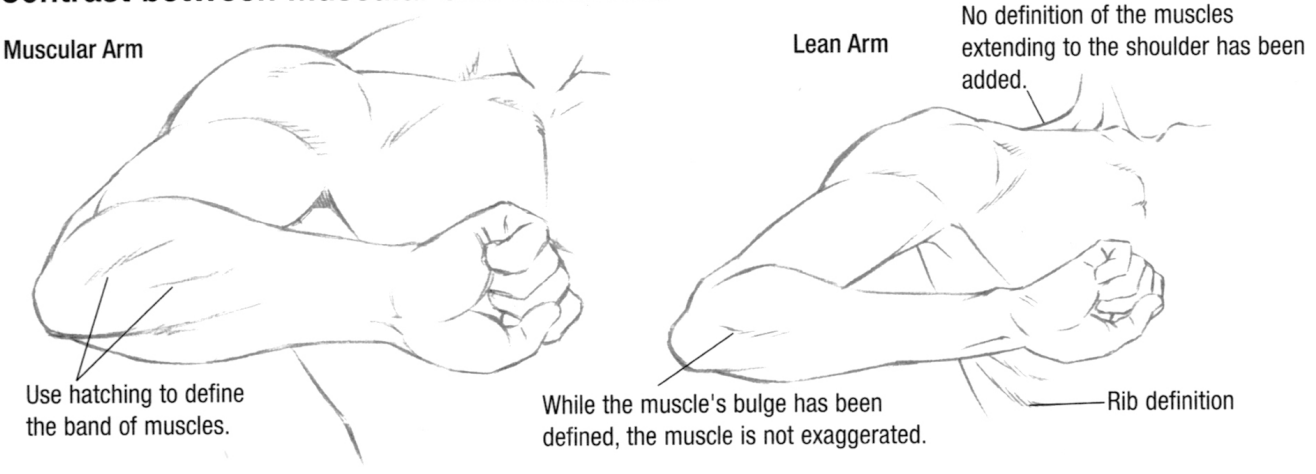
Powerful, Muscular Builds

Design muscular characters with the same 1:7 head-to-body ratio proportioning used for slim builds.





Contrast between Muscular and Lean Arms



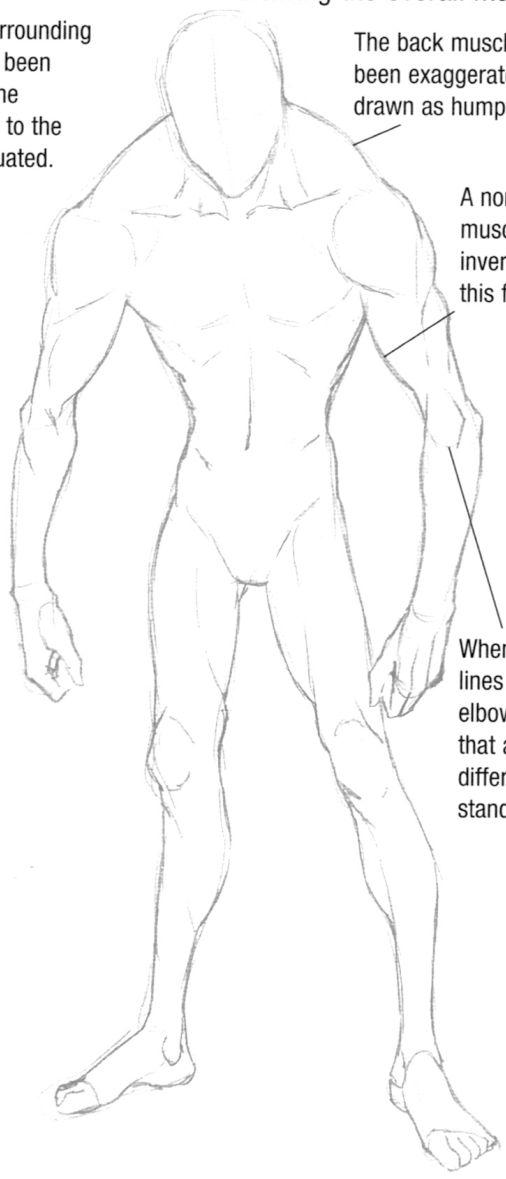
Grotesquely Muscular Build

Try avoiding visual symmetry and proportional balance when drawing the overall musculature to create a ghoulish character.



The muscles surrounding this figure have been deformed and the depression next to the clavicle, accentuated.

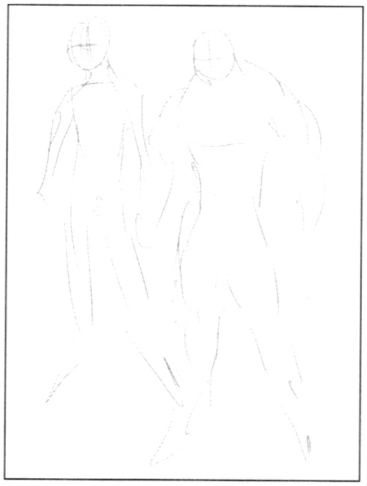
The above shows a proto-design with an inverted triangle-shaped torso and accentuated joints.



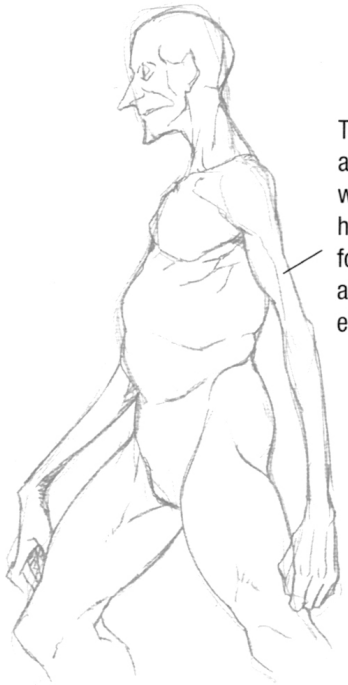
The back muscles have been exaggerated and drawn as humps.

A normal inner arm muscle contour was inverted to create this form.

When drawing two lines to define the elbow, use contours that are shaped differently from the standard form.



Deformation Study: Deformation consists of adjusting the body's forms, which should start by designing the outer contours at the layout stage.



The upper arm has about the same width as a normal humerus. The forearm has been abnormally elongated.

The above proto-design features a shortened neck and a slightly rounded back.

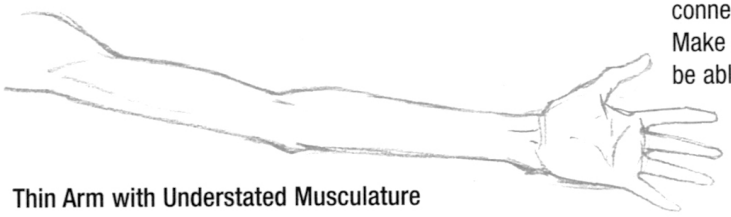




For this figure, the more the back was enlarged and exaggerated, the larger the feet had to be made to maintain balance.

Assorted Arms

The same body part may appear dramatically different depending on how it is portrayed. Your drawing capacity as an artist bears a direct connection to how much design variation you are able to produce. Make an effort to cultivate your abilities of observation so that you will be able to make distinctions as needed when drawing.



Thin Arm with Understated Musculature



Lean, Muscular Arm



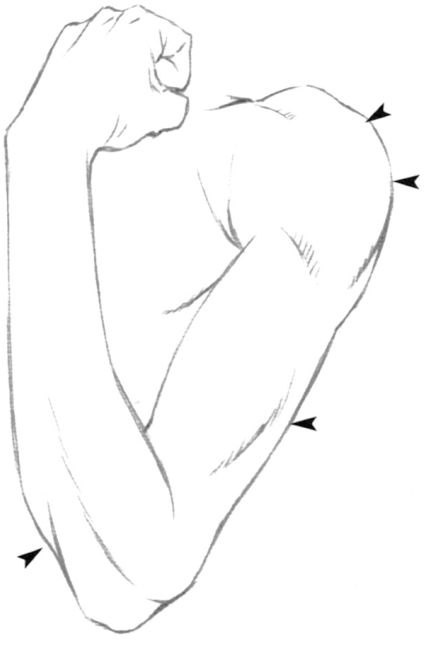
Beefy, Muscular Arm



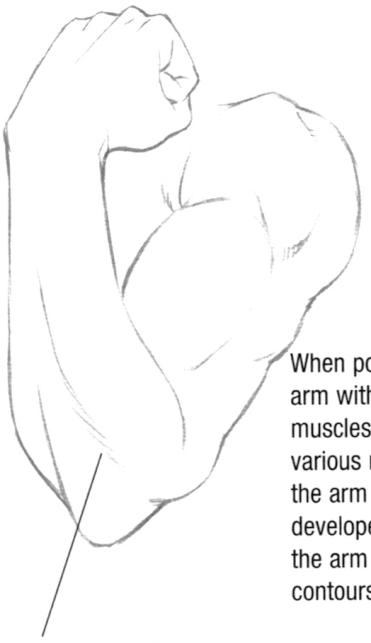
While all three images are of arms, the thickest has twice the width of the narrowest. The thicknesses of the hands and fingers also change according to the arms' girths.



The contours of the forearm's muscles still become visible even on a thin arm with little muscle definition.



Use flowing lines for the outer contour of a lean, muscular arm. Key points here lie at the muscle contours of the shoulder, biceps, and elbow.

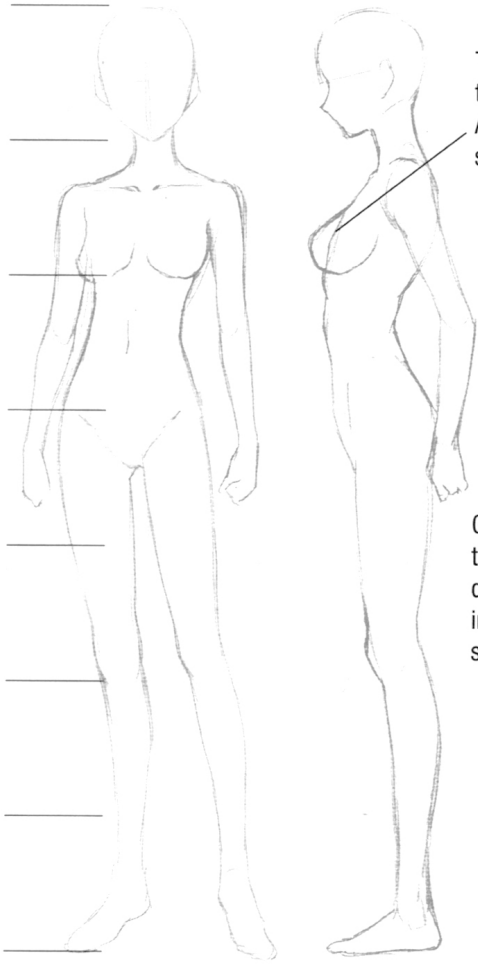


When portraying an arm with massive muscles, visualize various muscles in the arm as well-developed and give the arm rugged, bulky contours.

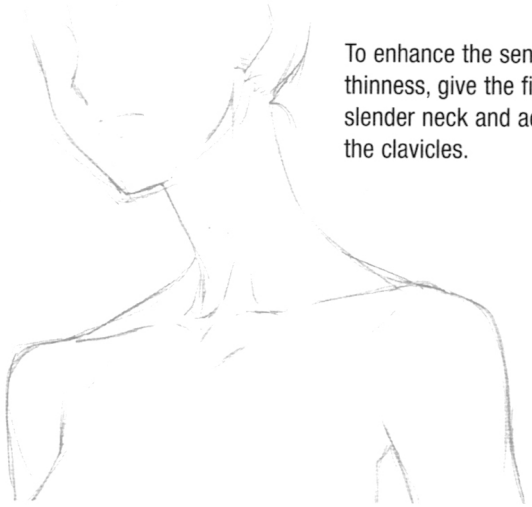
Hatching is an effective means of portraying muscle contours on well-developed muscles.

Slender Female Characters

Starting with a slender body build and adjusting it will enable you to depict a wide array of attractive female characters.



This contour denotes the breastplate. Adjust the breast size as needed.

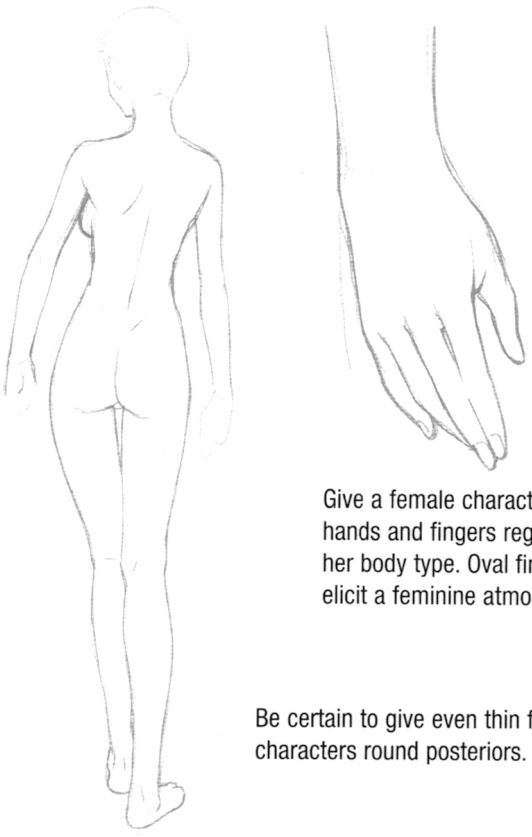


To enhance the sense of thinness, give the figure a slender neck and accentuate the clavicles.

Giving the torso and the head the same depth creates the impression of a slender figure.

To accentuate the illusion of slimness, draw bone contours for the clavicles at the base of the neck, elbow contours, and pelvis contours.





Give a female character soft, lithe hands and fingers regardless of her body type. Oval fingernails elicit a feminine atmosphere.

Be certain to give even thin female characters round posteriors.


Use low angle compositions when intending to portray the breast in an enticing manner.
To de-emphasize the breasts, accentuate the waist and the projection of the buttocks to give the character an attractively feminine appearance.
The character to the right features a generous chest. Because portrayal of a moderate degree of fat on a slender female figure is visually appealing, draw the character with rounded waist and pelvis contours and avoid portraying her bone structure. This will achieve a visually pleasing balance.
Breastplate guideline
Overhead compositions offer the advantage of showing off the chest's attractive contours.

Friendly Super-Deformed (Ultra-Stylized) Characters

The proportioning introduced in this section, which features oversized heads, produces the most loveable and *manga*-esque of character portrayals. The proportioning ranges from approximately a 1:2 head-to-body ratio to somewhere around a 1:5, and the variations are virtually infinite.



1:8 Head-to-Body Ratio Prototype

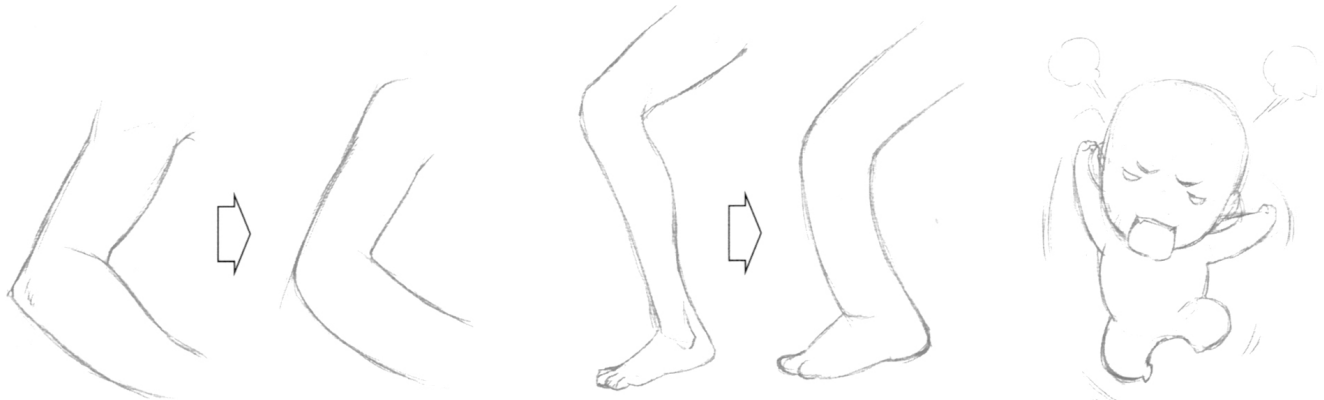


1:3.5 Head-to-Body Ratio Version



1:2 Head-to-Body Ratio Version

Using Rounded Joints



Realistic arm

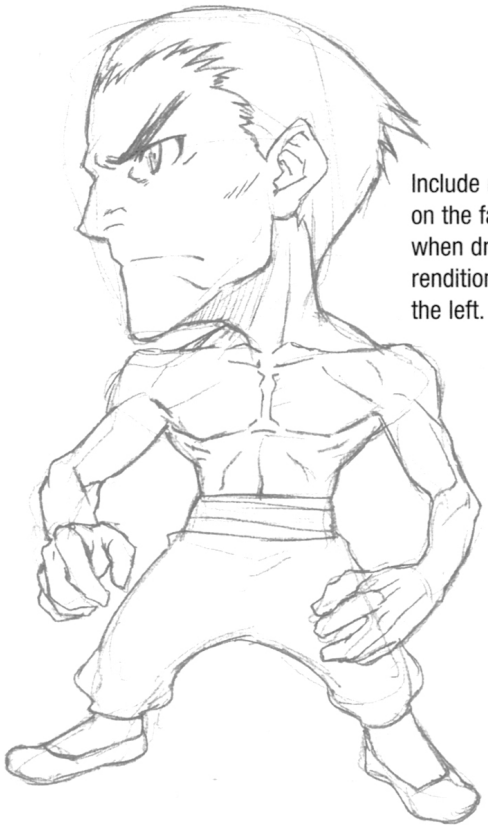
The *chibi* ("super-deformed") character's arm is cylindrical from the shoulder to the wrist.

Realistic leg

The *chibi* character's leg has virtually the same width from the knee to the ankle.

Show *chibi* characters displaying emotion with their entire bodies.

The charm of a *chibi* character changes according to whether the hands and feet are made large or small, even when the head-to-body ratio remains the same.



Include muscle contours on the face and body when drawing "realistic" renditions like the one to the left.

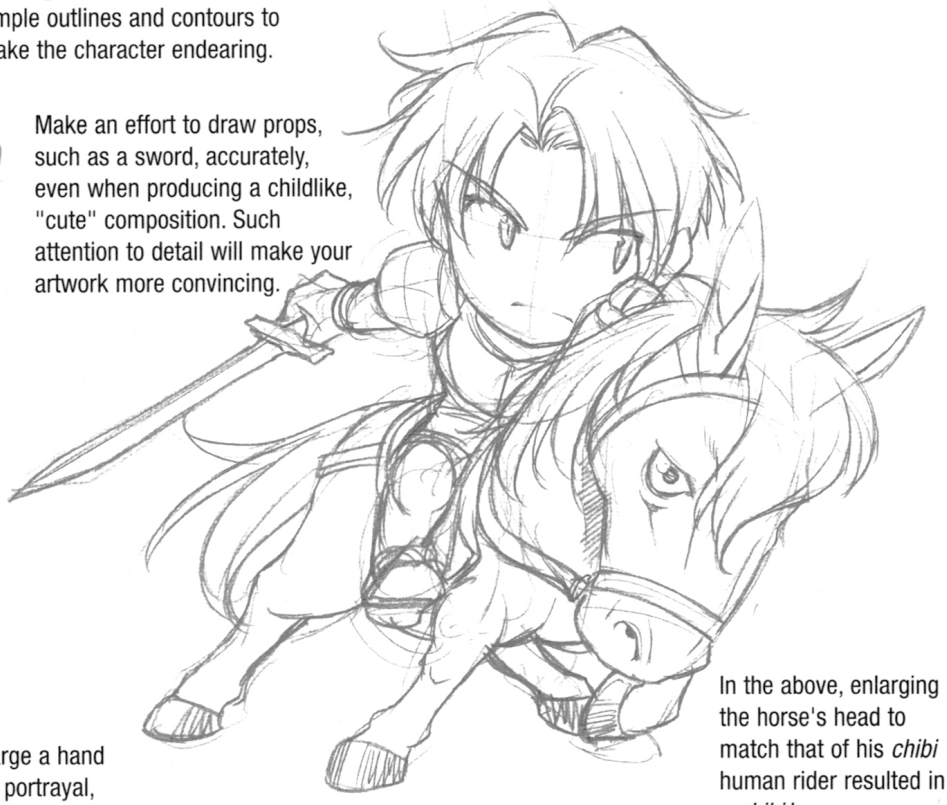


While this female character is also "realistically" rendered, the diminutive hands and feet enhance her visually charming air.



When drawing oddball or ghoulish characters, avoid drawing details. Instead use simple outlines and contours to make the character endearing.

Make an effort to draw props, such as a sword, accurately, even when producing a childlike, "cute" composition. Such attention to detail will make your artwork more convincing.



In the above, enlarging the horse's head to match that of his *chibi* human rider resulted in a *chibi* horse.



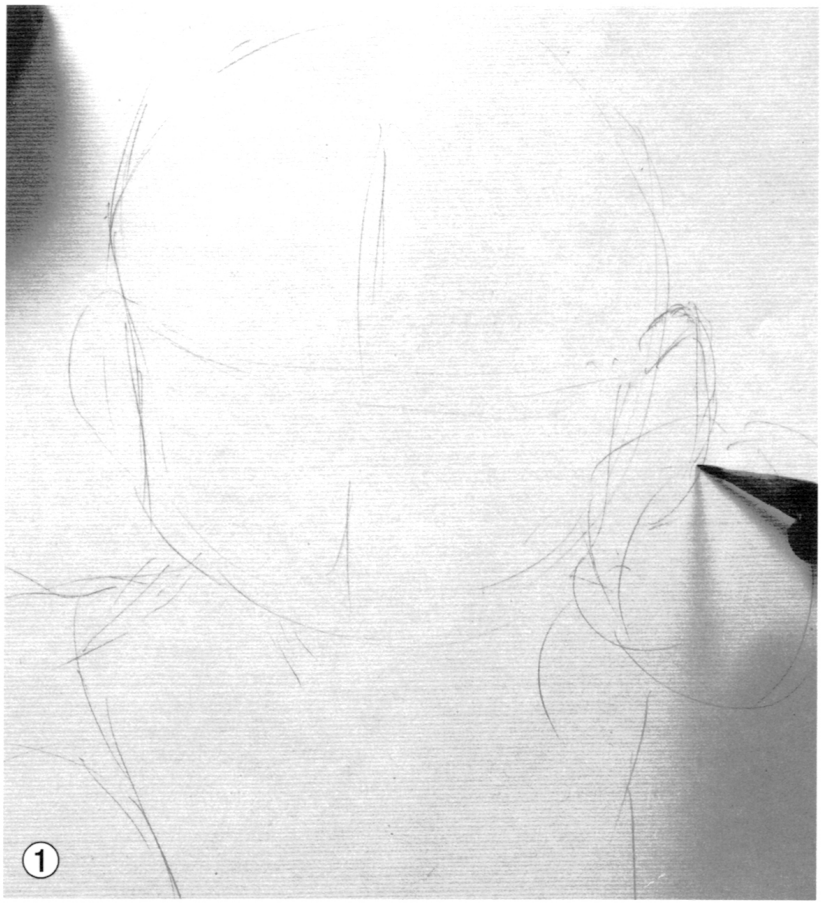
Go ahead and enlarge a hand to suit the scene's portrayal, even if the character was originally designed to have small hands.

Chibi Characters: The Reality behind Key Poses

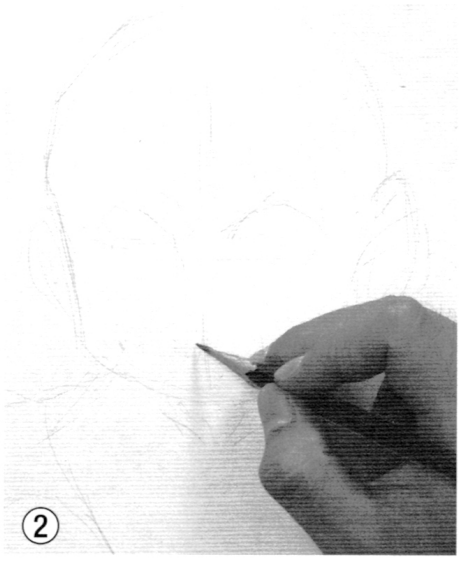
This section studies the steps in drawing a dynamically posed *chibi* character.



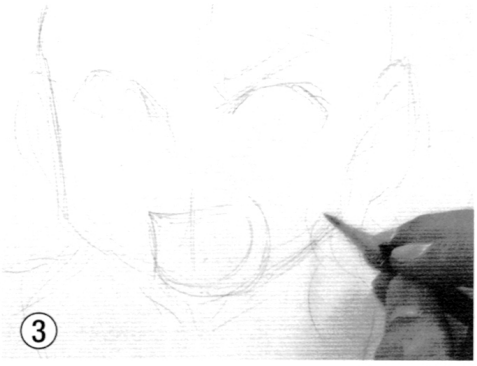
The above composition shows a *chibi* character pointing.



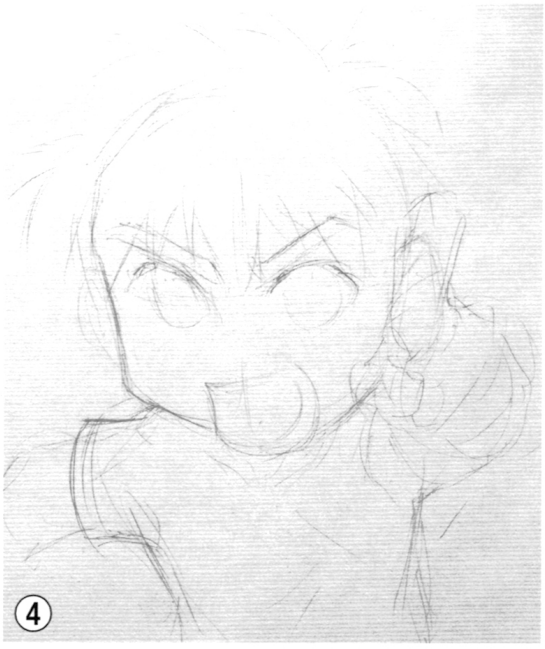
Start by drawing the layout, including a rough description of the hand thrust forward.



Roughly sketch the eyes and nose.

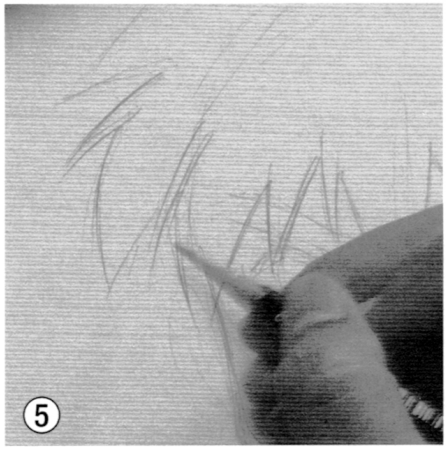


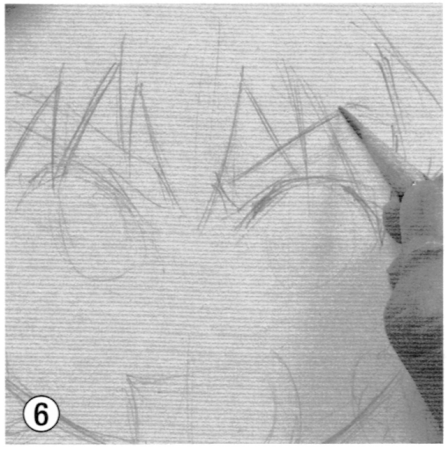
The mouth projects outside of the face's outline. When drawing boldly stylized figures, be certain to capture the stylized form in the layout stage.

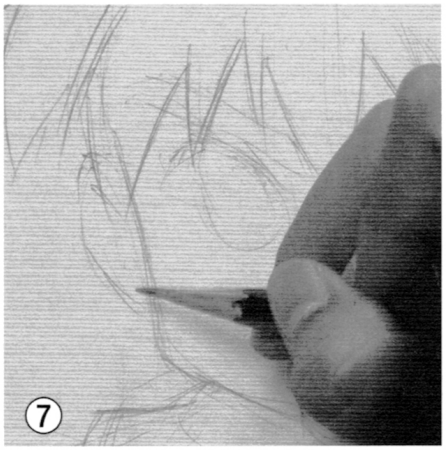


The image to the right shows a completed layout. From this point, the contours will be adjusted to finish the under drawing.

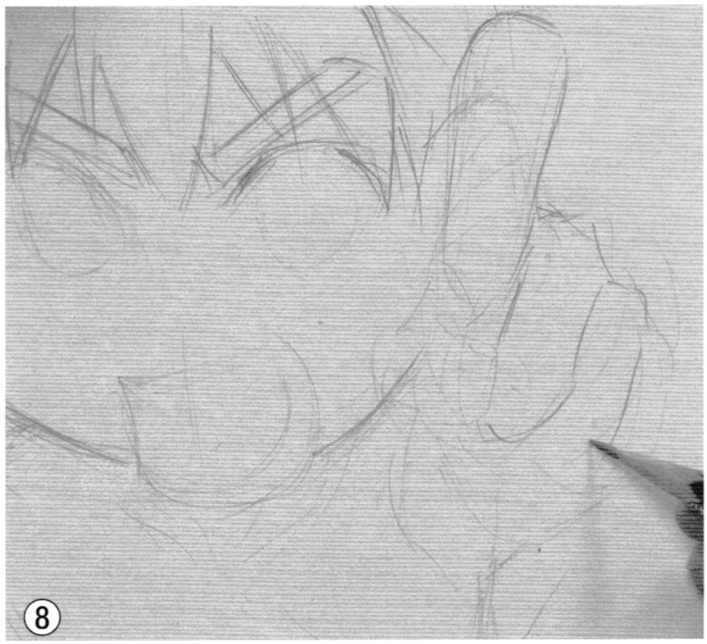
Adjusting the Contour Lines

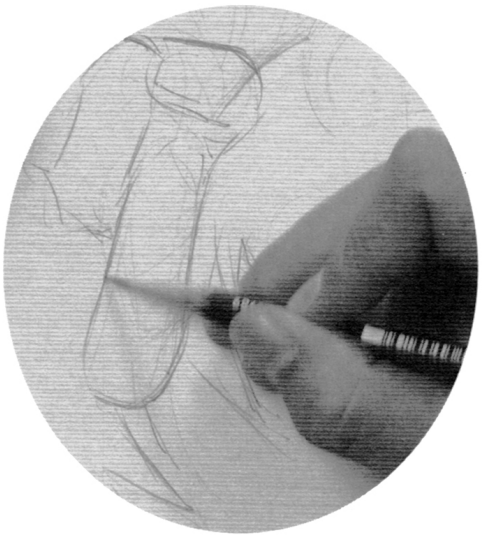




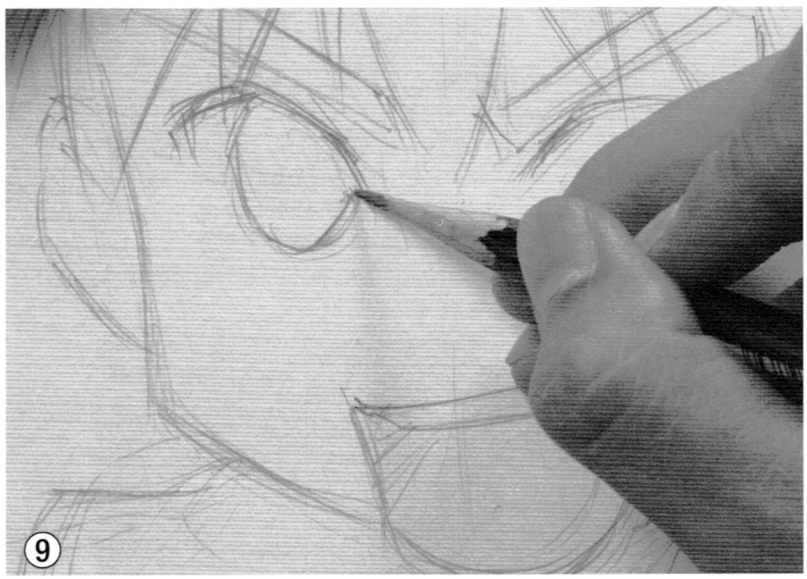


Adjust the layout contours of the hair, the eyebrows, and the face's outline to clean up the forms.





Rotate the paper into comfortable positions as you work. This will allow you to produce clean, straight lines for the hand thrust out toward the picture plane.

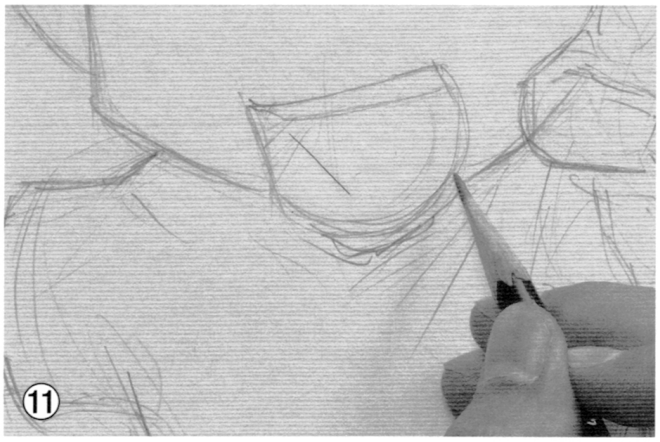


When drawing the eyes' layouts, gradually overlap strokes to create a smooth, round form.

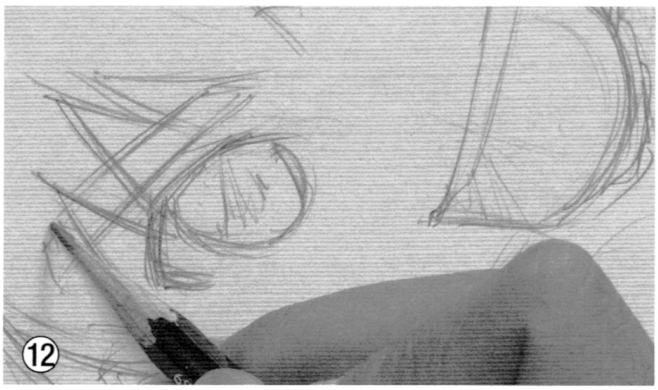


Gradually adjust the arm and figure contours.

Completing the Face



Carefully adjust the contours of the mouth protruding outside of the face's outline.

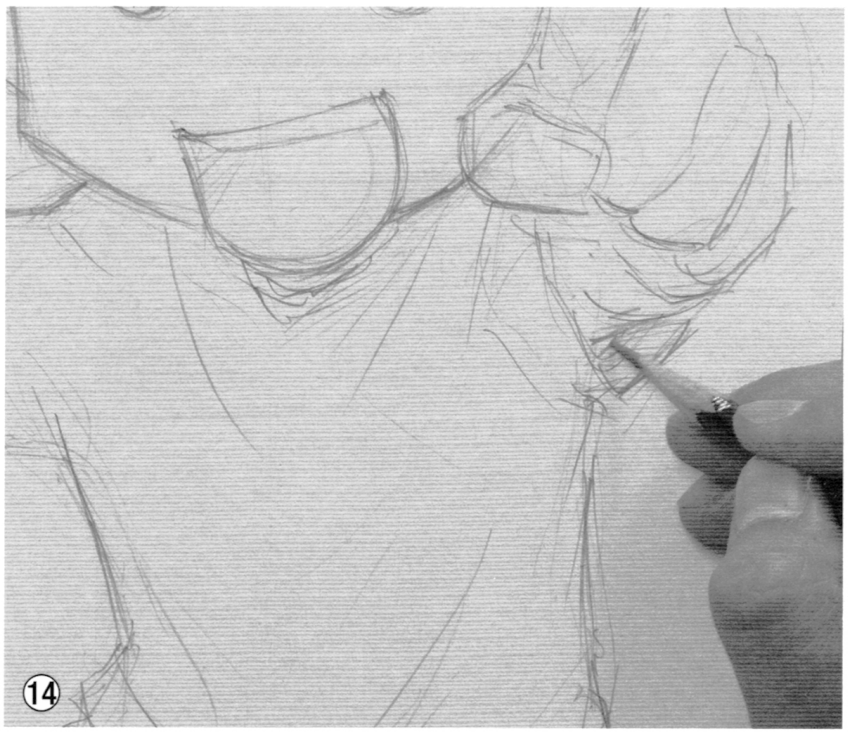


Drawing from left to right and top to bottom will feel more comfortable to right-handed artists. When producing a large composition, in addition to drawing strokes in a comfortable direction, rotate the paper.

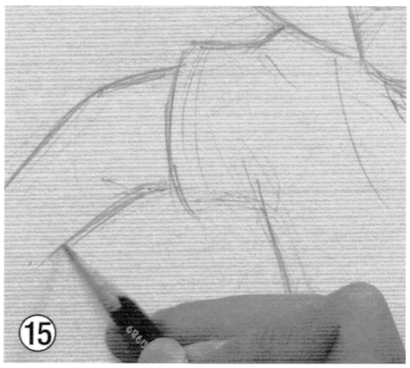


Draw the irises, pupils, light reflections, etc.

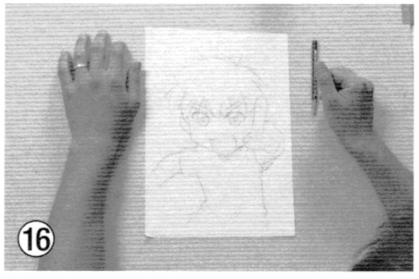
Completing the Figure



Add hatching to areas of shadow, such as the inside of the sleeves. This easily allows you to generate a sense of three-dimensionality.



When intending to draw only part of an arm and omit the remainder, use contours that taper at the end. This will result in a visually pleasing figure.



Completed image

Final Image of Character Pointing

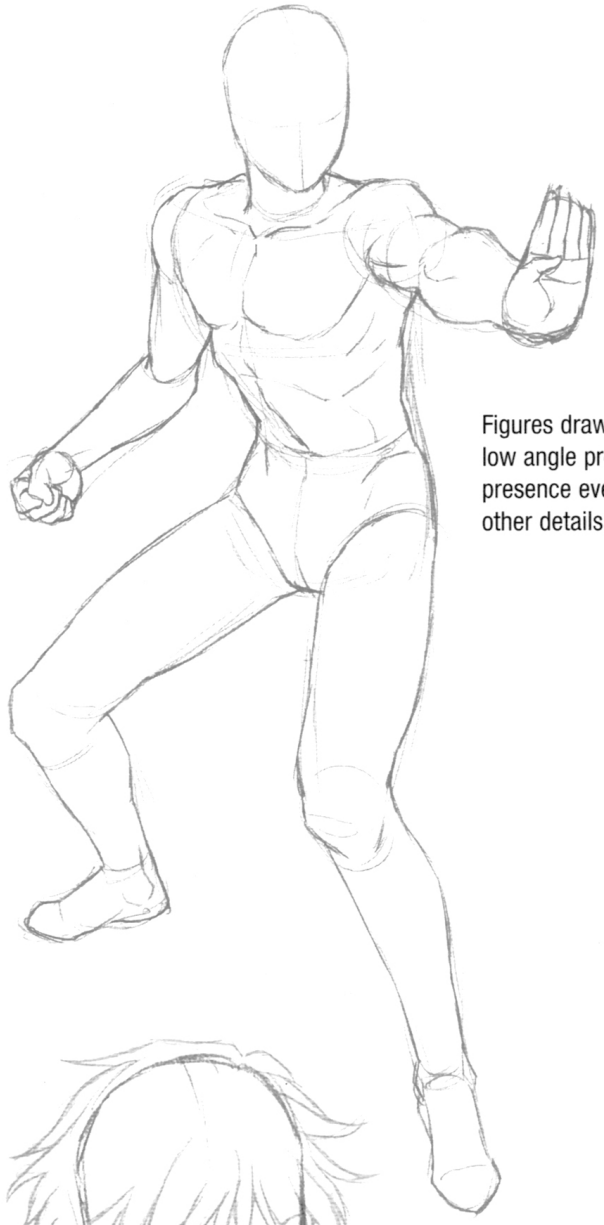


Composition Technique: Imagining a Box

To draw a figure as a solid object, try composing it in a box. Becoming able to represent a figure as three-dimensional will heighten your characters' sense of presence.

What Constitutes a Three-Dimensional Figure?

Showing the side or upper surfaces of a figure enhances the sense that the character represents a three-dimensional person.

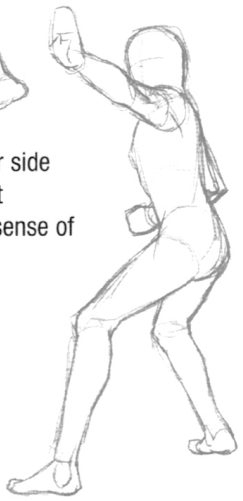


Figures drawn from a moderately low angle project a sense of presence even without a face or other details.

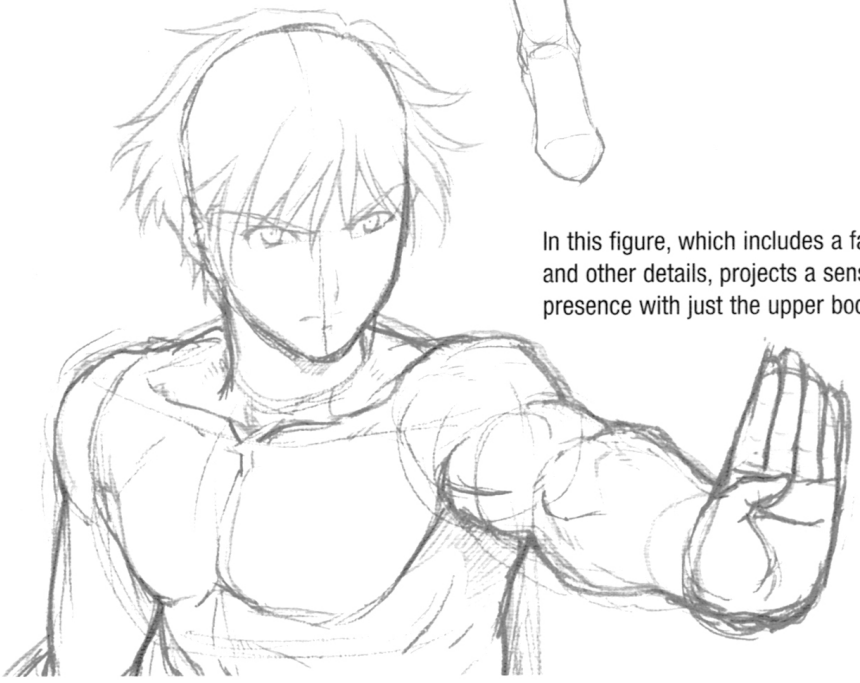


Composing a figure within a box facilitates imagining which surfaces should be visible.



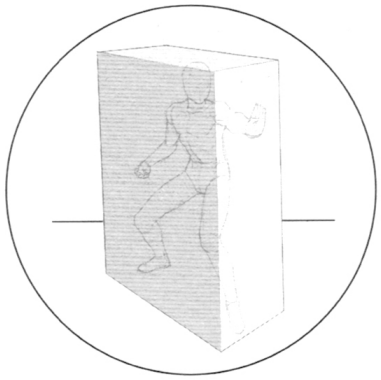


Merely showing the upper or side surfaces of a figure does not necessarily imbue it with a sense of three-dimensionality.



In this figure, which includes a face and other details, projects a sense of presence with just the upper body.

Three Elements in Rendering a Figure as a Three-Dimensional Object



1. The Composition
Use a composition that brings three surfaces into view (the front, a side, and the top).



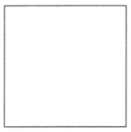
2. Shading
Include shadows, such as underneath the chin or the underarm that enhance the figure's sense of three-dimensionality.



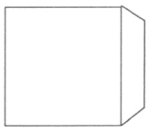
3. The Ground
Include shadows around the character's feet.

Placing a Figure in a Box

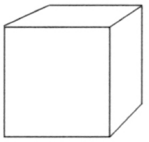
Gain an understanding of the three dimensions: height, width, and depth (thickness).



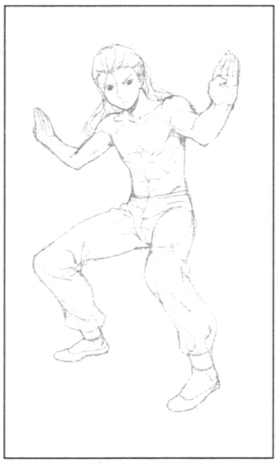
The object appears flat when looking directly at the front.



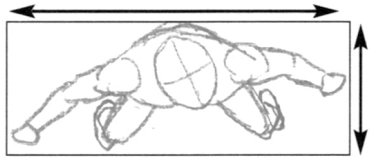
With the side visible, the object appears three-dimensional.



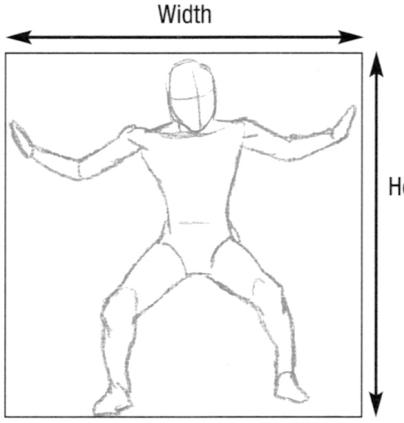
Having not only a side visible but the top as well enhances the object's three-dimensional presence.



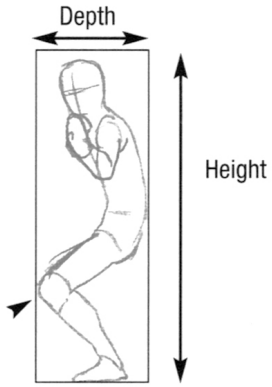




Direct Overhead View
Be certain you have properly identified the figure's depth when composing from this angle.

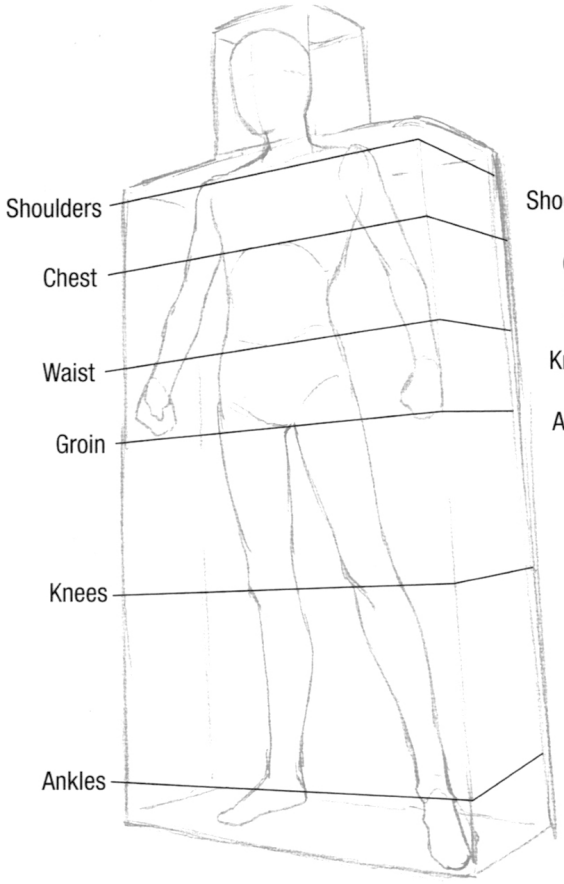


Direct Front View
Make an effort to capture the pose's width and height accurately.

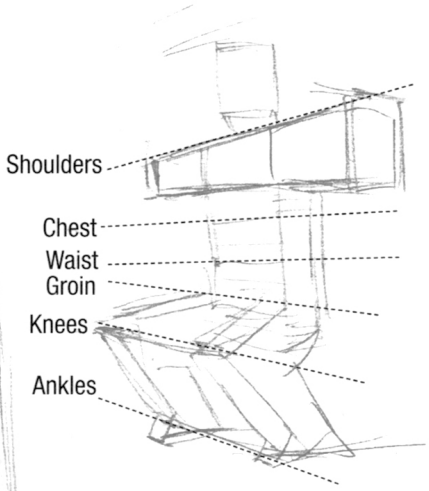


Direct Profile View
Drawing the figure in the box allows you to establish how much the legs (i.e. knees) jut forward in relation to the head and to what extent they bend.

Start with a Box Layout When Designing a Pose



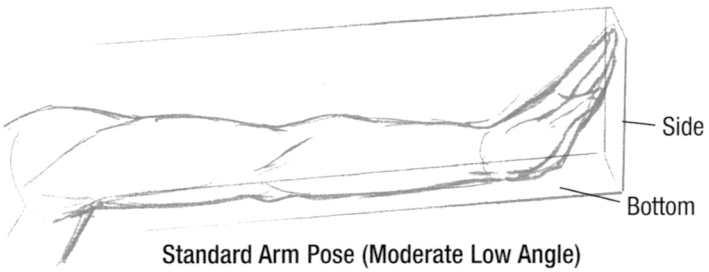
Draw guidelines to establish the positions of the shoulders, chest, waist, groin, and knees. These body parts constitute key points in portraying a given action or pose.



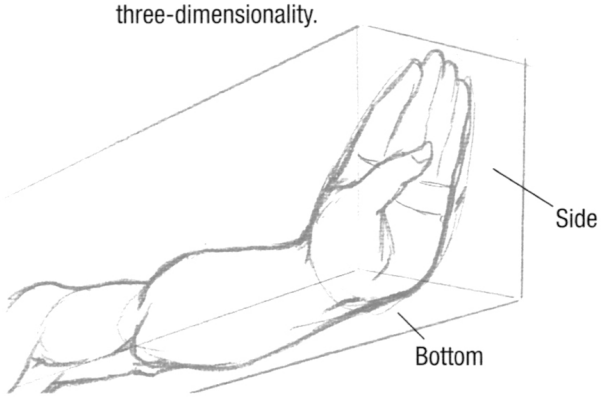
Block Layout
The above shows a figure with the joints of the shoulders, chest, waist, groin, knees, etc. established and the parts represented rendered as blocks. Using this layout technique facilitates drawing a dynamic, three-dimensional pose.



The above figure was drawn based on a block layout.



Standard Arm Pose (Moderate Low Angle)
Bringing just a modest amount of the bottom and side surfaces into view gives the arm a sense of three-dimensionality.



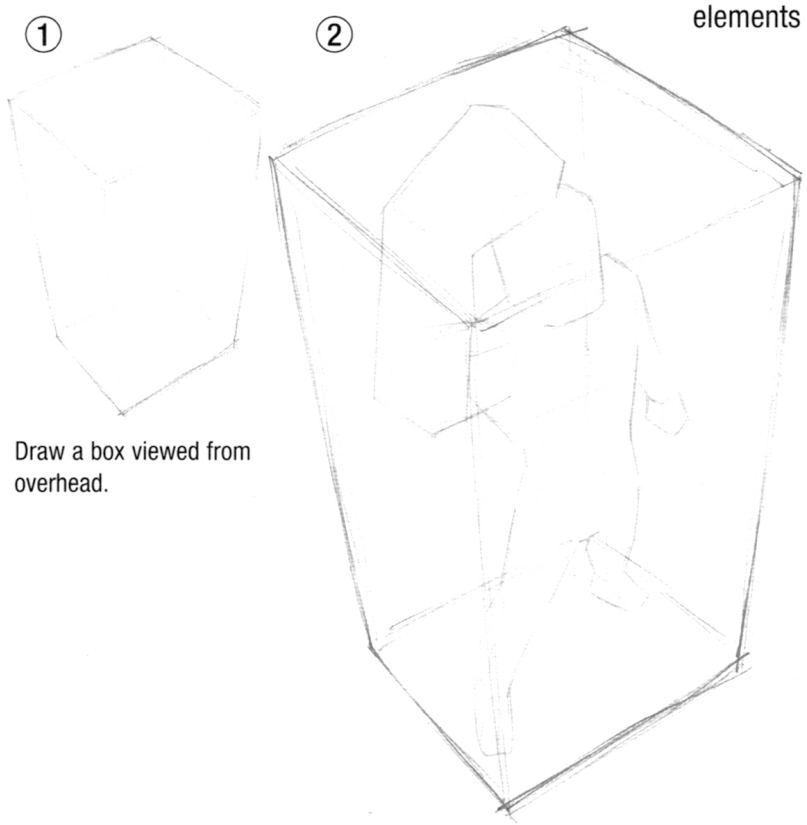
Dynamic Arm Pose
This composition shows the palm rotated toward the picture plane. Bringing more of the side and bottom surfaces into view enhances the illusion of three-dimensionality.



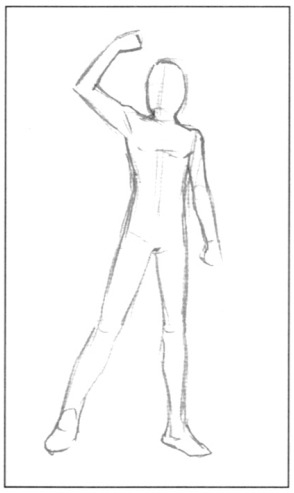
Using a block layout makes it easier to capture the pose pictured here or composed from a slightly higher angle.

The Steps in Drawing a Figure from a Box

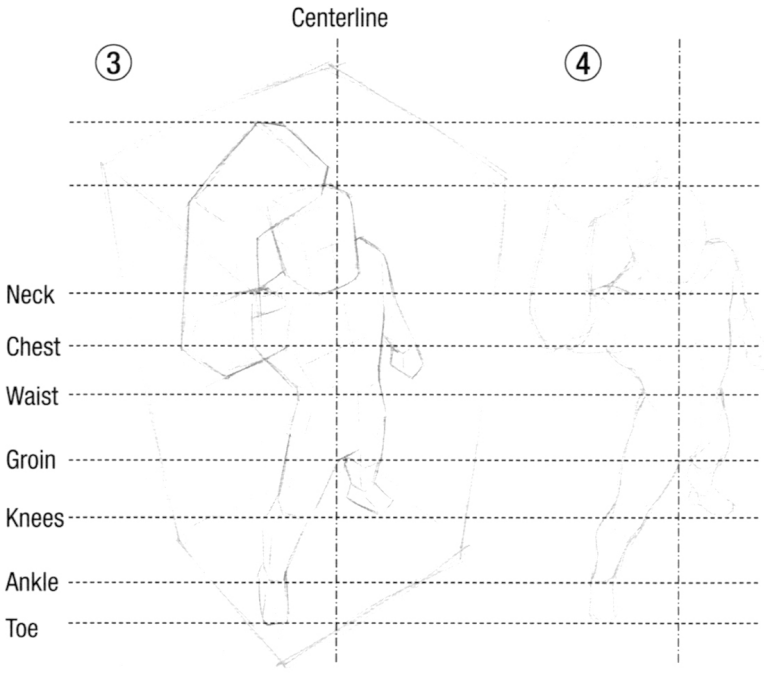
Try starting with a box when drawing a character's layout. This allows you to identify from an objective perspective how the visible surfaces, depth, and other elements will appear.



Draw a box viewed from overhead.



Draw the target pose from an easy angle of composition. This will facilitate drawing the final image.



Use the box layout to determine the figure's proportioning (i.e. establish the positions of the head, chest, waist, groin, knees, ankles, etc.). Adjust the overall layout.



The above image shows the layout with the exterior contours adjusted to clean up the form.

⑤

Add the details to complete the image.



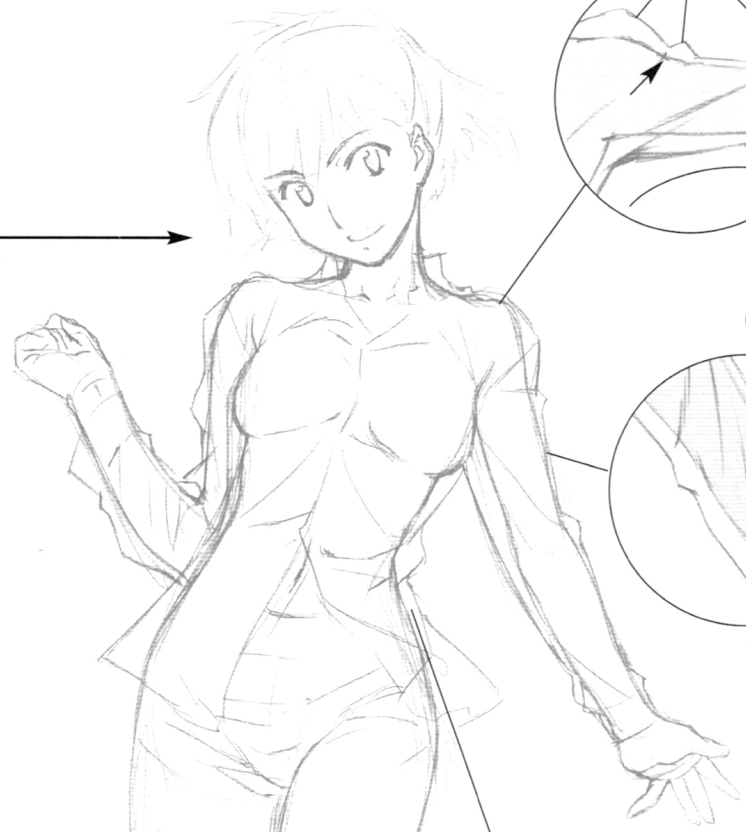
Mastering the art of drawing creases will make the composition convincing, regardless of the type of clothing worn. This section covers the basics of drawing clothes and in particular, the tricks to drawing creases skillfully.

The ABCs of Drawing Clothes

Basic Creases



An unworn shirt (that has been ironed flat) becomes three-dimensional when donned.



Creases formed from sagging fabric

Direction in which the fabric is pulled

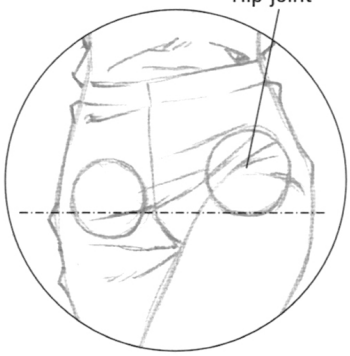
Gravity

This area lies touching the skin.

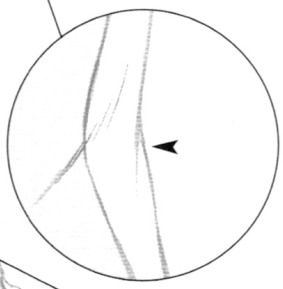
Direction in which the arm is moving

The fabric sags in the direction opposite that in which the arm moves, causing space to form between the fabric and the skin.

Hip joint



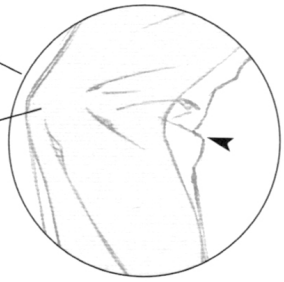
Creases form at the hips and are pulled in the direction to which the hip joint rises. Note the angle of the pelvis shown above.



Showing off the waist's curve makes the character appear more attractive, so go ahead and add a little tapering to the silhouette that would actually appear straighter in real life. Remember to add creases to the waist's curve.

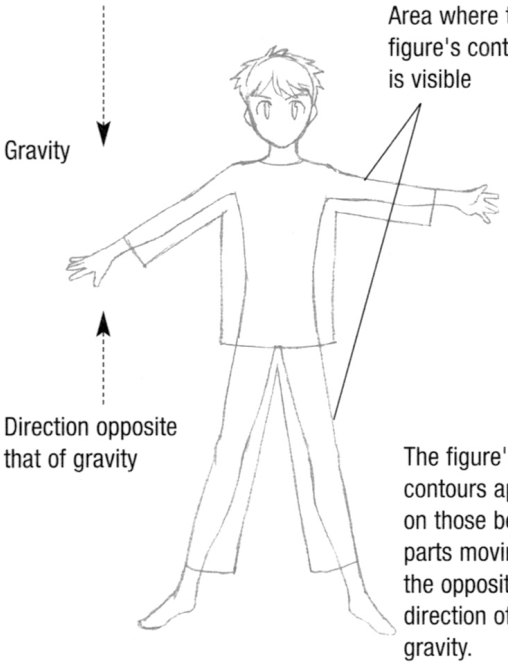
- More creases form on snug or fitted shirts and pants, which are made of less fabric.
- Large, sagging areas of fabric form on baggy clothing, but fewer creases and wrinkles appear.

Kneecap

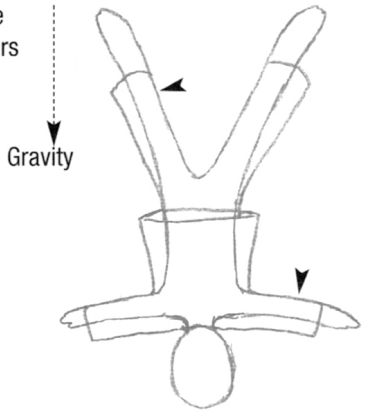


When the knee bends, creases form in a radiating pattern with the kneecap at the center. Creases also form in the bunched fabric behind the knee.

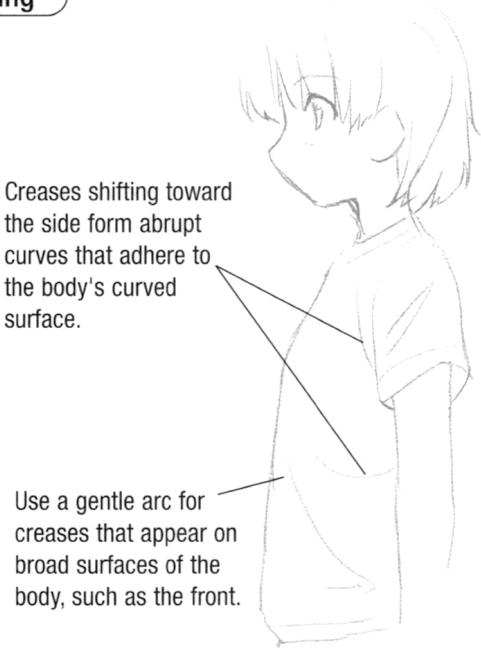
Controlling Where the Figure's Contours Become Visible through Clothing



The figure's contours appear on those body parts moving in the opposite direction of gravity.

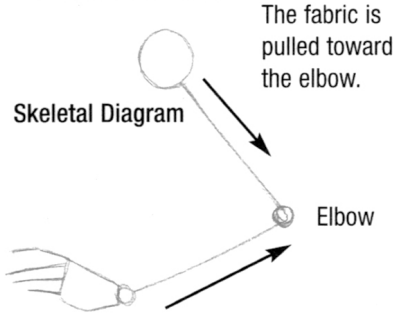


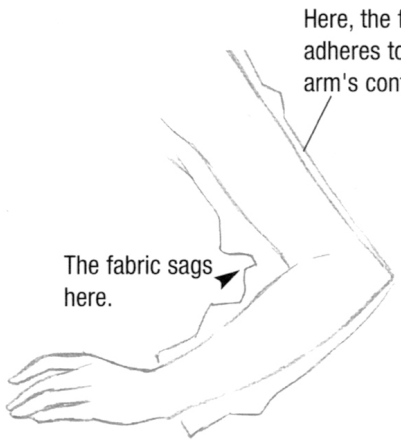
When the figure is turned upside-down, those body parts where the figure's contours become visible are opposite those when the figure is right side up.

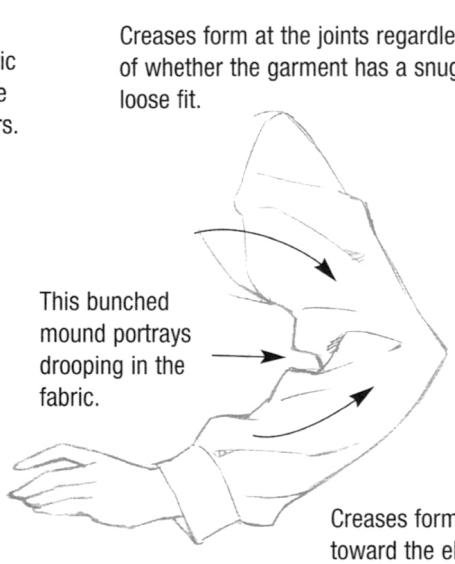


Creases form at regions in the fabric where the figure's contours are not visible.

Joint Creases







Creases form toward the elbow.



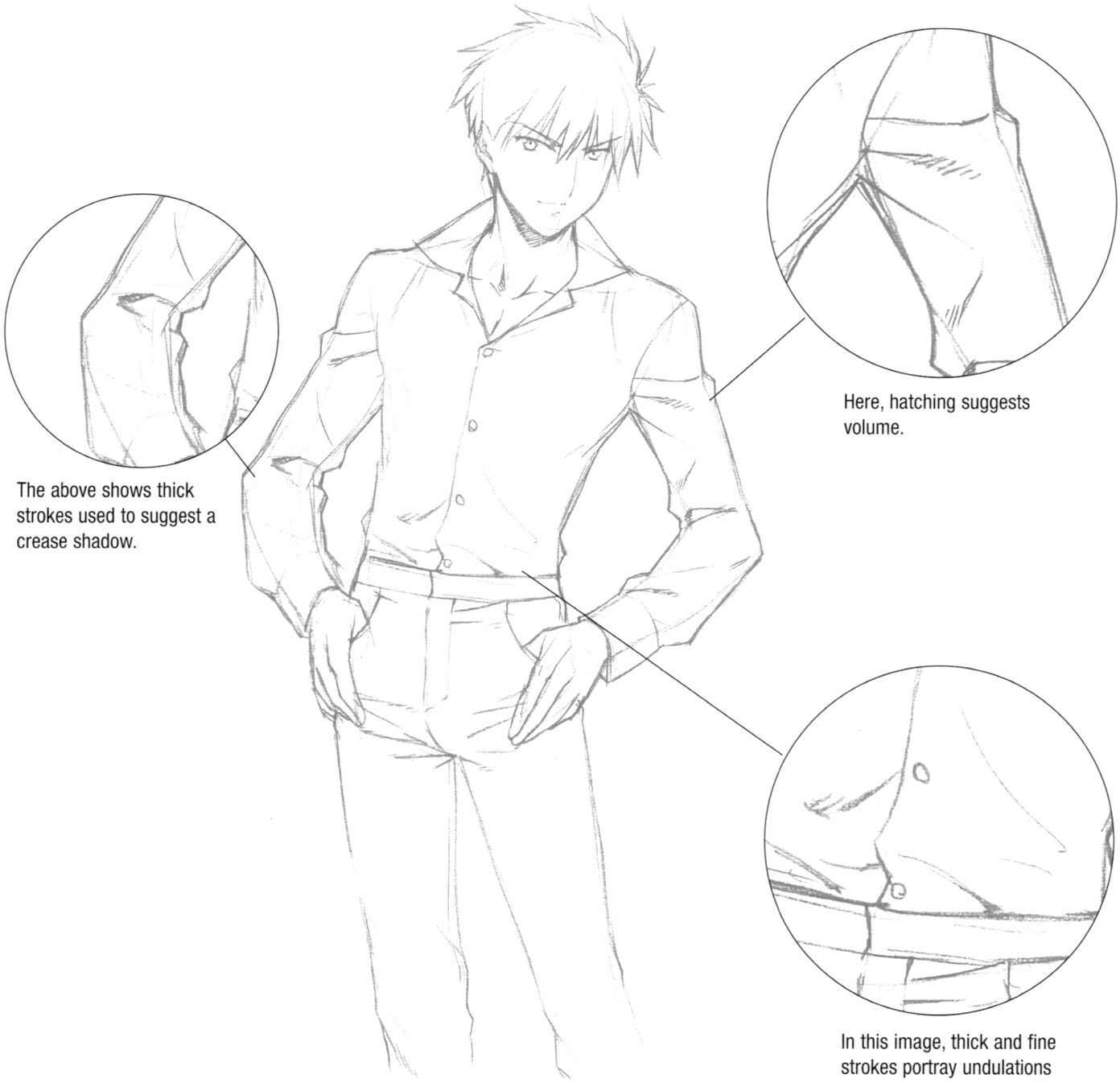


The rumpling of the fabric is more dramatic on the inside of the bend.



Using Fabric Creases to Portray Three-Dimensionality

The key to portraying creases lies in using contrasting line thickness and hatching to crate a sense of volume (i.e. depth).

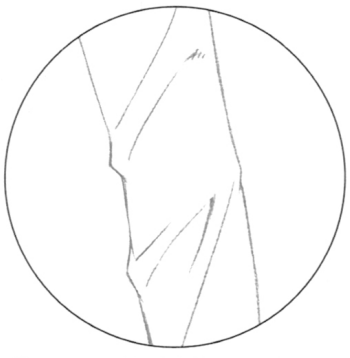


The above shows thick strokes used to suggest a crease shadow.

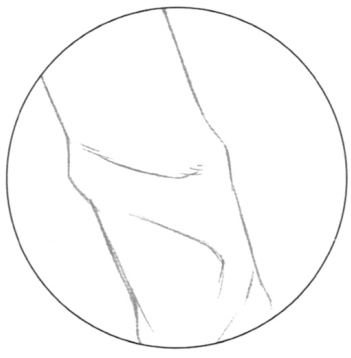
Here, hatching suggests volume.

In this image, thick and fine strokes portray undulations on the fabric's surface.

Differences in Crease Appearance According to Fabric Type



To portray thin fabric (e.g. dress shirts, etc.), make the spacing between creases narrow.

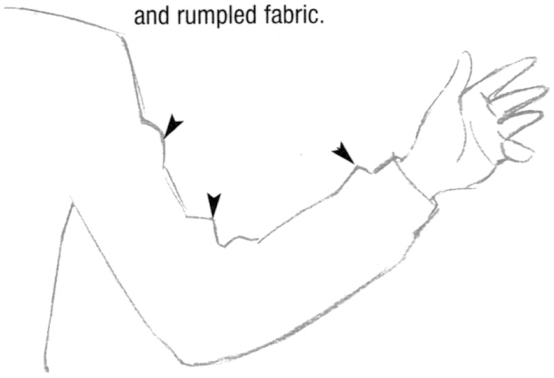


To portray heavy fabrics (e.g. jackets, etc.), keep the spacing between creases on the wide side.

How the creases are drawn suggests whether the fabric is heavy or thin.

Drawing Easy Creases

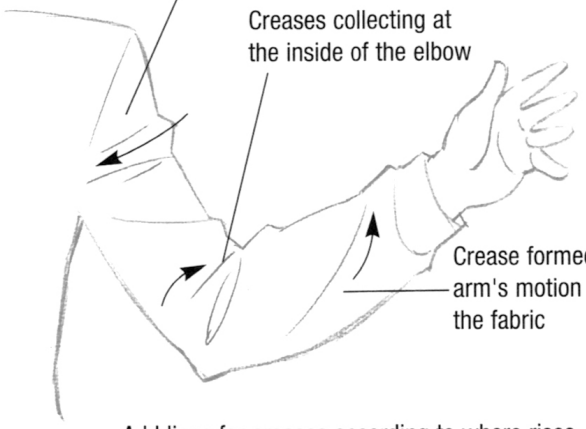
Estimate where creases should appear and add undulations in the fabric to the layout. This will help generate the feel of creases and rumpled fabric.



Creases collecting at the underarm

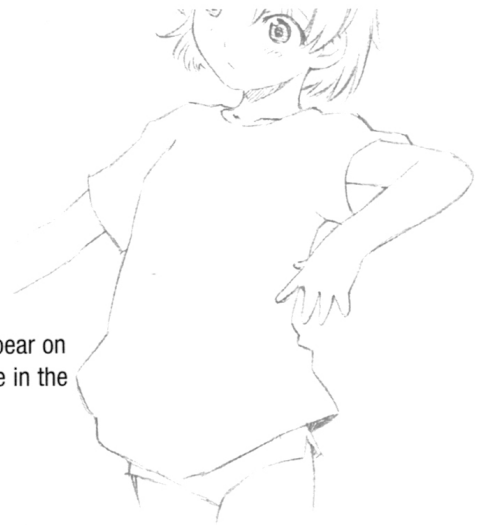
Creases collecting at the inside of the elbow

Crease formed by the arm's motion pulling the fabric



Add lines for creases according to where rises appear on the fabric's surface.

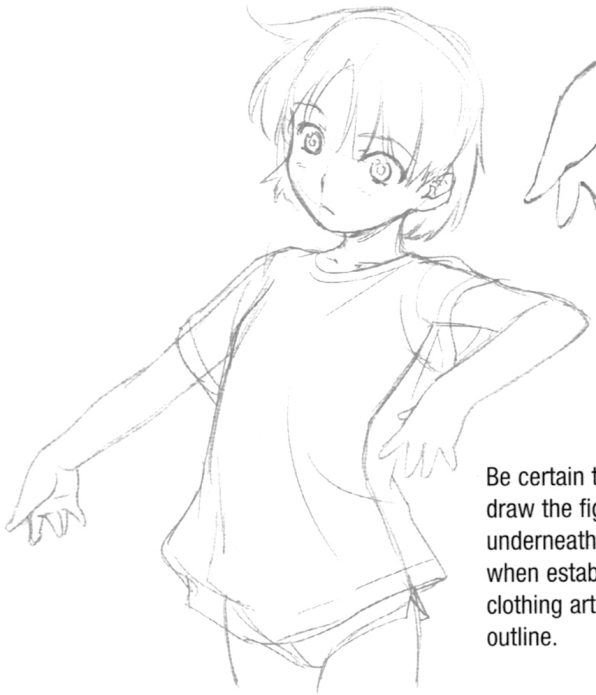
Add crease layouts when drawing outlines or exterior contours.



Creases only appear on the shirt's outline in the figure above.



This figure includes creases on the clothing and other clothing details.



Be certain to carefully draw the figure underneath the clothing when establishing the clothing article's outline.

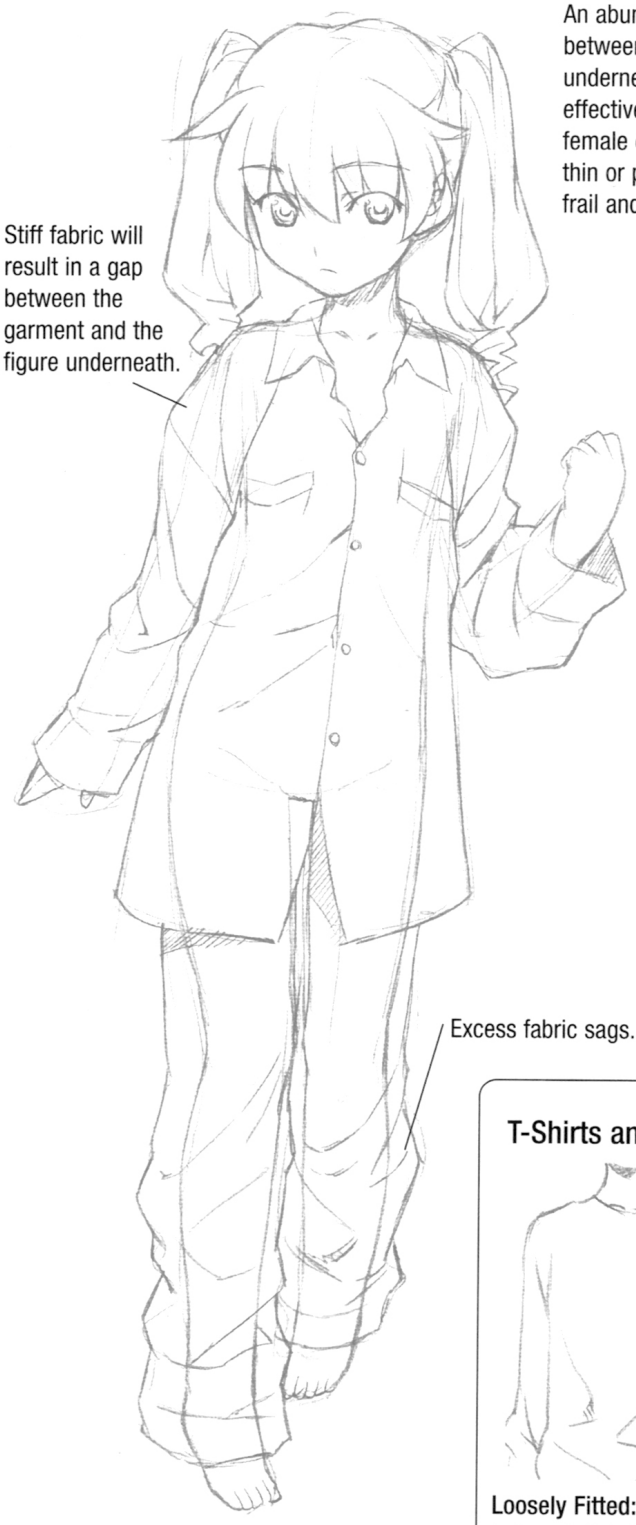
Using Clothing to Express a Character's Personality

Clothing essentially serves to conceal the body. However, garments can be roughly divided into two categories: those that reveal the body's contours and those that conceal the body's contours. Exploiting these two types of clothing allows you, the artist, to portray a given character's personality.

Figure-concealing, Baggy Clothing

An abundance of gaps may occur between clothing and the skin underneath. Such gaps are an effective means of presenting a female character as femininely thin or portraying a character as frail and weak.

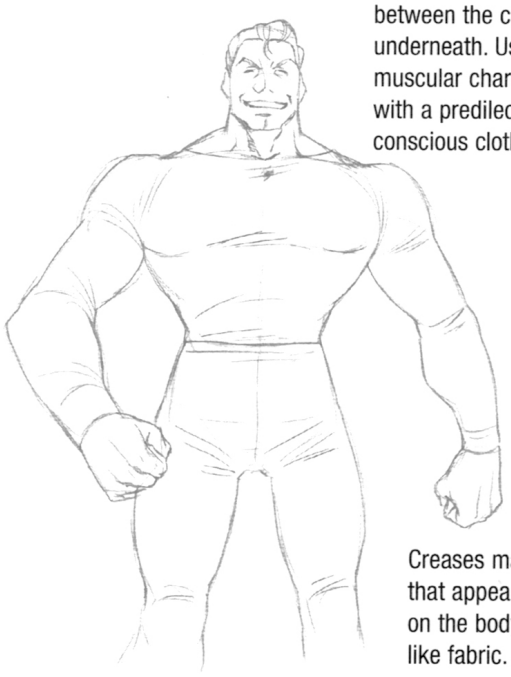
Stiff fabric will result in a gap between the garment and the figure underneath.



Excess fabric sags.

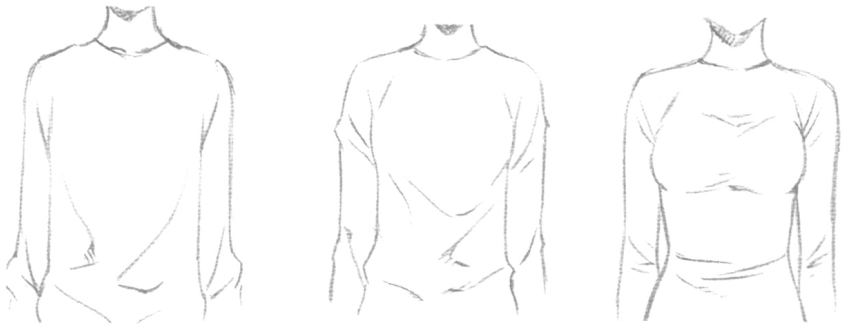
Figure-revealing, Active Clothing

In the style of clothing depicted to the left, little space remains between the clothing and the flesh underneath. Use this style with muscular characters or characters with a predilection for body-conscious clothing.



Creases make even clothing that appears painted directly on the body look convincingly like fabric.

T-Shirts and Figure Portrayal



Loosely Fitted: Concealing
In loosely fitted clothing, the fabric sags. Try using long, gently curved "V" shaped ripples and rolls, etc.

Standard Fit
More creases form on clothing with a standard fit than loose clothing, owing to the hills and valleys of the figure underneath. Draw the clothing visualizing an increased concentration of creases.

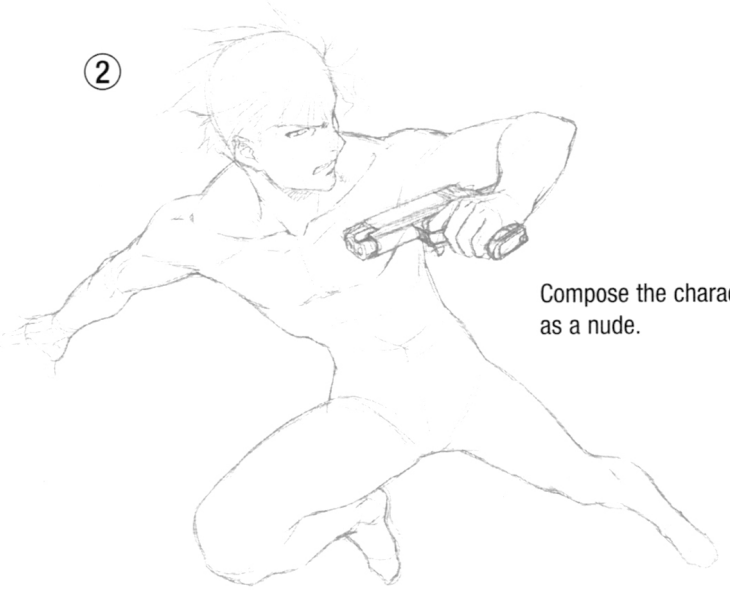
Tight-fitting: Figure Conscious
Creases form according to mounds and depressions on the figure underneath. Use relatively straight lines and accentuate the body's contours.

The Reality behind Dressing Characters

This section presents the steps in dressing a character, starting from the layout stage. Clothing moves along with the character. The next few pages show how to use clothing to highlight the character's motions.

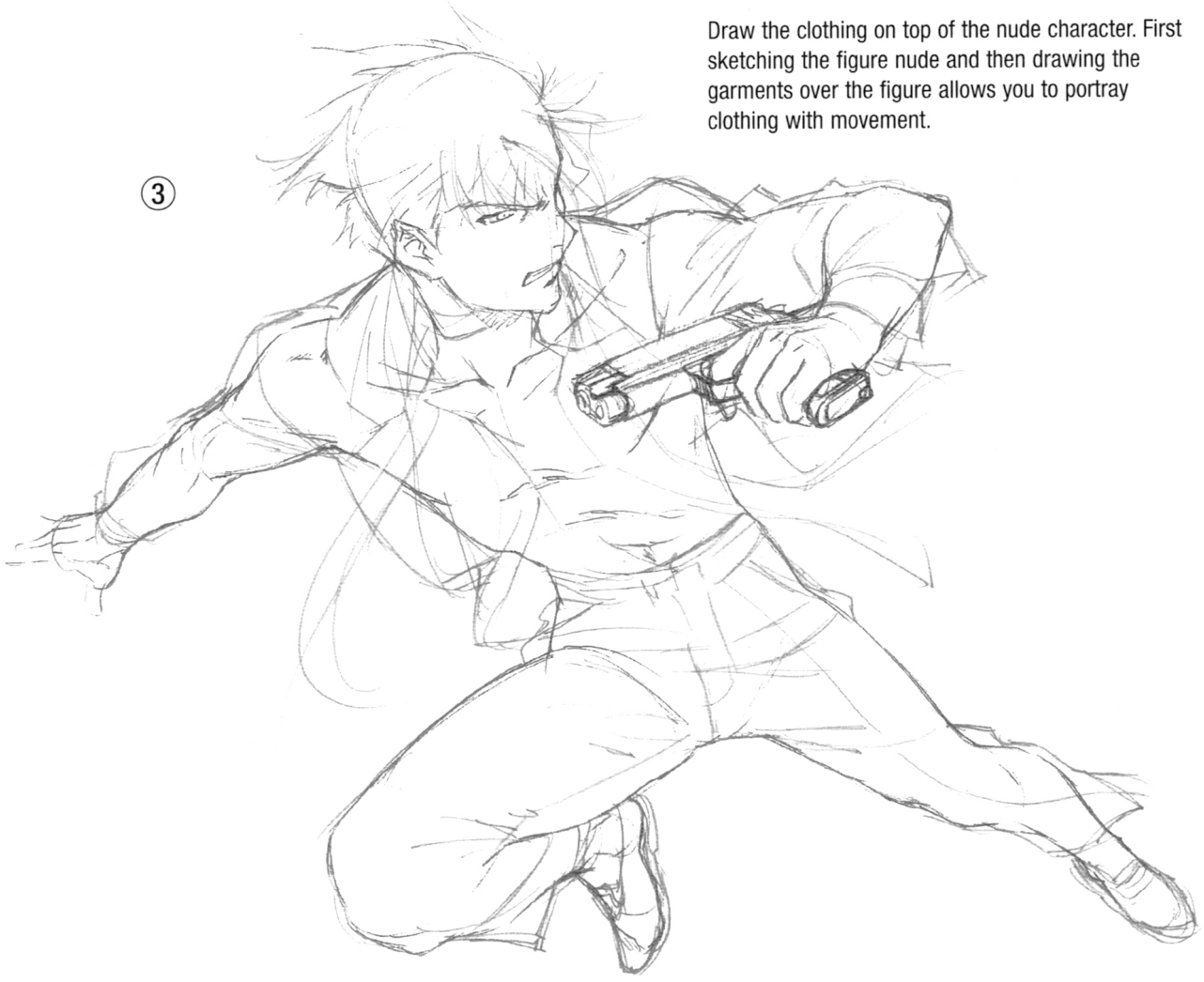


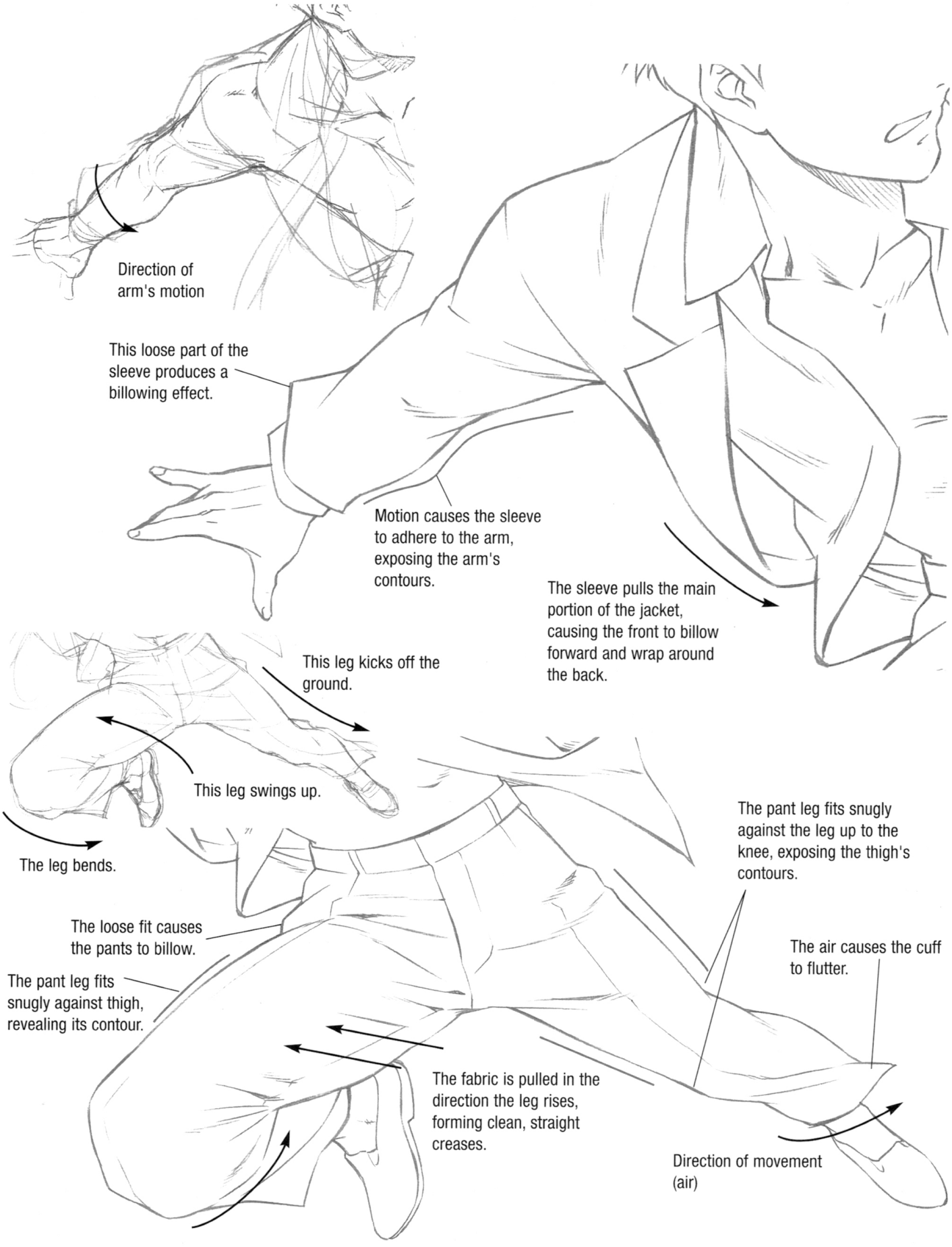
Draw the pose layout.

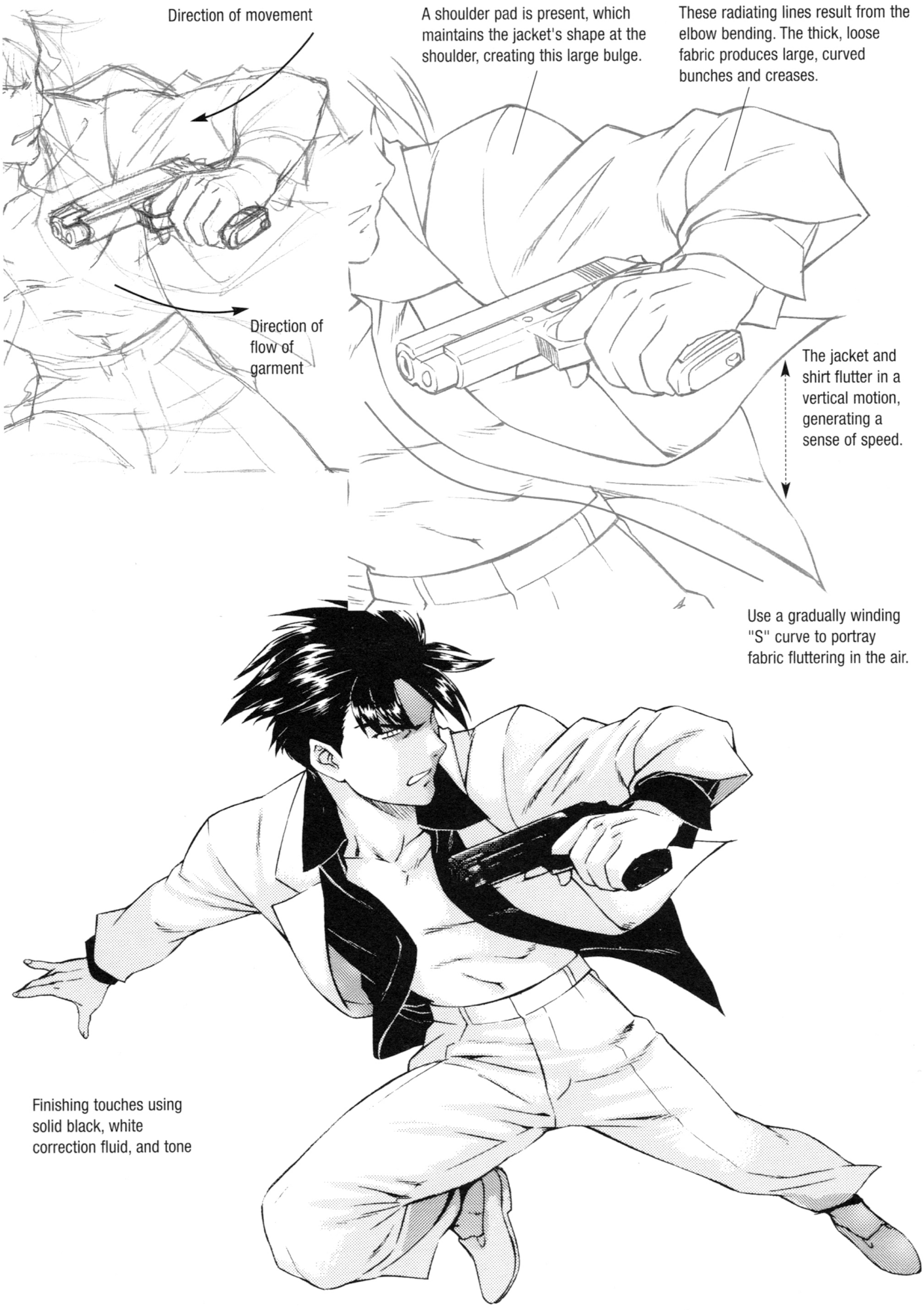


Compose the character as a nude.

Draw the clothing on top of the nude character. First sketching the figure nude and then drawing the garments over the figure allows you to portray clothing with movement.




Direction of arm's motion
This loose part of the sleeve produces a billowing effect.
Motion causes the sleeve to adhere to the arm, exposing the arm's contours.
The sleeve pulls the main portion of the jacket, causing the front to billow forward and wrap around the back.
This leg kicks off the ground.
This leg swings up.
The leg bends.
The pant leg fits snugly against the leg up to the knee, exposing the thigh's contours.
The loose fit causes the pants to billow.
The pant leg fits snugly against thigh, revealing its contour.
The air causes the cuff to flutter.
The fabric is pulled in the direction the leg rises, forming clean, straight creases.
Direction of movement (air)
Creases appear in a radiating pattern with the bent portion of the knee at the center.


Direction of movement
Direction of flow of garment
A shoulder pad is present, which maintains the jacket's shape at the shoulder, creating this large bulge.
These radiating lines result from the elbow bending. The thick, loose fabric produces large, curved bunches and creases.
The jacket and shirt flutter in a vertical motion, generating a sense of speed.
Use a gradually winding "S" curve to portray fabric fluttering in the air.
Finishing touches using solid black, white correction fluid, and tone

Drawing Dynamic Poses

Using a Low Angle to Create a Composition with Impact

The following constitute effective techniques for creating dynamic poses:

1. Use compositions that will make the subject appear three-dimensional
2. Show the subject balanced on one leg
3. Show movement involving dramatic torsion

Give these points primary consideration when designing the composition and make an effort to add movement to the hair and clothing.

Under Drawing



Layout

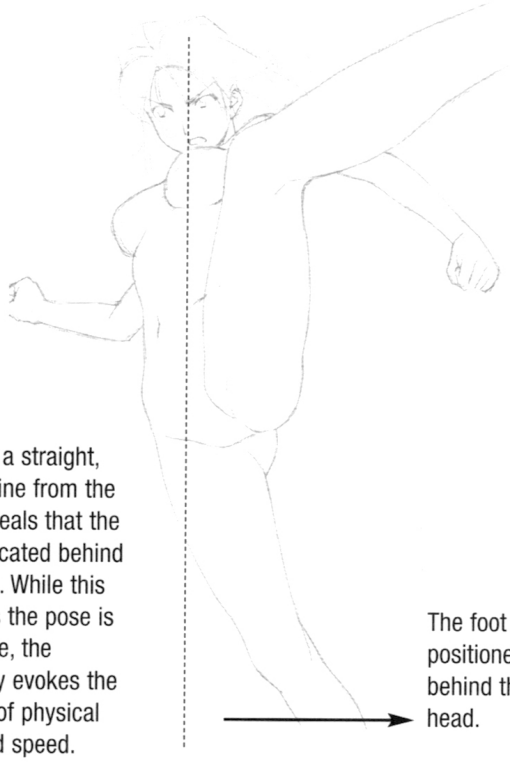
The head faces the viewer.

The axial line forms an almost perfectly straight line, indicating no torsion is occurring.

Draw the torso's layout first and then sketch the leg.

Torsion in the head and torso alone creates the illusion of "turning."

Nude Line Drawing



Drawing a straight, vertical line from the head reveals that the foot is located behind the head. While this indicates the pose is not stable, the instability evokes the feelings of physical force and speed.

The foot is positioned behind the head.

Final Image



Line Drawing with Clothing

The short leggings are the epitome of tight clothing.

The loosely fitted top softly billows at its bottom.

The addition of solid black at the hairline and around the garment's hem before applying tone generated a three-dimensional feel.

Under Drawing

Nude Under Drawing

Direction of arm motion

Direction of body motion

This arrow denotes the direction of the hair's motion, which is opposite that of the body, imbuing the figure with a sense of dynamism.

Direction of leg motion

Try to draw figures in action rather than figures holding still poses. This will imbue even "still" compositions with a sense of movement.

When drawing specialty moves or poses, create rough sketches of the same pose from a number of different angles to study how torsion occurs at the waist as well as the positioning of the hands, feet, and head, etc. These sketches will help as guides in adding creases when later dressing the character in clothing.

Nude Line Drawing

Centerline

The center of gravity is located at the toe.

Final Image



Line Drawing with Clothing

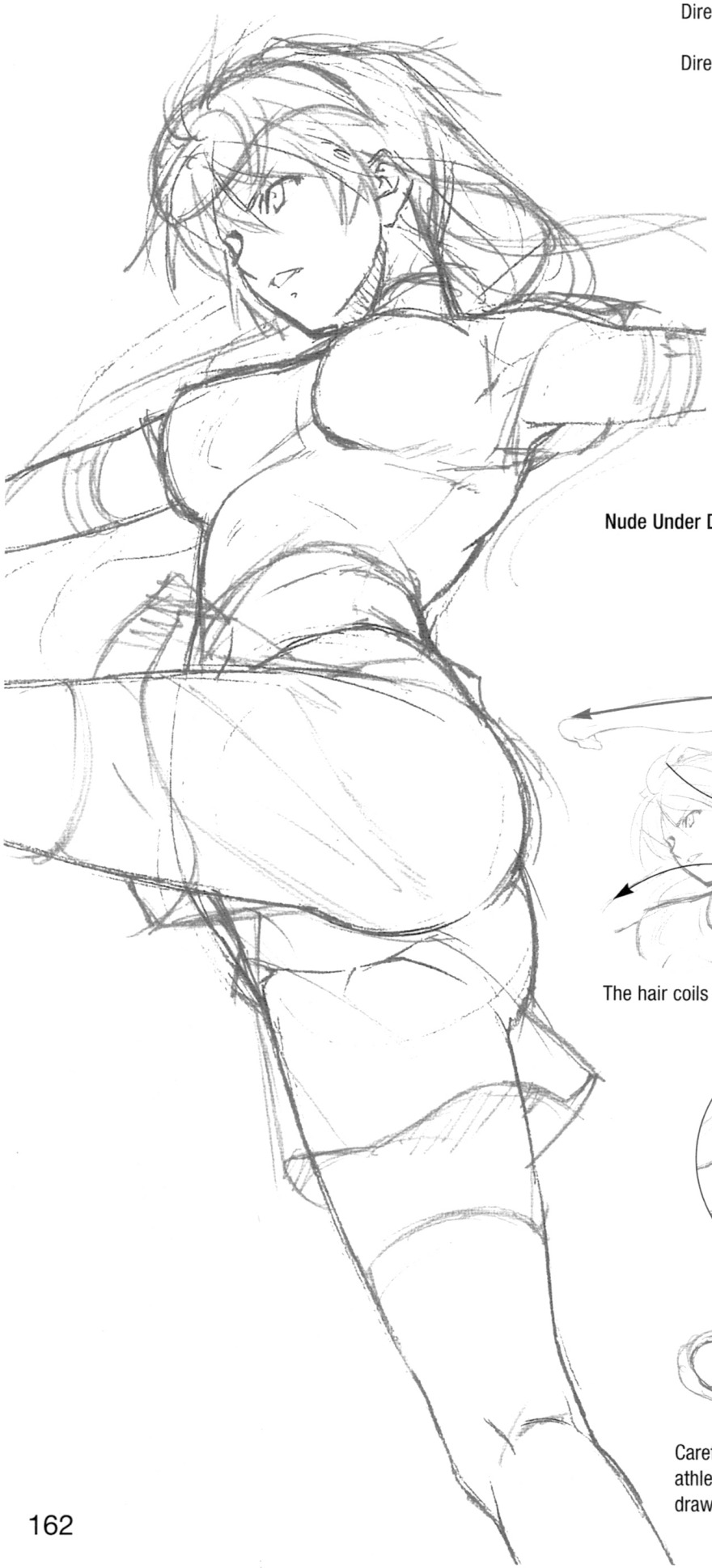
This mandarin dress is a popular snugly tailored dress.

The side slits enhance the legs' ease of movement.

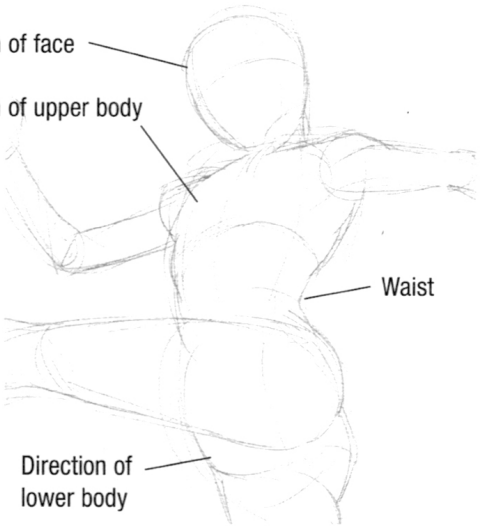
Use a wavelike, undulating line for the loose skirt.

Use solid black and white correction fluid to highlight the skirt's contours and the creases.

Under Drawing

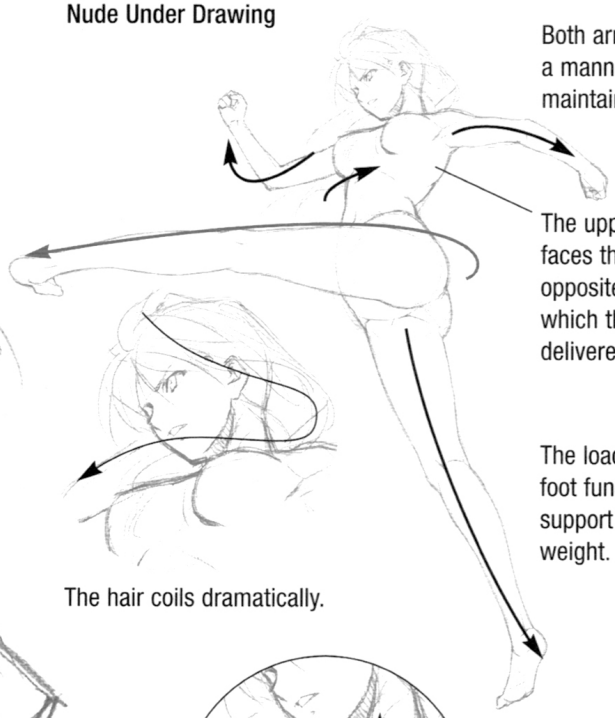


Layout



Shift the directions faced by the head, the upper body, and the lower body to portray dramatic twisting.

Nude Under Drawing

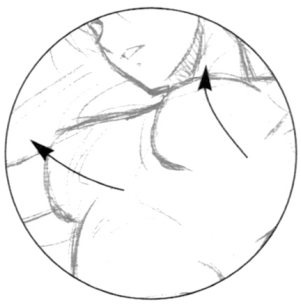


Both arms move in a manner to maintain balance.

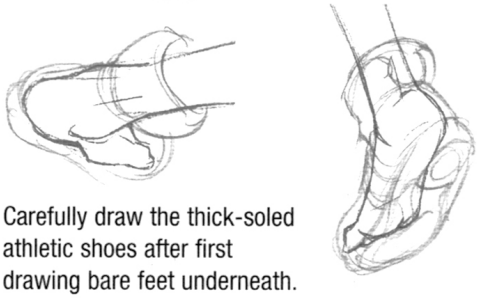
The upper body faces the direction opposite that in which the kick is delivered.

The load-bearing foot functions to support the figure's weight.

The hair coils dramatically.



Adjusting the chest's form evokes the sense of intense movement in the upper body.



Carefully draw the thick-soled athletic shoes after first drawing bare feet underneath.



Use solid black to portray shadows on the inside of the sleeves and the short's hem.

Final Image

Line Drawing with Clothing

Creases form inside the elbow of the snugly fitted opera-length gloves.

Slight creases form on the fitted top in conjunction with the torso.

The shorts are baggy at the hemline.

The hem flares in the direction of the kick. Using undulating forms for the hemline projects the sense of a supple fabric.

The stockings fit snugly against the leg. Showing an indentation where the top of the stocking squeezes the leg establishes a clear boundary between the bare leg and the stocking.

Bare skin

Stockings

The top of the stocking squeezes the leg, causing this indentation.

The shoes reflect the character's personality and function to make the character more convincing to the reader, so they must be rendered carefully.

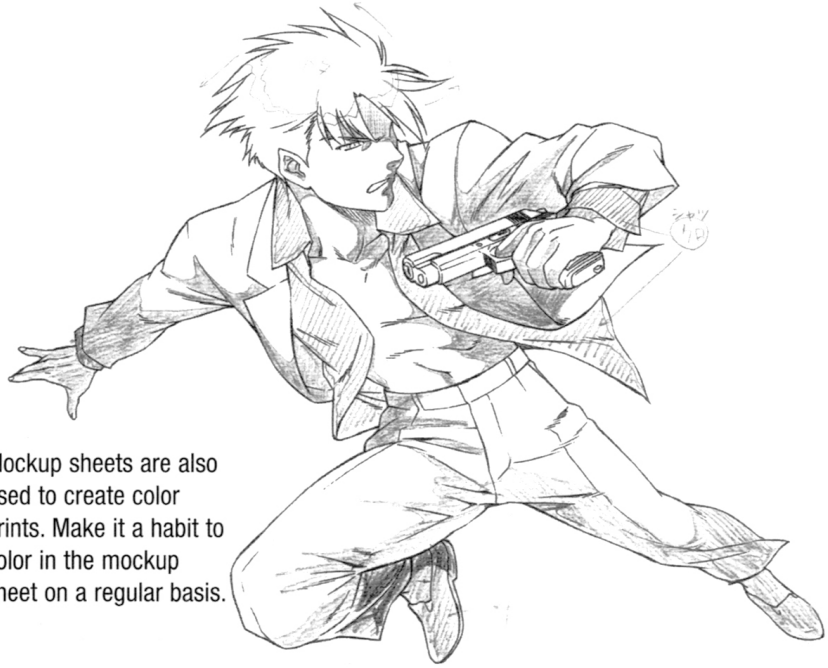
Mockup Sheet

Manga and *anime* artists prepare a mockup sheet after planning shadow placement, light and dark contrast balance, etc. Artists apply their knowledge of *manga* sketching, which is rooted in awareness of the human body to drafting the mockup sheet.

To create a mockup sheet, photocopy the original artwork and then use mechanical or standard pencil to designate how to apply finishing touches to the original artwork. Using multiple colored pencils to color in the artwork would clarify even further how to apply the finishing touches.







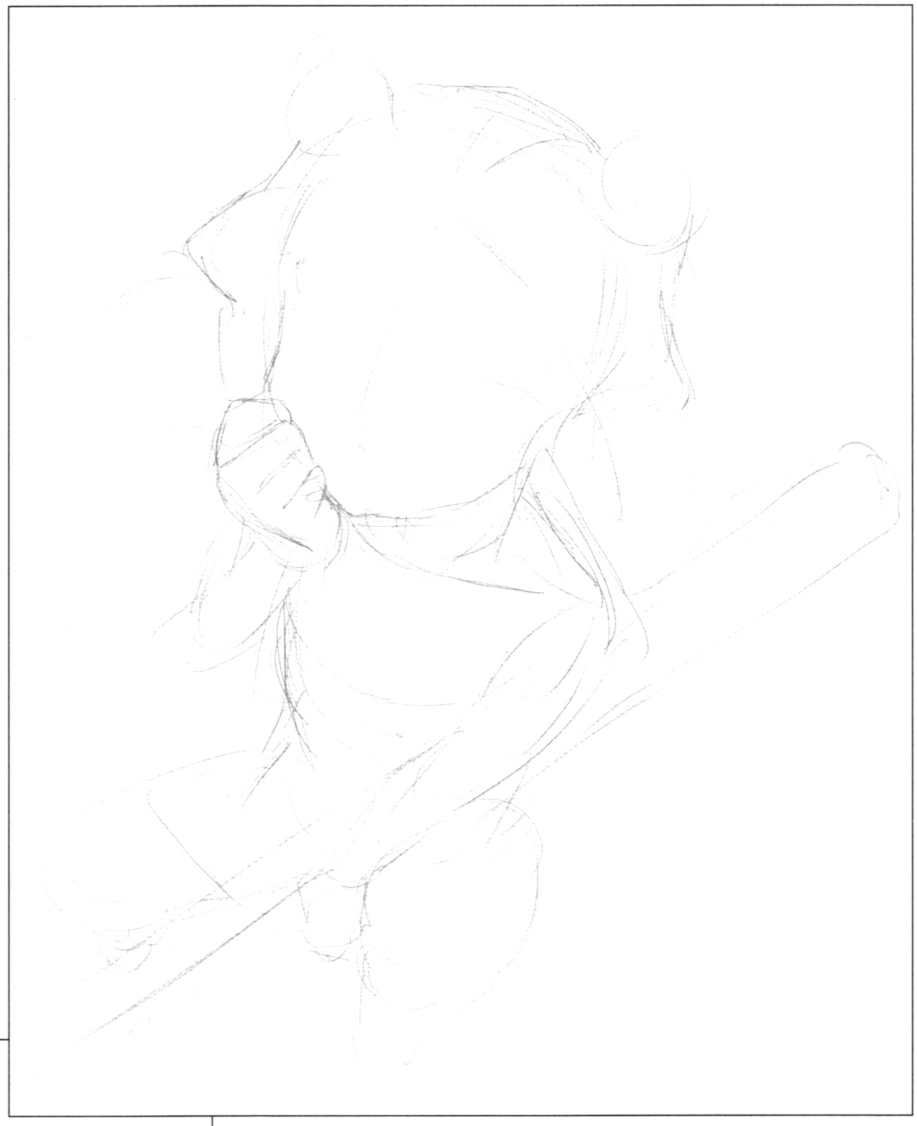
Mockup sheets are also used to create color prints. Make it a habit to color in the mockup sheet on a regular basis.

Cover Character Designing Frontline

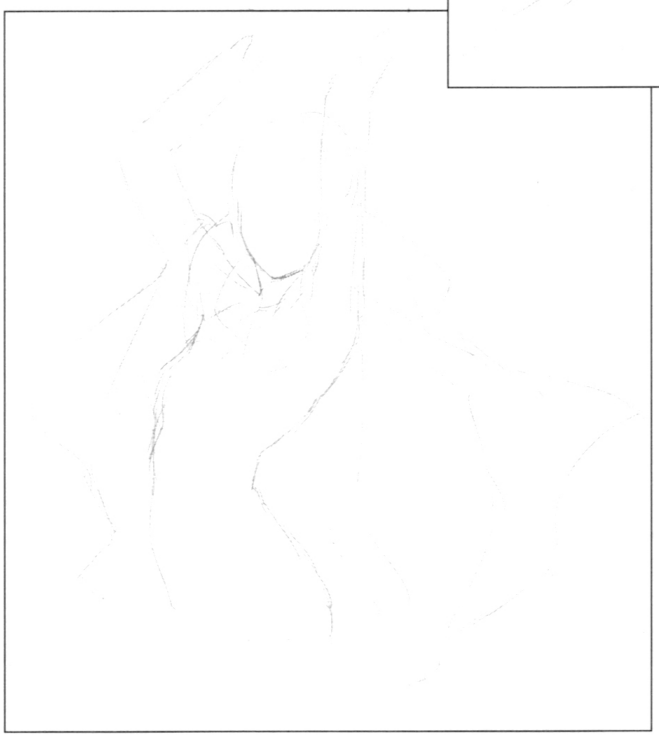
This next section covers the process involved in producing a character design using this book's cover illustration as a sample. Kazuaki Morita is responsible for the artwork.



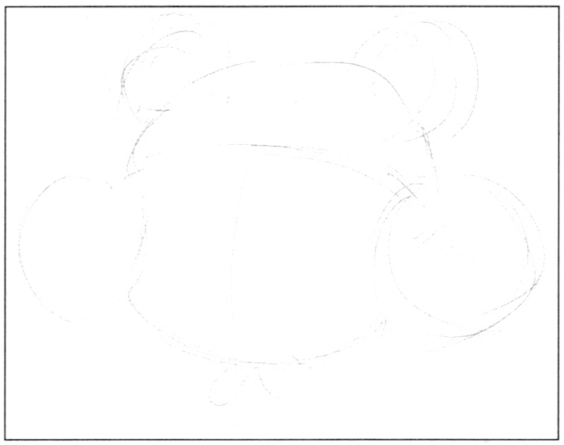
The above is a conceptual drawing, showing this book's theme of "sketching to plan" in a simple, visual image, namely as a "frog in a can" (playing upon the idea of a book being a condensed receptacle of artwork and ideas).



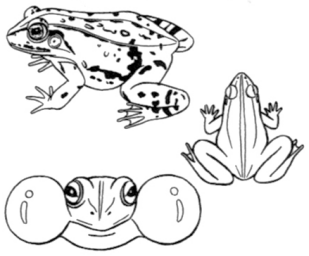
The layout above was composed from a moderately high angle, causing the character's face to stand out. Here, the frog holds a pencil.



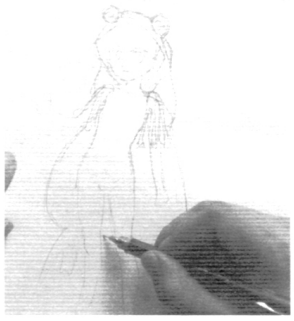
This sketch showing the character dressed in a hooded rain poncho evolved after associating a frog with a Japanese *amagappa* (rain cape) and then with a rain parka. While this composition of the character stretching her arms was a temporary candidate for the cover, the character tended to become overshadowed once combined with the can. Consequently, this composition was never developed further than this stage.



Black-spotted pond frog



The image to the left shows a rough sketch of the original concept, which was a frog costume. People would comment that showing only the frog's bulbous eyes was unexciting and that some frogs inflate their cheeks when croaking, so Morita opted to add attachments to the cheeks.



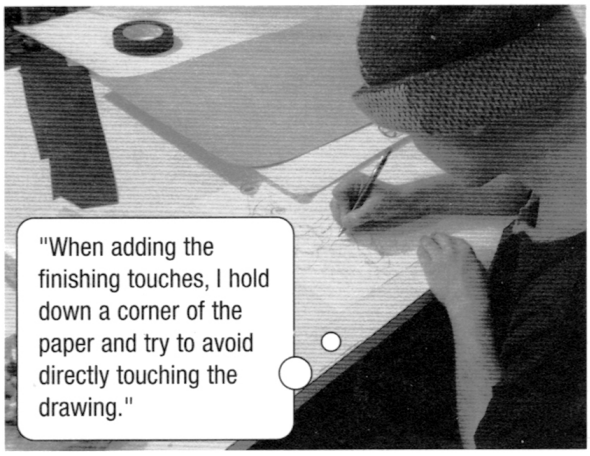
The above shows Morita sketching adhering to the standard guidelines of layout drawing.

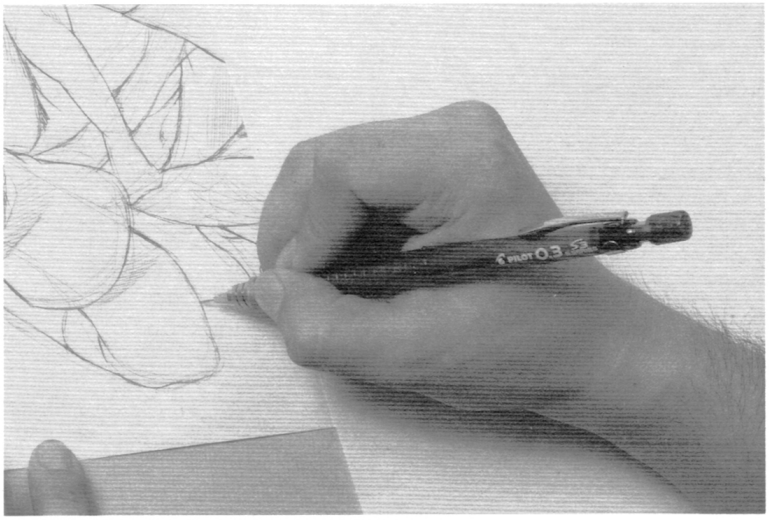




Morita settled on a moderately high angle composition and dressed the character in a hooded cape with "frog cheeks," inspired by the playful, froggy theme. Once Morita established the front and side designs to a certain extent, all he had left to do was match the designs to the composition.

Adding Finishing Touches to the Composition





When adjusting (cleaning up) contours with a standard or mechanical pencil, the number of strokes used on the composition increases, so use a sheet of paper to mask the drawing and protect it from smudging.



Final Composition

Coloring Characters

Coloration is an extension of character representation and allows the artist to enhance the character's sense of presence without much effort. When coloring, start with the largest areas where the color has been predetermined, which in this case would be the girl's flesh and the frog.

Steps to Easy Coloration



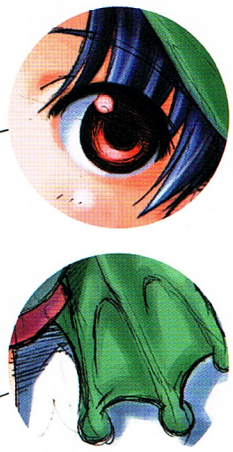
Start by coloring in the flesh. It is easy to leave gaps for the hair uncolored, so do not be concerned about the hair: just continue coloring the skin.



Color the hood (e.g. the exterior and broad surfaces).



Color the clothing, hair, etc. (e.g. the interior and other details).



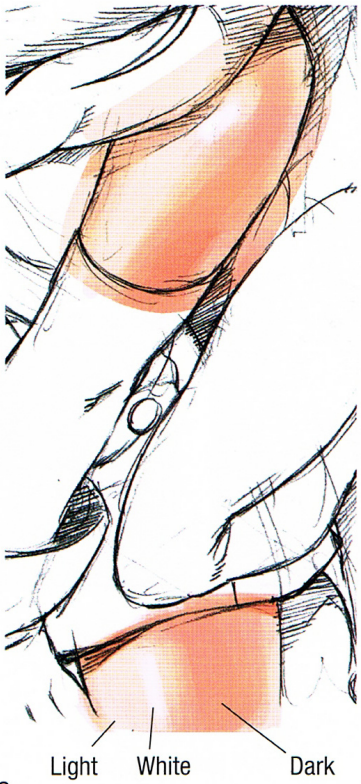
Finally, color in the irises and pupils and shadow falling across the floor (i.e. the ground) to finish.

Coloring the Skin and the Face



Add shadows to the lower right portions of the figure, which is the direction opposite the light source. The shadow to the nose's side is theoretically located to the right. However, a shadow was added as an accent point falling on an area opposite the light source (although in reality, there would be no shadow).

The contrast of light and shadow constitutes the foundation of creating a sense of volume. Determine the direction of the light source and pay careful attention to darken areas where shadow should form.



The arm and leg are essentially cylinders. Use average, light, and dark shades in that order from the side where light touches the limb to project a sense of volume.



Darken the upper eyelid to color the iris and pupil.

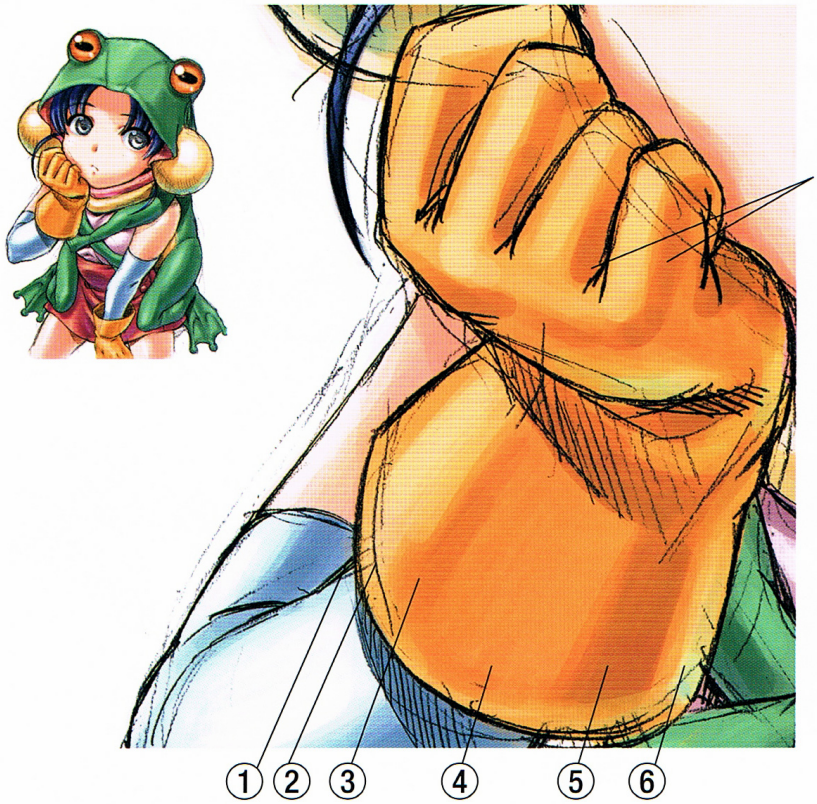
These denote highlights or light reflections on the iris and cheek. Add white correction fluid last.



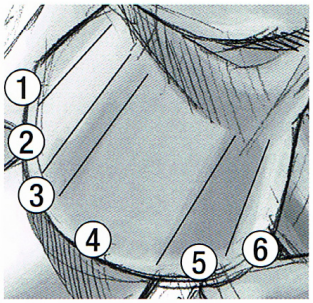
Use arced strokes to add light and dark to the hair.

Whiten (i.e. lighten) the locks' centers to generate a three-dimensional feel.

Rendering the Gloves



Light and Dark Contrast Used to Generate Volume



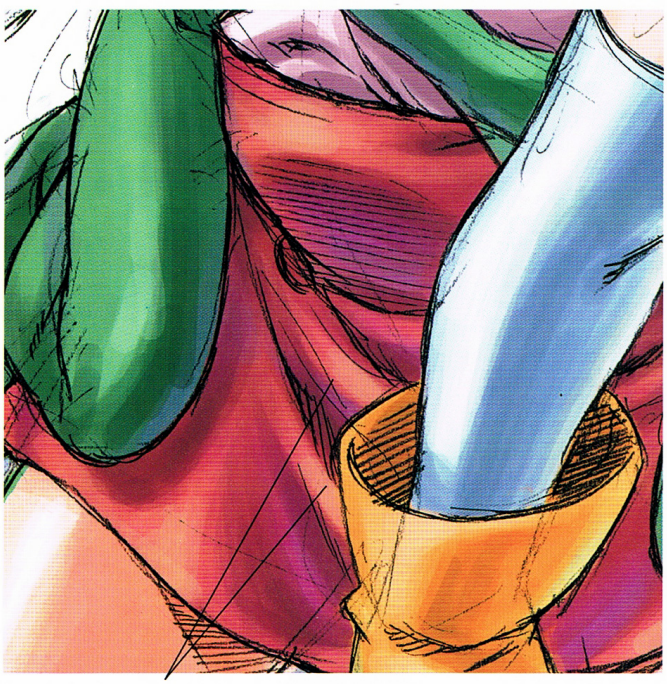
Using a prism shape for the cuff suggests a stiffness reminiscent of real gloves.

Three Shades Giving the Gloves a Sense of Three-Dimensionality



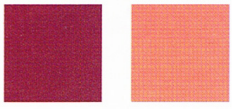
Light (2) (6) Medium (1) (4) Dark (3) (5)

Portrayal of Ripples in the Skirt



Use a lighter shade for the tops of the ripples.

Correct



Skirt shade

Top of the ripple (light area)

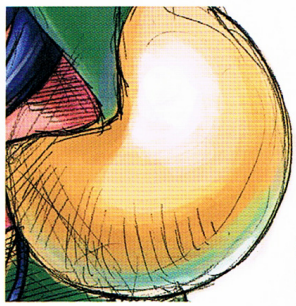
Incorrect



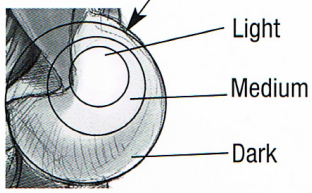
Lightened version of the skirt's actual shade

When using two shades to create a contrast, avoid simply lightening the original shade. Instead, select a different hue and lighten it. This will heighten the sense of contrast.

Portraying Spheres



Shift circles of graduated sizes and shades to one side of the sphere.

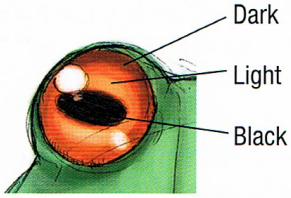


Start with the lightest area and then move to the darkest. Use circles of graduated sizes and shades, shifting them to one side of the sphere. The trick to creating the illusion of a sphere is to avoid drawing concentric circles, which would all share the same center.



The hood's cords (which are in the form of frog legs) press down on the chest. The breasts swell in an elliptical form. Therefore, likewise, an ellipse should be used for the lightest region on the breast.

Portraying Luster on Spheres



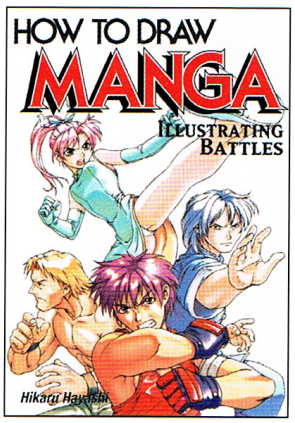
Draw circles of reflected light over a diagonal drawn across the eye, using a light shade next to the black pupil, while darkening the outside of the iris. This creates the illusion of a spherical eye.



Final Image

Coloration Improvement Techniques

In this section, Kazuaki Morita attempts to improve Takehiko Matsumoto's cover illustration on *How to Draw Manga: Illustrating Battles*, published by Graphic-sha, and the reader learns the secrets in how to produce a great-looking composition with impact.

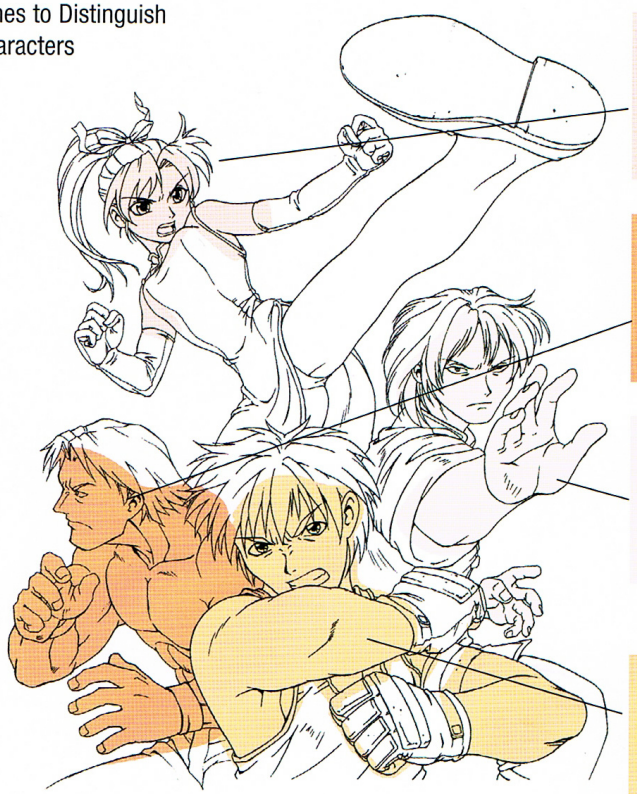


Takehiko Matsumoto created the cover illustration seen above. The coloring was outsourced, and the result was a watercolor effect, making heavy use of a "*bokashi*" or "blurring" technique. The final product disappointed Matsumoto, who had been expecting something more on the lines of a colored *anime* cell. Morimoto, who was aware of outcome, decided to resuscitate this composition as part of this book's project and attempt to improve the cover illustration's coloration.

Coloration Process

Morimoto began with a coloring-book, color-fill approach.

Individualizing the Characters-1: Using Flesh Tones to Distinguish Characters



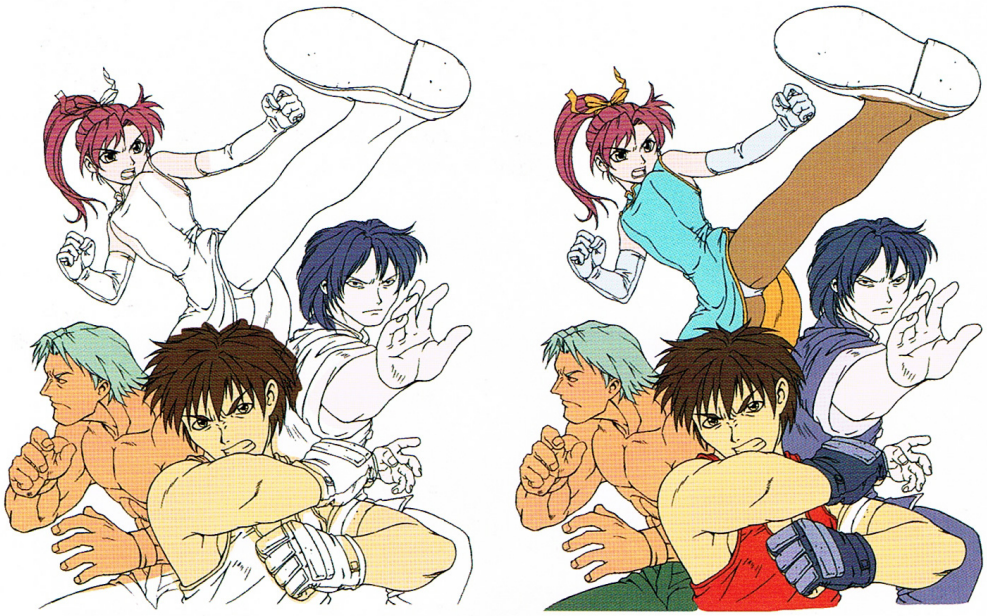
The girl was given a pink flesh tone.

This muscular character was given a bronze flesh tone.

This character was given a pale yellow flesh tone with a hint of blue to suggest an Asian who does not spend much time in the sun.

The protagonist was given a reddish-yellow flesh tone to create the look of a Japanese/Asian character.

Individualizing the Characters-2: Using the Hair and Clothing to Identify the Characters



Establish beforehand the color palettes to use for the hair and clothing as part of the character's color design. The protagonist wears a passionate red, while his sidekicks dress in cool purples and the like. Flavoring an everyday palette with an attention-grabbing color produces effective results.

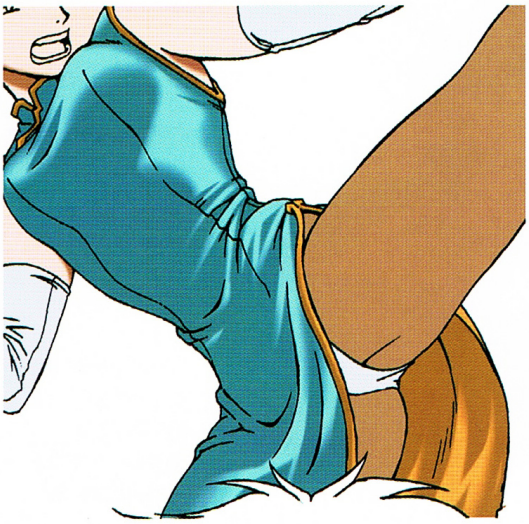


The above shows the composition rendered solely in color without contour lines. This allows the artist to check the overall balance, determine that the characters can be distinguished from one another and to what degree the characters stand out, etc.

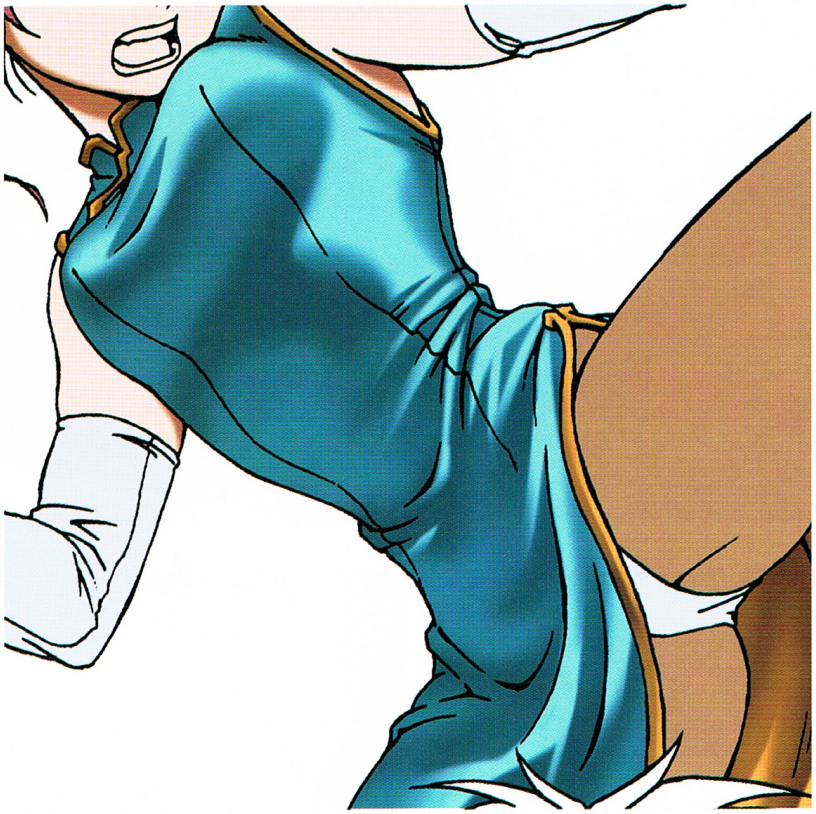
The Improved Palette

The key to improving the coloration lies in exaggerated the contrast of light and dark through careful shading.

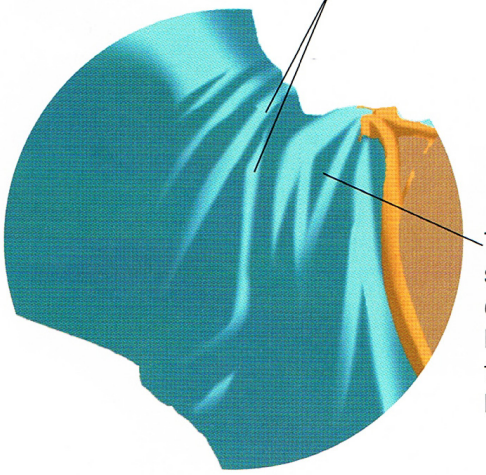
1. Better Clothing Shadows and Creases

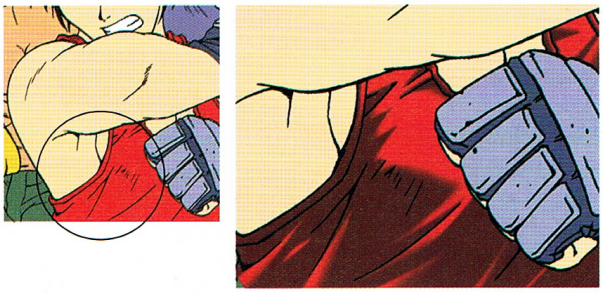


Use shadows to render creases. This will simultaneously enhance the torso's sense of volume.



Add a color just a shade darker in strategic locations, such as underneath the chest and underneath shadow contours. This will accentuate the torso's sense of volume.





Using simple fill to create shadows without drawing contour lines heightens the contrast between light and dark.

2. Improved Rendition of the Hair



Ring of reflected light



Hair lock shadows

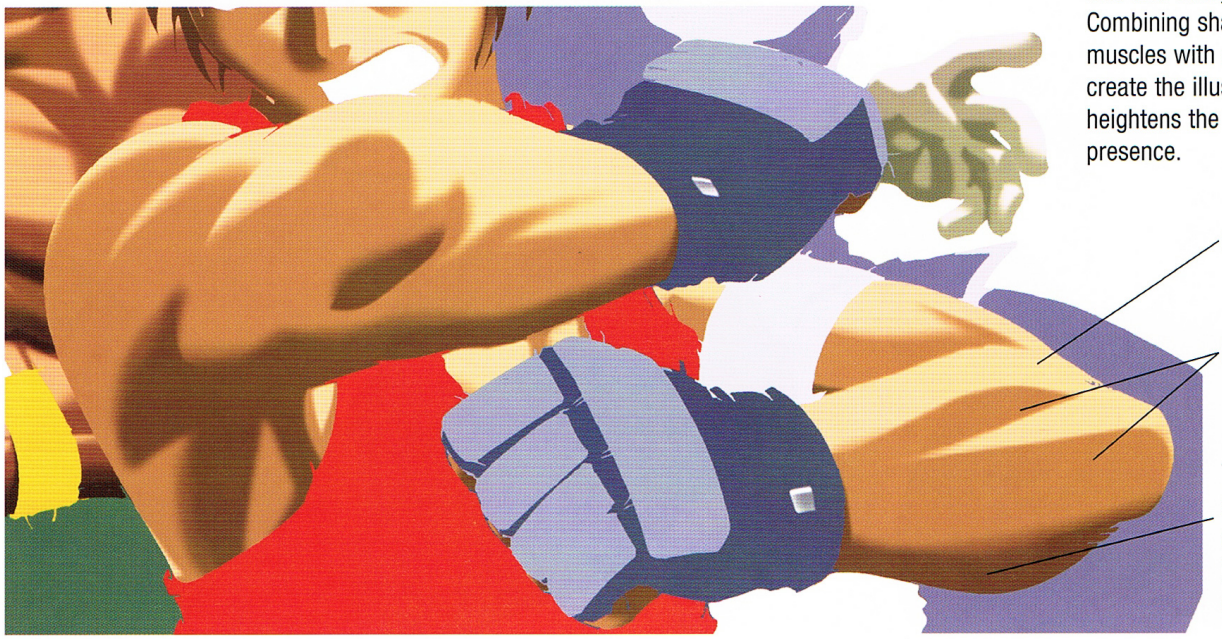
When creating the hair, combine hair lock shadows and a ring of reflected light for an effective look.



Final image

3. Using Shadows on the Skin to Enhances the Portrayal of Flesh

Use skin shadows to portray hills and valleys of muscle. Combining shadows to portray muscles with shadows to create the illusion of volume heightens the figure's sense of presence.



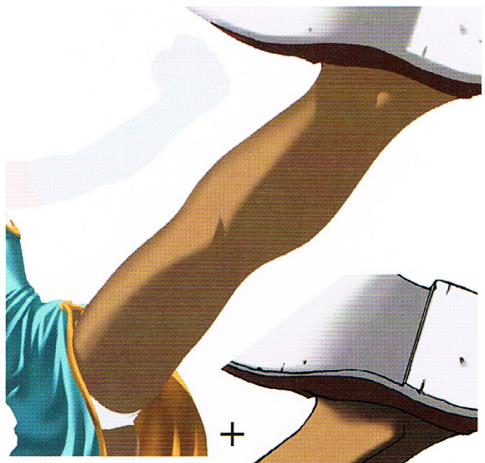


Muscle shadows put the accent on the flesh's surface. Shade the skin with the intention of accentuating areas touched by light.

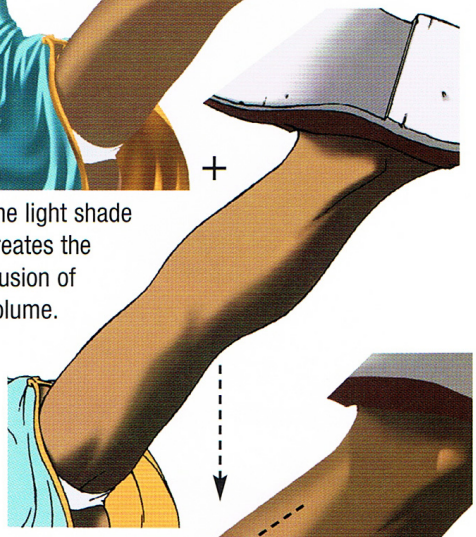


Take care to use curved strokes when drawing shadows' contours. This will preserve the undulations in the muscles and generate a sense of three-dimensionality.

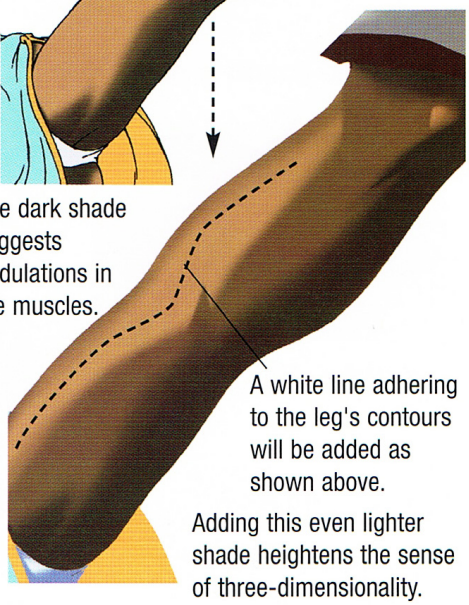
Using Light (White) to Enhance the Sense of Volume



The light shade creates the illusion of volume.

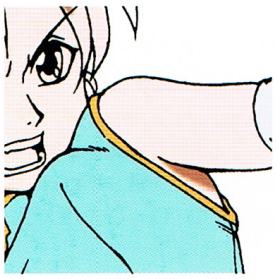


The dark shade suggests undulations in the muscles.



A white line adhering to the leg's contours will be added as shown above.

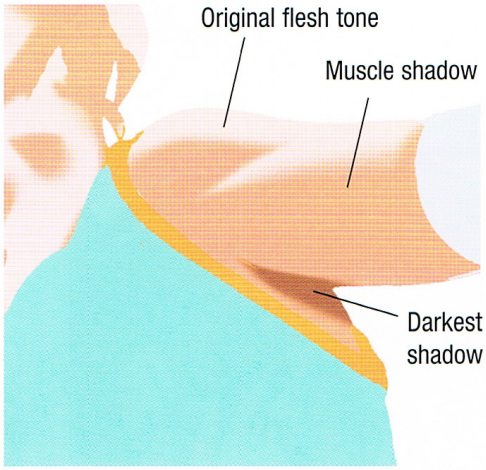
Adding this even lighter shade heightens the sense of three-dimensionality.



Skin coloration in initially published form



Skin in greyscale



With this shading, the original flesh tone has now become the lightest area. This area is left white in the greyscale version.

Improved Finished Artwork

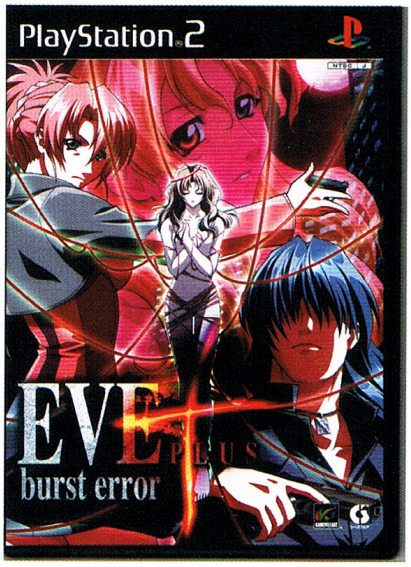
The color application succeeded in enhancing the costumes, hair, flesh (skin), and sense of three-dimensionality.



Improved Palette Artwork by Kazuaki Morita

Takehiko Matsumoto





EVE burst error PLUS
© Himeya Soft, Inc.

Kazuaki Morita

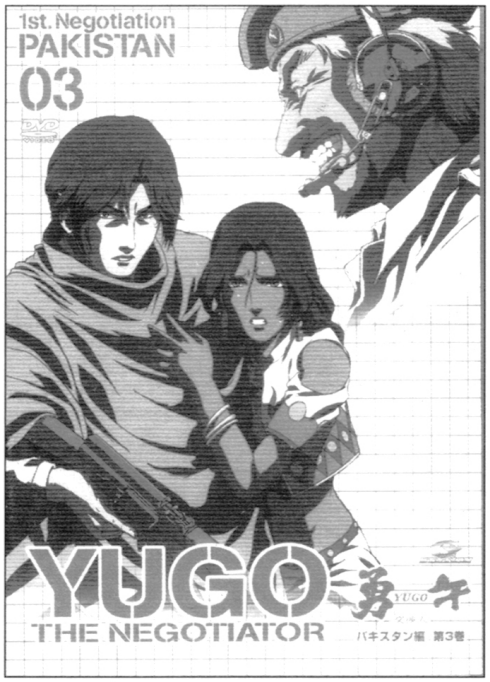




Berwick Saga
© Enterbrain, Inc.



TV Tokyo *Cho Positive! Fighters*



Yugo: The Negotiator
© Shinji Magari and Shu Akana, Kodansha Ltd.
© Yugo Production Committee

Takehiko Matsumoto

1973: Born on February 9 in Shizuoka Prefecture
1992: Graduated from Japan Animation and *Manga* College
1992: Began apprenticeship as a *manga* artist assistant under Yu Kinutani
1995: Joined the Society for the Study of *Manga* Technqiques and began participation in Graphic-sha's *How to Draw Manga* series
1998: Assisted in the production of publications on *manga* techniques produced by Go Office and produced the figures and illustrations as well as the cover of *How to Draw Manga: Illustrating Battles*
2001: Became engaged with Logistics's Team Till Dawn
2003: Produced the character designs and original event artwork for the PlayStation 2 game, *EVE burst error PLUS*
2004: Produced the character designs and was engaged as General Art Director for the Pakistan chapter of Kids Station *Yugo: The Negotiator*
2005: Produced the original artwork and was engaged as Art Director for TV Tokyo *Cho Positive! Fighters* episodes 10 through 13, 19, and 20



Night Shift Nurses III



Gakuen ojosama kitan ("Mysterious Tales of School Girls")
© Himeya Soft, Inc.

Kazuaki Morita

1973: Born on December 26 in Shizuoka Prefecture
1991: Became engaged as an employee at an average corporation
1996: Began apprenticeship as a *manga* artist assistant under Shiro Ono
1998: Assisted in the production of publications on *manga* techniques produced by Go Office and has been responsible for the *How to Draw Manga: Costume Encyclopedia* series cover illustrations
2000: Produced the character designs and original artwork for the PC game, *Gakuen ojosama kitan* ("Mysterious Tales of School Girls")
2002: Began activities with Logistics's Team Till Dawn
2003: Produced the character designs and original artwork for the PC game, *Night Shift Nurses* II
2003: Produced the character designs and original artwork for the PC game, *Night Shift Nurses* III
2004: Produced the character designs and original artwork for *Nanase Ren*, © Mno Violet
2005: Produced the character designs for the PlayStation game, *Berwick Saga*

Artists Discuss the True Nature of *Manga* Sketching

Takehiko Matsumoto and Kazuaki Morita Openly Discuss Their Artwork



In regular sketching, the subject is captured through portrayal of surfaces.

Japan may take pride in having *manga* and *anime* as part of its culture, and "drawing characters" is a basic and familiar behavior in which the Japanese engage from childhood.

Sketching Manga-Style is an attempt to describe "character drawing" as an artistic technique.

The following is an interview with two professional artists, discussing drawing characters.



In *manga* sketching, the subject is captured by starting with a circle-and-X layout.

What is the difference between "sketching" and "*manga* sketching"?

"Sketching" tends to be used to mean, "balance" or "proportioning," doesn't it?

Moderator: When *manga* and illustration artists get together and critique artwork, they often use the phrase, "The sketching on that composition is off." Does this mean that *manga* is a form of art that truly employs sketching?

Morita: It's true. I often hear artists make comments like, "The eyes are not positioned correctly," or "That outline doesn't look right." Often I hear artists use "sketching" in a context different from its actual meaning. For example instead of saying, "The balance is off," or "The figure is badly proportioned," they might say, "The sketching is wrong."

Matsumoto: I frequently hear people say, "Be sure to sketch the proportioning," instead of "Be sure to balance the proportioning."

Moderator: In the case of *manga*, often intentionally distorting the proportional balance makes the composition interesting. Alternatively, we also regularly see well-executed, traditional sketches resulting in completely unappealing compositions. Naturally, there is also "realistic *manga*" with a fabulous sense of presence.

Morita: I think this is a question of whether or not the artist consciously drew the composition (under the intention of distorting the proportioning to achieve an image with impact). Average artwork just doesn't leave much of an impression when the viewer just glances at it.

It seems to me that adding a touch of incongruity grabs the viewer's attention. This is the type of artwork that makes a significant impression.

Adjusting the Image in the Mind's Eye

Moderator: The human figure and musculature discussed in Chapter II was rather realistic, wasn't it? Do either of you use reference materials when you draw?

Matsumoto: Well, sometimes I find that I need some form of reference material to draw. However, this is more a case of being inspired by the original, reference material than referring to it the entire time I'm drawing.

Moderator: Is this because having seen the subject or being able to know it allows you to draw it?

Morita: Sketching involves looking at the subject while drawing, right? This is different. This usually involves looking at the subject once and remembering it—memorizing it, and then drawing it.

Moderator: "Does that mean *manga* sketching is really drawing from memory?"

Matsumoto: In one respect, yes. That's why in a sense *manga* sketching is a technique whereby fiction is made to look real.

Morita: *Manga* and *anime* are art forms that take fantasy and make it appear true.

Matsumoto: To a certain extent, anyone can learn to draw what he or she sees with a little practice. What we do is draw upon images we have seen once and stored in our memories. What we pull out of our memory passes through our personal filters, and the result could be regarded as reflecting our personal styles, individuality, or originality, if you will.

Morita: I think our memory flavors the subject's original impression, and what we draw from our memory is in one sense something modified, amplified, simplified, and transformed in our minds.

Editor: In contrast to the preparatory sketching one does for painting, *manga* sketching really involves simplification and exaggeration right from the start. Whether the artist actively does this or whether this is an unconscious process is hard to say. However, one does get the impression that more modification [*of the original subject*] takes place in the artist's mind [*in the case of manga sketching*]."

Morita: It seems to me that many *manga* artists are naturally equipped with this sensibility on an advanced level.



Manga sketching involves the artist actively passing his or her memory of the subject through a personal memory filter, and modifying the subject within his or her mind.

This modification occurring through the mind's eye adds the artist's individuality and originality to the composition.

Manga sketching is a tool

Moderator: Both of you have extensive experience in *anime* and game character design. Does *manga* sketching come of use when designing characters?

Matsumoto: Presuming I have drawn up a character profile table, I then use *manga* sketching to give movement to that character.

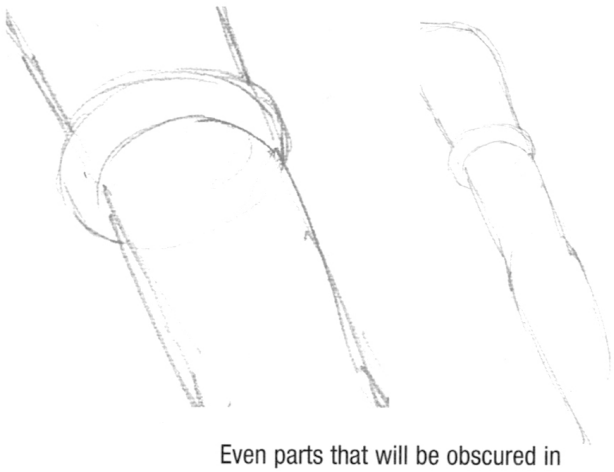
Morita: When I am drawing a character, I don't feel the need to "sketch" it per se. For example, say I am drawing a character's arm. To project the character's personality, I might add an armlet. Now, if I were following style of sketching used in painting, I would be aware that the armlet continues all the way around the arm, but I wouldn't draw it.

Moderator: So in *manga* sketching, you would draw the armlet in its entirety?

Morita: That is precisely because I am carrying out the *manga* sketching process.

Editor: *Manga* sketching is supposed to be a tool.

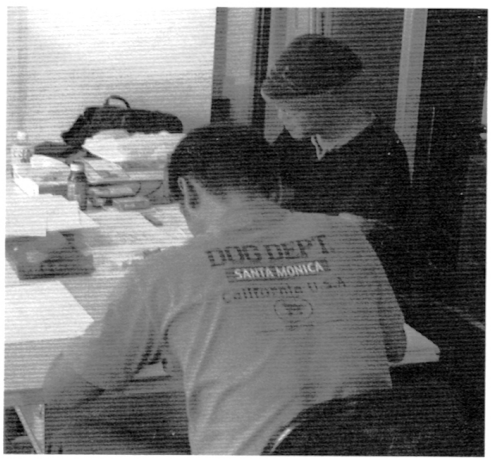
Matsumoto: Absolutely. If we were to liken it to computers, then perhaps *manga* sketching would be an image processing application, since it is something you use to process and modify the image (design) you are working on as needed.



Even parts that will be obscured in the final image are drawn during the *manga* sketching process.



The above flat fashion design sketch illustrates that there is no need to opt for a three-dimensional rendition. However, use of *manga* sketching enables three-dimensional portrayal.



To get a sense of the figure as a solid object, draw a robot. Robots are boxy in form. They have more corners than do humans, and they have more surfaces, which makes it easy to figure out which is the "opposite side." (Morita)

Morita: If I could just explain what we mean by "design" for a moment, for example, in the case of a fashion design, the designer merely needs to convey the design's form. There is no need to portray it as a three-dimensional object. In the case of game characters and the like, the design should convey in a single glance the character's personality or type. In other words, the design requires characterization.

Moderator: It seems like it would be extremely difficult to draw a flat fashion design as a three-dimensional object.

Matsumoto: This would be the point where you would apply *manga* sketching. This requires accumulating experience and then drawing upon this stored knowledge.

Morita: It's essentially sketching to plan. In a sense, designs are really for planning purposes. The artist draws clothing, hairstyles, and a wide range of other details from images stored in his or her memory. I think the character profile table should be regarded as the subject depicted or the reference material.

Moderator: So the character profile table becomes the subject, and the artist takes the character profile and uses the *manga* sketching technique to tweak it and create the target, dramatized representation. This means that during the character profile creating-process, the image in the mind's eye, is modified in a manner distinct to *manga* sketching, and that is the image used. Consequently, an artist who has mastered *manga*-style sketching should be able to produce drawings for the entire range of *manga* production skillfully, from designing characters to dramatizing compositions.

The Secret to Character Portrayal (Portraying Emotions and Detail Volume)

A large receptacle ends up with more in it.

Moderator: People often say that emotions are difficult to portray. What do you find is most important when drawing facial expressions?

Matsumoto: It isn't that the eyes or any single facial feature is important. The key is to maintain overall balance, looking at the emotion, the face, and the body as a single entity when you draw.

Morita: Your approach changes according to whether you are using a realistic or stylized portrayal of the character. Clearly, a character a 1:6 or other large head-to-body ratio will require more detail than one with a small ratio.

Moderator: More detail?

Matsumoto: The face contains various facial features. Let's say, for example, the emotion to be portrayed is surprise. The eyes actually constitute a very small detail on the face's layout.

However, if, for example, the emotion being portrayed is anger, then there are many details that must be included, such as furrowed creases at the brow and on the nose, flared nostrils, and muscle contour lines. In that sense, the artist has to pack the image with information details.

Moderator: That's when knowledge of muscle anatomy would come in handy. Or rather to say, if the artist is not familiar with anatomy, then he or she won't be able to portray the emotion.



The individual facial features are not in and of themselves significant in conveying information and portraying emotions.

There are limits to how much information a single facial feature can communicate. Drawing the figure as an aggregate allows the artist to convey a large volume of information. (Matsumoto)







When producing a realistic rendition, the amount of hand details increases. The composition's form allows the viewer to imagine the circumstances and emotional state portrayed. (Morita)



What struck me this time when I saw and photographed the artwork for this book is that unlike the sketching done in preparation for painting, *manga* sketching is almost a dialogue between the artist and the paper. (Editor)

Matsumoto: That's true. But, what I mean to say is that the artist actually draws are "tiny features." The figure ultimately conveys the emotion as a collective sum. It is impossible to communicate the emotion solely with the eyes.

Morita: In other words, if the character is to be realistically drawn, then the musculature must be correctly rendered. A large receptacle ends up with more in it.

Matsumoto: Conversely, when stylizing a figure, the artist abstracts and simplifies distinguishing characteristics. Drawing a crescent-shaped mouth indicates 'smiling.' Given that simplified forms sufficiently communicate the emotion, in this sense we can say few details are able to convey the information.

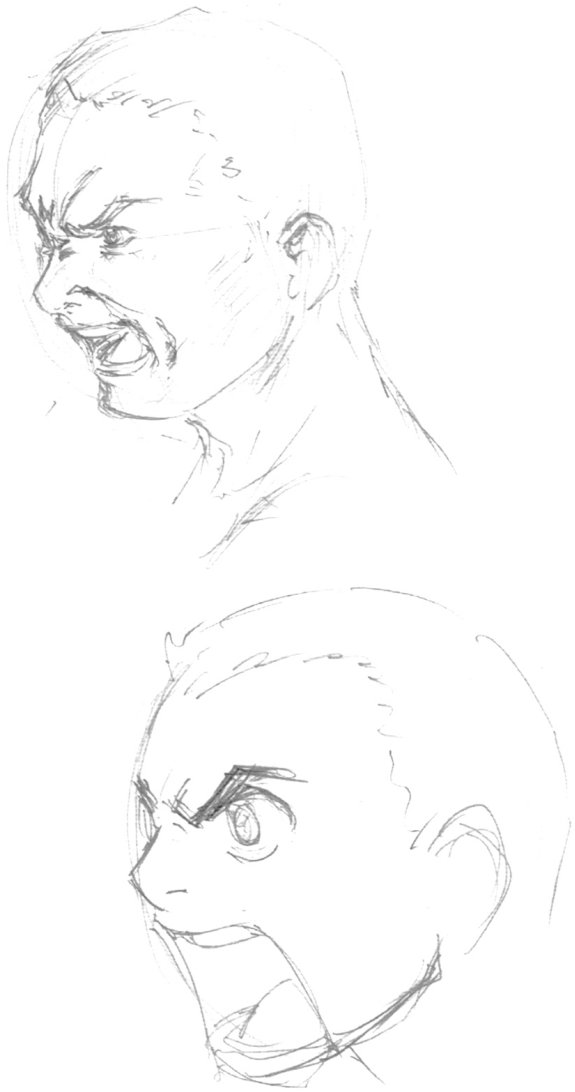
Morita: Regardless of whether a realistic or a stylized rendition is used, the impression the character projects should still be the same. That should be the artist's goal.

Learning realism is a valuable tool.

Moderator: Is it a good idea to study muscle anatomy more?

Matsumoto: Having a good foundation in muscle anatomy is effective. However, if the artist makes a mistake in usage, then the figure might not look convincing, or the character might lose his or her distinctiveness. So, perhaps artists really need to know the minimum necessary. In the case of the face, this would be to the extent that the artist recognizes where hills and valleys appear as the muscles move and where the muscles are located.

In the case of gestures and actions, on the other hand, artists are probably fine simply observing people on a regular basis and familiarizing themselves with anatomy to the extent needed to portray these actions.



A realistic character delivers impact as a collective sum, while stylized characters express themselves through their individual parts. (Matsumoto)

Editor: Really, this is knowledge of anatomy that we are talking about. If the artist does not know anatomy, then that artist can't draw.

Moderator: Knowledge of real anatomy allows the artist to simplify or exaggerate the components of the figure's structure. Quite simply, it allows the artist to create a stylized character through stylization.

Matsumoto: Some say that artists who are able to draw a figure realistically produce a different form of dynamism when making a stylized character move than do artists who are only capable of drawing stylized characters.

Morita: The artwork has more meaning if an artist able to draw a figure realistically to a certain extent draws a stylized character than if an artist only able to draw stylized figures with modified head-to-body ratios produces the artwork.

Editor: In that sense, *manga* sketching is also needed to allow the artist to apply his knowledge of anatomy effectively.

Moderator: I'd like to thank everyone for participating in this interview.

(Kamiigusa Studio, Tokyo)

Manga sketching is an extremely effective tool to use when designing a character, when showing a character that has already been designed in motion, and then drawing a stylized character. (Moderator, Hayashi)





Authors' Explanation

While no one could ever accuse us of "letting the cat out of the bag," we selected a "frog in a can" to represent the theme for this volume, namely that of "sketching to plan." The whimsical visual of the frog in the can is a play upon the idea of a book being a "condensed" receptacle of artwork or "jam-packed" with ideas, while simultaneously rhyming the words "can" and "plan."