HOW TO DRAW MANGA

Sketching Manga-Style

Vol. 2 Logical Proportions
"Composition involves first establishing what to draw." (Morita)

Composition has an aspect of constantly searching, specifically regarding what to draw and how to portray it. However, at the bottommost root of composition, the artist still decides for him or herself what to draw and how. The head-to-body ratio and figure proportioning develop from this most basic element.

Sketching as a composition technique that paves the pathway from the earliest stage of determining what to draw to the completion of the final drawing.
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Designing the head-to-body ratios so that they allow the viewer to distinguish between the various characters allows the artist to work in a variety of genres as well as to design characters that suit the setting. *Manga* sketching lies at the foundation of this technique.

This chapter covers using *manga* sketching to design a character's head-to-body ratio.

On that note, we ask *manga* artist Kazuaki Morita, who is currently active as both a first-rate character designer and artwork director, to step in and offer a little guidance.
Head-to-Body Distortion Marks the Origins of Manga
The head-to-body ratio constitutes the stylization of the character's figure proportions.

Manga is full of implausible things, movements, and thrilling scenes. The entertaining world within a given manga derives completely from stylized representations, including the characters' head-to-body ratios.

Ultra Stylization through Head-to-Body Ratio Modification

Attractive Proportioning
(1:6~1:8 Head-to-Body Ratio)

Chibi Proportioning
(1:2~1:4 Head-to-Body Ratio)

Make an effort to stylize synthetic objects and animals as well.

Two Styles of Proportioning Competing on the Same Screen

1:2.5 head-to-body ratio character

Character with realistic proportioning

1:2 head-to-body ratio character

Character with fantastic proportioning
Assorted Representations Resulting from Stylization

Stylization of the head (Mouth shape modified and drawn at a colossal size)

Stylization to portray movement

Anthropomorphized stylization

Stylization to portray a fantasy world or a fairytale world
Endearing Head-to-Body Ratios for Chibi Characters

The unusual proportioning defines *chibi* characters. The large face (head) gives *chibis* their distinctively childlike and adorable appearance.

**1:2 Head-to-Body Ratio**
This proportioning is frequently used for characters in marketing to represent a product-line, characters in cutout frames, etc.

**1:3 Head-to-Body Ratio**
This proportioning, which makes movement portrayal easy, is frequently used for a wide range of genres, from cutout frames and book and magazine illustrations to *manga*.

**1:4 Head-to-Body Ratio**
Commonly used for characters in *jido manga* (*manga* targeted to young children), this proportioning lends itself to elementary school and junior high school characters.
Attractive Head-to-Body Ratios

This proportioning reflects that seen in real-life and also appears on idealistically proportioned characters. It is commonly used with the protagonist in *manga* and *anime*.

1:5 Head-to-Body Ratio

This easy-to-draw head-to-body ratio affords the widest range of variation and frequently appears in *manga*. It should be noted, however, that this proportioning will make even adult characters appear childlike.

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This stylized version of the 1:5 ratio is frequently used in illustrations and universally in *manga* character variations.

This version is used for illustration as well as with characters used in product marketing.
1:6 Head-to-Body Ratio
This proportioning creates the appearance of a 15 to 18-year-old character.

1:7 Head-to-Body Ratio
This proportioning is suited to mature but still youthful characters somewhere between 17 years to their early twenties.
1:8 Head-to-Body Ratio
This is the proportioning used for adult characters.

Suited to book and magazine illustrations, the 1:8 head-to-body ratio lends itself to portraying dynamic movements, as the individual body parts are proportionally larger. When drawing a full figure in manga, the space available tends to be limited, requiring that the head be drawn on the small side. This means that the artist needs to use a little ingenuity in portraying the character.

In manga panels, the heads of characters drawn at a 1:8 head-to-body ratio tend to end up too small. Consequently, artists opt for a 1:6 to 1:7 head-to-body ratio, so the facial expression is easier to see.
his section takes a look at an artist at his desk, designing *chibi* characters of various head-to-body ratios. The steps to composing are essentially the same for characters of all proportions.

**Drawing a Character in a Gym Suit:**

1:2 Head-to-Body Ratio

1. Sketching a Circle-and-X Layout and the Neck (Shoulder Width)

   ![Sketching a Circle-and-X Layout and the Neck](image)

   The above shows Morita drawing a circle-and-X layout of the head. Always start with the most elemental step when sketching *manga* style.

   Next, Morita determines the shoulders’ width. This constitutes a key point in establishing the character’s head-to-body ratio.

2. Sketching the Full Figure Layout and the Head Layout

   ![Sketching the Full Figure Layout and the Head Layout](image)

   Use light strokes to sketch the posed figure’s overall layout.

   ![Headband layout](image)
   ![Morita adds the hair while adjusting the head's contours](image)

   Headband layout
   Morita adds the hair while adjusting the head’s contours.

   ![When sketching the face and head layouts, Morita adds faint strokes to suggest the facial expression and hair.](image)

   When sketching the face and head layouts, Morita adds faint strokes to suggest the facial expression and hair.

**The Steps**

1. Sketch the head as a circle-and-X layout and determine the shoulder width.
2. Sketch the figure’s exterior contours and roughly draw the face’s contours.
3. Retrace the lines, adjusting and cleaning them up to complete the sketch.
   3-1. Adjust the body’s contours.
   3-2. Adjust the face’s and head’s contours.
   3-3. Carefully clean up the overall figure.
   3-4. Add final touches to the face and detailed areas.

Begin drawing only after you have developed a clear image of the character in your mind. (i.e. decide first and then begin drawing.)
3. Retracing While Adjusting Contours

3-1. The Body

While more clearly defining the hands and feet, Morita sketches layouts of the gym suit’s design features.

3-2. The Head

Once you have defined the head’s exterior contours to a certain extent, establish the eyes’ shapes.

Use blotter paper while drawing at times when your hand feels sweaty.

4

The arrow indicates the direction in which Morita is drawing the hair.

5

Morita draws the hairline last.

6

When attempting to draw smooth, cleanly defined lines, rotate the drawing paper to the most comfortable direction.
3-3. Adjusting the Figure’s Contours Overall

Once you have cleaned up the head and body’s exterior contours, begin drawing the hair.

The ponytail requires long, smooth strokes, so Morita carefully adjusts the lines while maintaining tautness in adding the finishing touches to the character.

3-4. Adding the Details and the Facial Features

Rounding out the corners causes the facial expression to change dramatically in appearance. Consequently, Morita draws the mouth’s contours with extreme care.

Next, Morita draws the eye’s pupil and iris with reflected highlights.

Here, Morita uses hatching to shade the eye.

Morita fills in the shadow at the character’s feet.

As final touches, Morita adds a few diagonal lines at the cheeks.

Morita modulates the weight of the strokes, checking the overall visual balance.
After producing a layout of the figure, Morita retraced the contours three to four times before arriving at the final image seen here. When producing your own artwork, use carefully drawn, layered curved strokes, while attempting to preserve a sense of the three-dimensional figure’s curved surfaces.

Changing from Shorts to a Skirt

The above shows a miniskirt in place of the shorts. Morita produced this version by laying tracing paper over the original drawing. Even though this is a 1:2 head-to-body ratio character, Morita carefully sketched a layout of the character’s body underneath the gym suit, allowing him to modify the suit’s design and still have it fit the character perfectly.

Final Image: Miniskirt Version
1. Sketching a Circle-and-X Layout and the Neck (Shoulder Width)

1. First, Morita draws a circle-and-X layout of the head.

2. Next, Morita sketches a rough outline to define the head's shape more clearly.

3. When drawing a *chibi* character, omit the neck at this stage and instead draw the shoulders directly touching the head.

2. Sketching the Full Figure Layout and the Head Layout Width

- This line establishes the position of the groin.

On a 1:3 head-to-body ratio character, the head and the torso are essentially the same length. On a character drawn at a 1:2.5 head-to-body ratio, the head should be longer than the torso. The legs' length gives the *chibi* her cute appearance, making where to position the groin a key point in the figure's design.

3. Retracing While Adjusting the Contours

1. Once Morita finishes the body's exterior contours, he moves on to the face.

2. Here, Morita defines the body's exterior contours more clearly.

3. Draw the face and hair after completing the body.
Drawing the Clothes

After Morita has finished the figure, he adds the clothes. First he draws the panties. Clearly planning where and how the clothing is worn makes it easier to grasp the overall visual balance.

Here, Morita draws the waistline, which plays a vital role in balancing the clothing’s proportions.

The skirt’s waist and zipper are drawn according to where the waistline is positioned.

Next, Morita draws the skirt’s outline. He uses a trapezoidal form that extends beyond the legs. The hem forms a gentle curve, giving the skirt a three-dimensional feel.

**Drawing the Eyes**

Morita fills in the eye details to complete the face.

**Drawing the Ponytail**

After having essentially completed the character, Morita begins adding the ponytail. He starts by using light strokes to sketch a contour layout.

While maintaining awareness of the overall visual balance, Morita adds small lines, layering two to three strokes over each other, gradually building up and darkening the contours until he has achieved clearly defined lines.

Morita adds the ends of the ribbons to finish the drawing.
The resulting character has a head-to-body ratio of 1:2.5.
The above figure shows a more voluptuous body with slenderer arms and legs.

This study shows the same head drawn on two figures of different head-to-body ratios. Adjusting the length of the torso, arms, and legs as well as their thicknesses also completely changes the atmosphere that character projects.

Although this is still the same *chibi* character, modifying the body below the head allows you, the artist, to produce a wide range of variations.

1:2 head-to-body ratio

1:3 head-to-body ratio
1. Sketching a Circle-and-X Layout and the Neck (Shoulder Width)

Morimoto attaches the torso and shoulders directly to the head.

2. Sketching the Full Figure Layout and the Head Layout

1. Morita sketched these strokes as he adjusted the shape until he was able to produce a simplified, satisfying rendition of a muscular chest.

2. Morita adds the shoulders, using circles to represent the joints.

When drawing a figure layout, use abstracted geometric shapes to represent the arms and legs, assembling them into a body.

3. Retracing While Adjusting the Contours

1. Morita adds the eyebrows after having first drawn the eyes' layouts.

2. Morita layers strokes to build the exterior contours.

3. Here, Morita uses a gently curved arc to simplify the chest's contours and avoid overemphasizing the musculature.

4. Next, Morita adjusts the contours of the figure overall.

Morita uses abstract, geometric shapes to render the distinctive body contours created from bulky muscle.
Adding the Hair and Details

1. Morita decides where to draw the hair whorl and adds it.

2. When drawing the hair, follow the head's layout contours.

Work from higher to lower regions when drawing around the waist and the legs.

Finishing Touches

Reinforce the face's contours to finish.
1. Sketching a Circle-and-X Layout and the Neck (Shoulder Width)

The neck is added.

Line denoting the spine

Morita sketches the body's layout while maintaining a visual image of the spine.

2. Full Figure Layout

Clavicle guideline

Waist guideline

Groin guideline

The legs are on the short side, creating a girlishly adorable character.

3. Head Layout: Adjusting the Contours

Morita gives the hair volume while maintaining awareness of where the head's exterior contours are located.

Morita reinforces the body's contours to a certain degree. After having given the body a clear shape, Morita adds in the facial features.

Morita draws the torso, the facial features, and the head's exterior contours in that order, gradually allowing the character to take shape.

Finally, Morita draws the swimsuit's contours and details. The garment fits snugly against the body, causing the nude sketch to become particularly critical. This is because the swimsuit's contours at the chest and hips must be used to give the figure a sense of volume.

Morita completes the nude figure by adding a contour to define the belly.
4. Final Image

The figure to the right shows the same character with longer legs.
The head-to-body ratio may be modified.

1:3.5 head-to-body ratio

1:4.5 head-to-body ratio
1. Sketching a Circle-and-X Layout and the Neck
(Shoulder Width)

Morita draws the circle-and-x layout. One effective technique Morita demonstrates in this figure is using his fingers to gauge the positions of the waist and groin.

Next, Morita sketches the torso's layout.

Here, Morita continues sketching the torso, while showing consideration to the neck.

This marks where the groin would normally be positioned on a 1:4 head-to-body ratio character. As you can see looking at the figure, Morita drew the torso on the long side in the layout.

The lower the groin is positioned from this level, the longer the torso will become proportionally, resulting in a short-legged character. The higher the groin is shifted above this level, the longer-legged the character will appear.

2. Sketching the Full Figure Layout and the Head Layout: Adjusting Contours

Morita determines where to position the groin while adjusting the torso's exterior contours. He draws the legs and adds a line to denote the figure's center or axial line.

At this stage, Morita cleans up and adjusts the shape of the arms, which were previously simple poles.

In the above figures, Morita draws the eyes, nose, and hair.

The above shows a completed contour drawing of the character nude. Producing a carefully rendered nude sketch of the character before dressing her is a key requirement if you intend to dress the character successfully.
3. Drawing the Clothes

Use the centerline as a guide for drawing the blouse’s front closure.

Here, Morita draws layouts for the sleeves and the rest of the clothing. Drawing a cropped, middy blouse gives the sailor suit a stylish look.

Once Morita adds the bow, he has finished the upper body clothing. The garments sit on top of the body, so they must be drawn following the figure’s contours but leaving a gap between the body and the clothing’s silhouette contours.

Morita adds a guideline for the skirt’s hem.

Finally, Morita draws the skirt’s contours and ripples in the sleeves to finish the drawing.
1:5 Head-to-Body Ratio Study Sketches

The neck plays a key role in the impression the figure's head-to-body ratio projects. A 1:5 head-to-body ratio seems to be the point at which the impression the figure projects changes depending on whether it is above or below this ratio. Consequently, even a professional artist must have built up skill and experience to determine the desired image. Artists find sketching studies of the kind shown on these pages useful to improving their skills.

In the above, Morita sketches a circle-and-X layout. Unlike the chibi (a.k.a. "super-deformed" or "ultra-stylized" character), this character has been given a slender neck.

When composing a figure, the groin should be positioned halfway down the full height. Therefore, in a 1:5 head-to-body ratio character, the groin would be positioned at a height of 2.5 heads. Once you have grown accustomed to proportioning a character, you will find yourself naturally positioning the groin at the correct position to match the proportions desired.

The above shows Morita again using his fingers to check the head-to-body distances. A 1:5 head-to-body ratio is commonly used for male and female characters in their teens.
1. Steps in Sketching from a Circle-and-X Layout and the Neck (Shoulder Width) to a Full-Figure Layout

① Morita intends to draw a mature-looking character at a 1:5 head-to-body ratio, so he made the neck longish.

② Imagine the spine follows an S-curve when giving a character a sinuous pose. Take care when sketching the layout.

③ Once Morita has progressed to the point where he adds the groin guideline, he checks the proportioning.

The above shows a completed layout of the posed character.

2. Sketching the Full Figure Layout and the Head Layout: Adjusting Contours

① How the character will appear in the final drawing has already been established by this point. In order to achieve a clear image of a character, first draw a layout sketch of the full figure rather than starting with the face.

② Morita sketches a layout of the head (face and hair).

③ Where the groin is positioned constitutes the key point in the character’s overall visual balance.

④ Next, Morita adjusts fingers’ contours and other details.

⑤ To finish the drawing, Morita draws the irises and pupils, the breasts, and other details. The nude sketch is now complete.
3. Drawing the Clothes

1. Work from top to bottom, starting with around the neck.

2. Leave a gap between the contours of the loose jersey and those of the flesh underneath. Layer your strokes, and note where the body’s contours are while you draw the clothing.

3. When drawing clothes as with drawing other things, it is common to start with the layout.

4. In this figure, Morita draws the ripples and creases on the jersey’s front and adjusts the jersey’s hemline.

5. Morita maintains awareness of the denim’s thickness while carefully adding strokes.

6. Morita draws the exterior contours of one jean leg and then the other.

7. When drawing your own, add contours to define the rippling and bunching at the hem after having finished the jeans’ exterior contours.

8. The addition of creases on the jeans marks the final touches. Use hatching to create the distinctively thick feel of the jeans’ denim.

9. Thickening the contour extending from the posterior to the groin heightens the sense of three-dimensionality.

10. At the very end review the final image, and if you feel the need, only then add rippling and bunching behind the knees.
The sleeves contours should be at a distance from the arm's contours.

The shirt falls in a gentle arc from the breast's tip.

Adding small mounds of fabric form around the knees generates an air of realism.
1. Sketching a Circle-and-X Layout and the Torso's Layout

The neck is obscured from this angle.

Waist guideline

Approx. 2.5 heads in height

Since this character will be drawn at a 1:5 head-to-body ratio, Morita positions the groin at approximately 2.5 heads along the figure.

The torso shown here is actually shorter than two heads in length. Normally, when drawing from an angle where the neck becomes obscured, the torso is made shorter than it would be drawn in a standing pose.

2. Adding Layouts for the Arms

Morita works from right to left.

Morita draws the right arm while noting with sketched layouts and guidelines where the left arm and the clavicle will be located.

The clavicle guideline clarifies how the shoulder's upper surface appears.

At this stage, the hand's layout is posed to reflect the grasping of a sword hilt.

3. Adjusting the Full Figure's Contours

Morita adjusts the contours, starting with the head and particularly around the jaw. He works his way to the body.

Morita draws the arms after reinforcing the torso's contours.

Emphasize the extended leg, which is from a compositional perspective, the largest body part.

Use a masking or blotter paper to avoid smudging the drawing.
4. Drawing the Sword and Shield

1. Start by drawing the sword’s hilt.

This shield attaches to the arm. Often, the shield will obscure the arm in the final drawing. However, as with drawing clothing, the figure should be drawn in its entirety first. This will result in a more convincingly drawn character.

2. The completed contour sketch, seen above, includes the nude figure, the shield, and the sword.

5. Drawing the Face and the Hair

1.

Morita adds the eyes, the eyebrows, the nose, the mouth, and the hair in that order.

6. Drawing the Clothes

1.

Morita draws the armor’s breastplate, starting with the shoulders. This alone generates the look of lightweight, leather armor.
7. Drawing Movable Body Parts

To draw the leg, Morita begins with the knee.

Use hatching to shade the knee, maintaining awareness of the joint's round form.

Armor has volume. In the figures on this page, Morita uses hatching to portray leather and other textures. When drawing on your own, leave a wide gap between the hatched strokes.

Here, Morita draws a greave (leg armor).

Morita adds creases to the abdominal area.

8. Adjusting the Shapes of the Shield and Sword

The areas of the hand gripping the hilt, adhering to its curved surface are vital to the drawing. Morita carefully renders these areas using curved lines.

In the above, Morita adjusts the hilt's form and carefully draws the hilt.

Morita reinforces the exterior contours while finalizing the forms.

Morita uses large, diagonal lines to portray the bent knee, emphasizing the sense of "bending."

Morita draws the armor's contours outside of the leg's contours, thereby giving the armor a sense of volume.

An abundance of curved creases were added to the back of the knee.
9. Adding the Details

Morita adds strokes that give the sword a sense of texture.

Morita uses crisp, straight strokes for the clothing creases.

The hatching (diagonal lines) seen here give the armor a sense of leather.

To the left, Morita adds lines to create the illusion of creases concentrated at the underarm.

Final Image
1. Sketching the Full Figure Layout

Since this character will have a 1:6 head-to-body ratio, the groin is positioned three heads' length along the body.

Morita starts by drawing a circle-and-X layout of the head and then proceeds to draw the torso's layout.

Parts of the body that will be obscured in the final image should still be included at the layout stage.

Once Morita has completed the full figure layout, he adjusts the exterior contours, reinforcing the lines.

Note that Morita included the hip on the far side of the figure.

2. Drawing the Head and Further Adjustment of Contours

Morita draws the face after sketching the jaw.

When drawing on your own, maintain awareness of how the movement of running will affect the direction in which the hair flows.

Morita draws the hand, fingers, and other details.

Morita saves her ribbon and flowing locks of hair for last.
3. Drawing the Clothes

First Morita draws the collar and then the sleeves.

Next, Morita reinforces the line at the skirt’s waist and adds contours to suggest bunched fabric.

This line defines the waist, which is the top opening in the skirt. A carefully drawn, gently arcing line creates the illusion of a three-dimensional girl actually wearing a skirt.

The skirt’s hemline is added using an S-curve to evoke a feeling of movement.

Morita connects the skirt’s contour to the body’s contour, making the skirt scoop inward.

Morita adjusts the contours to complete the drawing.

Final Image
Chibi characters, which some consider to have given birth to manga, were created from stylizing and abstracting characters of physically attractive proportions.

Morita starts with the full-figure layout. He draws a slender, smallish torso, paying attention to the distinguishing features of the original character (the angle of the waist and legs) while drawing.

When drawing the tiny, stylized feet of a chibi character, match the angle of the legs to that of the original character.

Once Morita has finished the facial features, he begins adjusting the contours.

Morita draws the navel and other details to complete the nude sketch.
The same steps should be followed in dressing a *chibi* character as when dressing a standard character.

The number of strokes used on the *chibi* character drawing is significantly less than that used on the standard character.

**Modified Version**

Here, the arms and legs have been made slenderer and the hands and feet larger than in the original *chibi* drawing.

To modify the character, first trace the original and then add the modifications, starting with the arms.

Morita has made the torso slenderer and the hands and feet larger than in the original *chibi* drawing, but he has not changed the direction faced or the angle in which she leans.

Morita stylizes the shoes' form while maintaining the original design.
What Are Proportioning and Sketching?
Kazuaki Morita and Hikaru Hayashi

Characters constitute one of the most directly engaging elements in a work of manga or anime, and characters of various head-to-body ratios appear in media ranging from jido manga, targeted at children to manga targeted at adults and even government bulletins and public service announcements.

Kazuaki Morita and Hikaru Hayashi, star artists featured in Sketching Super Manga, discuss characters, proportioning, and sketching.

The Look of a Character and the Head-to-Body Ratio

How Proportioning Affects the Atmosphere Projected

Hayashi: You have drawn a wide range of characters from chibis to attractively built characters. Are you always thinking about the head-to-body ratio?

Morita: When I am just doodling or doing study sketches, I don’t really think much about proportioning. The average head-to-body ratio I use is probably 1:6 or 1:7, I guess.

Hayashi: What about when you are drawing a chibi or "super-deformed" character?

Morita: It can get tedious drawing the characters with the same proportions all the time for published work, so sometimes I might draw something with different proportions for myself—just for variety’s sake. The head-to-body ratio does affect the atmosphere the character projects.

Hayashi: What do you mean by "atmosphere"?
Morita: Well, for example when I’m drawing a physically attractive character, I tend to make that character proportionally tallish. Short proportioning would give the character a "cute," "round," or "sweet" look.

Hayashi: So, the head-to-body ratio has the potential to alter completely the mood projected by the character. It basically means that the proportioning carries totally different connotations.

Morita: I suppose so. This is why when I need to draw a character for work, I first have to consider what type of mood the character will project and then decide the head-to-body ratio.

Matching the Face to the Proportions

Hayashi: When we photographed the figures for this book, I raised the topic of matching the face to the head-to-body ratio.

Morita: I remember. In my case, I start with the head and then add the neck and establish the torso’s breadth. To a certain extent, their proportions are predetermined according to the target head-to-body ratio. Realistically speaking, it is impossible to give a 1:2 head-to-body ratio character a long neck and a shoulder width the same breadth as the head.

Hayashi: Do you ever receive job orders where a specific head-to-body ratio is requested?

Morita: Well, I receive requests for characters of a specific age range, which necessitates drawing characters at a 1:5 head-to-body ratio or the like.

Hayashi:
So, the head-to-body ratio is a technique for expressing a character's age.

Morita: Absolutely. A character drawn at 1:4 head-to-body ratio will look like an elementary school student, while a 1:5 character will look like a junior high or high school student. If I want to make a high school student appear childlike, then I reduce the head-to-body ratio.

Hayashi: I suppose "matching the face to the proportions" could also be interpreted in that manner.

Morita: That's why I tell other artists first to plan what to draw and then actually to do the drawing.

Close-up of a 1:2 head-to-body ratio character

While doodling or making study sketches does not necessarily require taking head-to-body ratios into consideration, I do recommend that you maintain awareness of the proportional balance while you draw. I think learning various head-to-body ratios will help you gain a sense of how a character's body should be correctly proportioned.

This close-up of a 1:4 head-to-body ratio character illustrates that its face, which matches its proportioning, is distinctly different from that of the character drawn at 1:2.
Bird's and Worm's-Eye Views

Don't think of yourself as drawing a polygon character. The proportions only have to give the illusion of viewing the character from a given perspective.

Hayashi: Composing from a bird's or worm's-eye view creates a visually dynamic image, making these angles appealing. But, is there a special trick to drawing chibi characters effectively from a high or low angle?

Morita: Sketching Super Manga contains a discussion of methodology, namely composing the character within a box. This technique allows artists to draw characters of any head-to-body ratio.

Hayashi: It seems to me another effective technique would be to start by drawing the character in an easy pose and then trying to recompose that from either a high or low angle.

Morita: That sounds reasonable to me too. The key point is that you have to have a clear visual image in your mind. I should also point out that the character's head becomes proportionally small when composing from a low angle. This could make the overall proportioning look off. However, since you are not composing a polygon character, the figure simply needs to be drawn convincingly.

Hayashi: Do you have any tips on how to make a character look convincing?

Morita: Showing the soles of the feet, for example, underscores the sense of a low angle. The waistline is also effective in that you can use the waist of a skirt or pants to illustrate that the character is being viewed from a low angle. The circle-and-X face layout can be used when drawing either a chibi or a regularly proportioned character. If the face is being composed from a low angle, then the layout design makes this obvious.

Next, I draw the eyes and then the ears go about here (c.f. figure to the right). The difference in height between the ear and the eyes creates the illusion of viewing the character from below. The positioning would be reversed if I were composing from a high angle.

I recommend the readers try drawing an informal orthographic sketch to study how the front and side of the character's face will appear from a given angle. Of course, the

Normally, the face is drawn first, but in a pose like mine, you would give the fist shape first and then the rest of me.
top of the head should be included.

**Hayashi:** What about the underside?

**Morita:** The underside would not be visible from a high angle. If drawing a three-dimensional model is too difficult, another option is to use a figurine or an artist's manikin as reference. You would also need to check that the face appears convincingly three-dimensional.

**Hayashi:** Basically, you are saying the character needs to be composed as a three-dimensional object.

**Morita:** Correct. This means drawing perspective lines would also make composing the figure easier. Knowing perspective drawing techniques is extremely helpful to artists.

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**The Character's Role and Proportioning**

**For Effective Drawing**

**Hayashi:** Before embarking on the design, the artist decides beforehand whether or not he or she will be drawing a character with a "tall" head-to-body ratio or a *chibi*, ultra-stylized character. The artist then draws the head-to-body ratio accordingly. Are there any special tricks to proportioning?

**Morita:** Well, the more head-lengths comprising the character’s full height, the more attention has to be paid to the individual body parts, while the fewer head-lengths making up the character’s height, the more attention needs to be paid to the body as a whole.

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Depending on the composition and pose of the character, the clavicle may be used as an alternative to the neck. It suggests the neck without having actually to draw it. It indicates to the viewer that the neck is connecting the head to the torso, causing the viewer to imagine the neck without it actually being visible.
I am referring to the volume of lines used to draw the character being in direct proportion to that character’s head-to-body ratio. In other words, the fewer the head-lengths making up the ratio, the less lines the artist will use to draw that character. Consequently, having a visual image of the figure as a whole becomes an effective drawing strategy. On the other hand, the greater the number of head-lengths, the more attention needs to be paid to the size and shape of the individual body parts.

Hayashi: Often, artists correct their work as they draw or they might not notice while they are drawing that a particular part looks funny. In that regard, where should an artist pay particular attention when drawing?

Morita: In terms of the figure’s proportioning, you should pay attention to the arms’ lengths or the sizes of the hands and feet and fix them as necessary. Often a body part will seem inappropriately sized. It’s also important to set the drawing aside for a few hours or even an evening and then go back and look it over.

The Effect of the Silhouette

Hayashi: Last, I’d like to talk a little about designing and creating roles. The head-to-body ratio is determined according to the impression the character needs to project. However, is there ever a case where you might use a chibi-type ultra-abstracted style for a “tall” head-to-body ratio character?

Morita: Well, when I’m doodling or drawing study sketches, I might draw a figure with a “tall” head-to-body ratio and then stylize the character to give it a gentle, sweet atmosphere. But this makes drawing the character extremely difficult. I might be able to achieve the right facial expression, but the figure’s silhouette is particularly important in character design, so mismatching drawing style with the proportioning throws a big curveball.

Hayashi: By silhouette, do you mean the first impression the viewer gets just by glancing at the character?

Morita: Yes. For example, a character with an inverted triangle torso projects an impression of physical might, while a triangular torso suggests a soft, feminine character. I design the shape of the character’s torso based on the impression it will elicit.

Hayashi: Using an inverted triangle or a triangle as the torso’s basic shape is essentially referring to the shoulder width, isn’t it?

Morita: Naturally, I mean the shoulder width as well as the clothing (in other words, the presence of shoulder pads, etc.). The silhouette’s shape doesn’t necessarily have to be dictated by the shoulder width. Other clothing elements control the atmosphere projected as well. Perhaps the collar forms a triangle or inverted triangle. Ponchos project a gentle mood. Different clothing articles can have a tremendous impact on the impression projected.

Hayashi: So this means that it is important to know how to draw clothing.

Morita: Right. It is vital to have basic knowledge of clothing structure, etc. However, if you can’t draw a body properly, there is no way you will be able to draw clothing.

Hayashi: Sketching essentially means going back to the very basics, doesn’t it?
Three Key Phrases in Improving Sketching Skills:

Revealed in Our Artist Tête-à-Tête

Key Phrase 1:

Great-looking bodies remain great-looking, even if the clothes they wear aren't

A physically attractive character can make even unattractive clothing articles look good. (Morita)

It is a fact that hairstyle and clothing have a tremendous impact on the atmosphere a given character projects. However, hairstyles and clothing are ultimately details. Insisting too much on decking out a character in stunning details often results in the artist neglecting the design of the character, himself.

The basic axiom of drawing or character design is to pay attention to the character as a whole. Think about what type of character you intend to draw, decide how the character should look, and then begin drawing. Naturally, you should always be aware of this basic axiom and avoid festooning the characters you design with too many eye-catching details.

In the case of a character projecting a sweet or adorable atmosphere, the wardrobe and other details may affect an abundance of factors.
Key Phrase 2:

A bust close-up alone can suggest the character's proportioning.

A bust close-up (close-up of the head and shoulders) can indicate the figure's head-to-body ratio. (Morita)

The head displays an essentially round silhouette. The curling locks of hair have been abstracted.

The neck is just barely visible. Often, artists omit the neck on characters of this style.

Key features of this style are the narrow shoulders that directly touch the neck.

In the version to the left, the hair's form is reflected in the head's silhouette, and the contours of the curling locks have become slightly more detailed.

The neck has slightly more presence than the above version. However, rather than having a realistic thickness, this style of character often still has a narrow neck.

The distance between the neck and the shoulder joint has increased.
1:4 Head-to-Body Ratio

The bone structure slowly takes form. This style of character requires the artist to show more attention toward a realistic portrayal.

Characters with a 1:4 proportioning have a more realistic appearance. The hair is rendered in more carefully and in more detail.

The neck is more visually prominent.

The shoulders are approximately the same width as the head, and clavicles have been drawn. Artists typically use 1:4 head-to-body ratio characters for children between 10 and 15.

1:7 Head-to-Body Ratio

These characters' figures are based on the underlying skeletal structure.

Characters with this proportioning appear increasingly real, and the face becomes elongated.

The neck is clearly delineated.

The shoulders should be approximately the head's width or broader. In the case of female characters, aim for approximately 1.5 times the head's width. This is the proportioning used with adult characters.

Face: The head-to-body ratio affects the proportioning and degree of abstraction or stylization of the facial features (exterior contours, eyes, nose, etc.). Consequently, the artist is able to indicate to the viewer whether the character is a chibi or not with the face alone. You will find your character design range has expanded once you have established your own approach to the face according to whether the character is drawn at 1:2 or 1:3, etc.

Body: The neck and shoulder width to a certain extent predetermine the torso’s size. Therefore, the inclusion of the neck and the shoulder-width alone are able to hint at the character’s overall proportioning.
Key Phrase 3:

Failure is key to mastery.

Learning from mistakes is the best way to improve. Without a little failure and pain, your skills won't get better. This is a case where stubbing your toe will make you more graceful. (Morita)

When an artist draws, he or she thinks about what the subject should be and how to compose the subject. An artist might consider the context of the scene and what should be visible or present in the composition as a result. With this approach, blunders and missteps the artist experiences lead to improvement. However, what is vital is to continue playing around and experimenting and not to give up.
Chapter 2

The Basics of Proportioning

If we take a look at figure proportioning, we realize that all characters may be categorized as having either "attractive" proportioning or "cute" chibi proportioning. In this volume, attractive head-to-body ratios will be referred to as "attractive proportioning," while chibi head-to-body ratios will be referred to as "chibi proportioning."

Chibi characters, which frequently appear in single panels, cutout frames, and multiple-panel manga have proportions that make them appear affable or endearing. However, chibi designs actually indicate that the designing artist was aware of proportioning and distilled the body's various components down to their essences as appropriate to the head-to-body ratio selected.

After lightly touching on the basic proportioning of an attractive character, this character will cover in comprehensive detail the fundamentals of selecting the head-to-body ratio through discussion of chibi character proportion sketching.
The Head-to-Body Ratio and Proportioning

This section covers the standard head-to-body ratios used for attractive proportioning and cute chibi proportioning.

Attractive Proportions: 1:8.5 to 1:5 Head-to-Body Ratios

1:8.5 Head-to-Body Ratio

Head and torso

Legs

1:8 Head-to-Body Ratio

Head and torso

Legs

1:7.5 Head-to-Body Ratio

Halfway mark on a 1:7 head-to-body ratio character

1:7 Head-to-Body Ratio

Half of full height

The distinguishing features of attractive proportioning are long legs. Therefore, the groin should be positioned either at or slightly above the halfway mark so that the legs make up half of the body's full height or longer.

1.8 reflects a model's build. The neck is long; the shoulders are broad, befitting an adult character. The face seen on the above character is suited toward realistically drawn characters.

To create the character above, the groin and waist were shifted higher along the body, thereby shortening the torso. The face is drawn in a manga-esque style, which suits this character. This character's legs are about one head's length longer than they should be, making her inappropriate for action scenes.

0.5 heads in length

To create a 1:7.5 character, draw a standard 1:7 proportioned character, and then add an extra 0.5 head's length to the legs. This creates a pleasingly proportioned, long-legged character.

0.5 heads in length

The above shows a character drawn with the groin positioned 0.5 head's length higher than on a standard 1:7 character, causing the torso to shorten. The result is a long-legged, charmingly designed character.
1:6.5 Head-to-Body Ratio

With this head-to-body ratio, the shoulders become narrow, and the torso shortens, generating a sweetly endearing atmosphere. Positioning the knees halfway along the knees makes the legs appear short.

1:6 Head-to-Body Ratio

In the above, the chest, waist, and groin have been raised, lengthening the legs. Positioning the knees higher along the legs and shortening the length from the knee down creates physically attractive proportioning.

1:5.5 Head-to-Body Ratio

The 1:5.5 proportioned character’s overall figure appears well balanced, even with the groin positioned halfway along her full height.

1:5 Head-to-Body Ratio

On a 1:5 character, positioning the groin halfway along the full height creates the appearance of a moderately long-legged figure.

Foot Size and Height

The feet should be about the same length as the head.

When standing on the tips of their toes, the legs become longer by approximately one head in length, making the full height taller.

The waist rises exactly the same height as the heels, and the character’s full height lengthens accordingly.

The same character appears to change in height depending on whether or not she is wearing heels. With the heels her legs become longer, causing the character’s overall proportioning to change as well.
Creating Variations for 1:5 Head-to-Body Ratio Characters

The proportioning of a 1:5 head-to-body ratio is easy to modify, and possible variations for characters drawn at a 1:5 ratio are endless. This head-to-body ratio also lends itself readily to manga characters and can be smoothly adapted to the target readership or to the setting of the given work of manga.

Standard Proportioning

This build is commonly found on dolls. The distinguishing features are pole-like arms and legs.

The arms, legs, and torso on this figure with attractive proportioning reflect that of a real human being.

Accentuating the curves creates a build suited to attractive female characters.

This build consists of understated curves and a trim silhouette, making ideal for a character in her early teens.

Lowering the groin’s position produces a long torso. This build produces a strong childlike atmosphere.

Standard Proportioning

This is the male version of the doll-like build. The musculature in the chest and other body parts is de-emphasized.

Accentuate the muscles and joints to create attractively proportioned male figures, like this.

This is the male version of the curvaceous female above. The figure’s exterior contours are accentuated with some muscle definition added.

Give male characters in their early teens slim torsos (especially the waists) and legs, like the one shown here.

Give male figures with long torsos an overall feeling of roundness in the trunk and legs, like the one shown here.

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Further Variations on Figures with the Same Head-to-Body Ratio and the Same Proportioning

Conceptions of what constitutes ideal beauty changes through time and from country to country. When Botticelli painted Birth of Venus, he gave Venus, the goddess of love, a 1:8 head-to-body ratio and proportions reflecting the 15th century's ideal beauty. However, if Botticelli had painted his work today, in the 21st century, would he have given her the same body? This page shows Venus drawn with same 1:8 head-to-body ratio and the same face, and with the waist and groin positioned as they are in the original but with a body more representative of the 21st century ideal.

Ideal Proportions of the 15th Century Beauty

- Thickish neck
- Sloped shoulders

Ideal Proportions of Today's 21st Century Beauty

- Slender neck

Squared shoulders: The skeletal structure and musculature of the ideal 21st century woman should be accentuated.

Stylization and abstraction may be used to produce completely different types of characters, even if they share the same head-to-body ratio. Differences in which aspects of the figure that are emphasized or stylized reflect differences in the tastes of the day.

Distinguishing Characters

Realistic  Manga-esque  Character used in advertising

First determining what to emphasize and what to use as the subject matter and then stylizing the subject matter will enable you, the artist, to draw a variety of distinctive characters even using a single set of proportions.

The neck, arms, waist, legs, and figure overall are plump, and the musculature is understated.

The entire figure, including the neck, arms, waist, and legs are approximately one-third slenderer than those of the ideal 15th century woman, while the musculature and skeletal structure are emphasized.
Drawing Clothing: Attractive Character Study

Drawing the Character Nude

While there is no need to draw the figure realistically, the following key points should still be carefully noted.

1:7 head-to-body ratio

Establishing the shoulders' angles is vital to giving the shoulders an attractive silhouette.

The areoles' position marks the bustline, a key point in establishing the underarms' positions and portraying hills and valleys in the chest's form.

The waistline functions as a guide when drawing the figure's actual waist or the waist of a skirt or pants.

The groin denotes the lowest point on the torso and its position affects the atmosphere projected by the figure overall.

The ankle constitutes a key point when the character is dressed in skirts and other garments that show off the legs.

First, sketch the figure nude and then draw the clothing over it.

Use an ellipse to draw the juncture where the shoulder meets the arm.

Rendering the chest using abstracted, geometric forms facilitates capturing it as a three-dimensional form.

The above shows the groin and the hips. To ensure that the legs project a shapely impression, even when hidden underneath a skirt, maintain awareness of where the groin is positioned and sketch the legs from the hips.

Drawing a curved line at the juncture where the ankle meets the foot helps to give the legs a sense of volume.

This shows the toes simplified and rendered as a single block.

Plan the wardrobe beforehand

- Cropped jacket with tailored sleeves
- T-shirt
- Low-rise miniskirt
- Cowboy boots
Drawing the Clothes

Ensure that you have clearly captured the individual garments' distinguishing features.

Although the T-shirt will ultimately cover the skirt's waist in the final image, it should still be included in the rough sketch.

Shading gives the jacket the illusion of volume.

The sleeves form a cylinder.

The cowboy boots have a roomy fit around the calves.

Use shading to give the boots' leather a sense of volume.

Final Image
Chibi Characters: 1:4 to 1:2 Head-to-Body Ratios

With cute, short legs, chibi characters are proportioned to look adorable. The legs should be stubby and comprise half or less of the body’s height.

**1:4 Head-to-Body Ratio**

**Standard Proportioning**
- Head and torso
- Waist
- Groin
- Legs

Position the groin approximately halfway along the figure’s full height.

**"Cute" Proportioning**
- Waist
- Groin

Raising the position of the waist while keeping the groin in the same place results in a character stylized as if she had been drawn at a 1:3 head-to-body ratio.

Drawing the character with sturdy legs gives him a distinctively masculine appearance. The longer legs mean that the boy is also taller than his girl counterpart.

These stylized versions still maintain the same standard proportioning. The body’s contours have been simplified and the hands and feet, enlarged.

**Long-legged Proportioning**
- Torso
- Groin
- Legs

Positioning the groin halfway along the character’s full height destroys the overall balance.

Dress the character in a skirt or pants.

**Long Torso Proportioning**
- Torso
- Groin
- Legs

In the above, the extremely short legs comprise a meager quarter of the figure’s full height.

This is the proportioning used with *dogu* figures.

These proportions work well with manga-style middle-aged male and female characters.

Remember to add a skirt and other feminine articles when drawing a regular female character.

*Dogu are earthenware figures from the Jomon Period (approximately 10,000 BC to 300 BC). Theories regarding their functions range from dolls to talismans, ritual votives, or funerary offerings.*
Raising the position of the waist while keeping the groin in the same place results in a character stylized as if she had been drawn at a 1:3 head-to-body ratio.

**Standard Proportioning**

The above and the figure to the right show how a character looks when the waist is centered on the torso.

Giving the character a slender torso and fleshing out the arms and legs in a realistic manner produces a trim, realistic-looking, mature female character.

**Long-legged Proportioning**

Characters with overly long legs look odd. Avoid making the torso less than one-quarter the character’s full height.

Positioning the groin only slightly above the standard halfway mark is sufficient for successfully creating the look of a long-legged character.

**Long Torso Proportioning**

Since this proportioning is intended for characters with short legs, try shifting the groin to slightly below the standard halfway mark so that the waist and groin comprise half of the torso’s full length.

Even characters with short legs are capable of dynamic motion.

Long legs diminish the distinctively chibi-esque look.
**1:2 Head-to-Body Ratio**

The same basic rules of adjusting the waist and groin's positions to modify the overall proportioning likewise apply to 1:2 head-to-body ratio characters. The length of the torso and legs combined equals that of one head. As a result, shifting the groin's position even slightly dramatically changes the overall body build.

**Standard Proportioning**

Make the torso and the legs approximately the same length.

This character was given a slender torso and pole-shaped arms and legs that taper at the extremities.

The lengths of the arms and legs changes according to the torso's length. However, the characters are still capable of dynamic movement, regardless of whether their limbs are long or short.

To create long-legged characters, raise the position of the groin. It is virtually impossible to include any hint of a waist on characters with this build.

To create characters with long torsos, lower the position of the groin. The larger torso requires representation of a waist.

**1:2.5 Head-to-Body Ratio**

Characters of this head-to-body ratio are styled similarly to a 1:3 character. To create a 1:2.5 character, draw a 1:2 character with a long torso and then lengthen the legs.

Ref. Fig.: 1:2 head-to-body ratio characters with long torsos.
Key Points in Modifying the Head-to-Body Ratio

Drawing the Head, Torso, and Legs as Three Separate Units

The number of units remains the same, regardless of the head-to-body ratio adopted. The difference in proportions occupied by the three units: the head, the torso, and the legs, reflects the differences in the head-to-body ratio.

The Groin as the Boundary between the Upper and Lower Bodies

1:3 head-to-body ratio

E.g. 1:6 head-to-body ratio requires six circles.

Center (axial) line

First determine the head-to-body ratio you intend to use and then use circles one-head in length to lay out the proportions.

After using the circle layout to draw the torso unit, add a line for the waist. This serves as a guide in adjusting the torso's contours.

The "taller" the head-to-body ratio makes the character appear (i.e. the more head-lengths used in the proportioning), the more oblong in shape the face will become.
Assorted Head-to-Body Ratios at a Glance

Unnatural (Artistic License-reflected) Head-to-Body Ratios

1:1

1:2

1:3

1:4

Actual Head-to-Body Ratios (Children)

Actual Head-to-Body Ratios

1:5

1:6

1:7
Chibi Character Proportioning
as the Basis of Head-to-Body Ratio Sketching

Chibi character design requires distilling proportional sketching down to its essence, provided that proportional balance has been achieved in the planned design. This section discusses studying chibi character sketching in order to master techniques in sketching, which form the basis of head-to-body ratio layout sketching.

Learning How to Sketch Characters Used in Marketing and Cutout Frames with Ultra-stylized Proportions: 1:2 Head-to-Body Ratio

Learning How to Sketch Delightful and Animated Characters for Use in Cutout Frames and Manga: 1:3 Head-to-Body Ratio

Learning How to Sketch Manga and Illustration Characters with Moderately Realistic Form and Movement: 1:4 Head-to-Body Ratio
What Is Meant by "Chibi Proportioning"?

Characters drawn at 1:2 to 1:4 head-to-body ratios typically have large heads and short legs. The steps to sketching a chibi character are essentially the same as those for sketching an attractively proportioned character: first the proportioning of the head, overall figure, and torso are established, and then the body is fleshed out. However, the simpler proportioning of a chibi character makes its body easier to capture. Make an effort to learn the basic proportioning of a chibi character by studying the sketching process.

**1:2 Head-to-Body Ratio**

Characters drawn at a 1:2 head-to-body ratio come either with roly-poly or itsy-bitsy twiggy bodies.

Roly-poly characters have pudgy bodies, arms, and legs.

Roly-poly characters look pudgy even in profile.

Itsy-bitsy, twiggy characters have slim and trim bodies, arms, and legs.

The body's width varies little whether viewed from the front or side.
1: 3 Head-to-Body Ratio

When sketching, use rounded forms for the arms and legs as well as the torso.

First, do three study sketches of the character from the front, side, and back to determine how high to draw the bow and how long to make the ponytail before launching into the actual drawing of the character.

The head, torso, and arm units are clearly defined in this character, and the proportions occupied by the body parts are sufficiently large enough to allow for shading. The addition of even simple shadows enhances the characters sense of three-dimensionality.
Use a slim character design for the limbs as well as the torso.

Use simple, pole-shaped arms and legs, including at the ankle, to achieve that adorableness distinctive to chibi characters.

While the addition of clothing creases is permissible with a 1:4 ratio, these characters can still be adequately portrayed without drawing much detail.
Drawing the Face: Sketching and Stylization

Chibi character faces are essentially the face of a child. When drawing a chibi character, stylize the eyes and hair in the same manner that you would when sketching a child’s face.

Proportioning a Childlike Face

The distinguishing feature of the child is that the portion of head not containing the face is larger than that occupied by the face. Giving the hair plenty of volume results in a larger head, which creates a childlike appearance.

Key Points in Transforming an Attractive Adult Face into a Chibi-proportioned Child’s Face

Key Characteristics of an Adult’s Face
Oblong face
Small eyes
Presence of a nose and nose bridge

Key Characteristics of a Child’s Face

- Children’s faces should be generally round in form.
- The eyes should be large.
- The nose and nose bridge should be minimized.

Sample Stylization and Abstraction

Original attractive adult character
This figure shows a shortened face with larger eyes. The bridge of the nose has also been shortened and simplified in form.

In the above, the face has been simplified and abstracted down to an ellipse. The eyes are dots, and the nose has been eliminated altogether. The overall face has been abstracted using simple contours.

Attractive adult faces and chibi bodies do not mix.
Characters with eyes abstracted to dots are frequently used with minimally rendered characters designed for book or magazine illustrations and characters used in product marketing.

The eyes' positions reflect the proportioning of a child's face (the eyes are positioned below the face's centerline).

**Family with Dot Eyes**

Simply modifying the hairstyle and eyebrows allows for the creation of an entire family of characters.

**Eyebrows as a Key Feature on Male Characters**

This unisex eyebrows could be used with either a male or female character. Thickening the eyebrows makes the character appear male at a glance. Enlarging the eyes and adding a tiny nose results in a boy drawn with chibi character proportions. Making the eyes smaller and giving the nose a bridge results in an attractive youth.

**Dots Used in Layouts to Represent the Eyes**

Use a circle-and-X layout to determine where to draw dots for the eyes. The eyes' positions establish in which direction the head is facing. Draw the eyes based on the dots' positions. Adjust the exterior contours and add the hair to finish.
Drawing the Full Figure: Sketching and Stylization

This section covers how to sketch a quick layout using chibi character proportions.

**Drawing a 1:2 Head-to-Body Ratio Character**

Start by drawing two circles of the same size to create a snowman.

**Drawing a Girl**

1. Draw a two-ball snowman.
2. Divide the bottom snowball into half.

Envision a character drawn at a 1:2 head-to-body ratio as starting out as a two-ball snowman.

A standard character sticks out of the snowman format from the waist down.

![1:2 head-to-body ratio character theater](image)

Draw guidelines for the torso and the legs.

- Head
- Torso
- Waist guideline
- Groin guideline
- Legs
**Drawing a Boy**

1. The steps from drawing the snowman up to this point remain the same as when drawing a girl.

2. Sketch the torso's layout and add circles for the joints. The torso should be wider than that used for the girl.

3. Give the character stout limbs and draw the face.

4. Final Image

5. Use simple geometric forms for the torso's layout, such as an ellipse, a rectangle or other oblong shape.

6. Draw layouts for the joints and sketch the arms and legs.

7. Flesh out the limbs and draw the hair.

8. Draw the clothes and fill in the other details.

Final Image

Giving the character short, roly-poly arms and legs generates a sweet, endearing atmosphere.
Portraying the Hands of 1:2 Head-to-Body Ratio Characters

This section covers how to stylize the hands of a 1:2 head-to-body ratio character. In contrast with real hands, the hands of these characters tend to have shorter and thicker digits, and typically not all of the fingers are individually rendered.

Sample fist of an attractive (tall) character
(Hands underneath those drawn within circles represent sample hands of attractively proportioned characters.)

Rock (Gripping)

Scissors

Paper (Open hand)

Lightly clenched hand

Hands covering the mouth

Hands carrying an object
Even Chibis Have Centerlines

Figures of all head-to-body ratios have centerlines. When facing forward, the head’s centerline and the body’s centerline form a single, straight line.

Bending the body or changing the direction faced causes the centerline to take on a "C" or "S" curve.

Maintaining awareness of the face and torso’s centerlines helps to draw the character in dynamic poses.

Changing the direction the head or body faces generates a movement with torsion.

When the head turns to the side, the centerline shifts to the side as well. Since the body seen above remains facing forward, the centerline does not change.

In the figure to the left, the head faces right while the body faces left.
Drawing a 1:3 Head-to-Body Ratio Character

Start by drawing three circles of the same size to create a snowman.

1. Draw a three-ball snowman.
2. Establish the positions of the waist and groin.
3. Position the waist approximately two-thirds from the circle’s top.

Envision this character seated within a two-ball snowman.

Draw the figure as if adding hands and feet to the original two-circle snowman.

Original two-circle snowman superimposed over a 1:3 ratio character

The above shows the completed body with its limbs.

1:3 head-to-body ratio character theater
Drawing a Girl

Create the impression of a girl by adding arms and legs to a torso that tapers slightly at the waist.

Sketch her costume's layout.

Clean up the contours to finish.

Drawing a Boy

Follow the same steps as when drawing a girl until determining the waist's position.

Use a rectangular shape for the boy's torso. The shoulders should form an almost completely straight line and should not slope.

Sketch layouts for the torso, joints, and limbs. At this stage feel free to modify the direction the head faces.

Draw the hair, the arms, and the legs. Add the clothes.

Clean up the contours to finish.
Portraying the Hands of 1:3 Head-to-Body Ratio Characters

This section covers how to stylize the hands of a 1:3 head-to-body ratio character. The hands of these characters tend to have rounder contours and thicker digits than real hands.

Sample fist of an attractively proportioned character.
(Hands underneath those drawn within circles represent sample hands of attractively proportioned characters.)

Rock (Gripping)

Scissors

Paper (Open hand)

Lightly clenched hand

Hands covering the mouth

Hands carrying an object
Portraying the Feet of 1:3 Head-to-Body Ratio Characters
Contrasted with the Feet of 1:5 Head-to-Body Ratio Characters

1:3 head-to-body ratio

- The sole's contour should not undulate dramatically.
- Use a clean, gently arcing line to define the top of the foot.
- Omit the toenails.
- The ankle should also be omitted.

Minimized heels are a key feature of characters drawn at a 1:3 head-to-body ratio. Give the character adorable feet, by making them small in overall appearance and by adding chubby, round fingers.

1:5 head-to-body ratio

- The heel and arch of the foot are clearly visible on the 1:5 head-to-body ratio character.
- Ankle
- Realistically proportioned look appropriate on 1:5 head-to-body ratio characters.

Draw 1:3 head-to-body ratio characters with cute, stylized feet.

When giving the viewer a glimpse of the sole, exaggerate the foot's size.

- Draw a simply rendered version of the foot's sole.
- The foot should not taper at the ankle.
- The foot should form a simple "V" shape.

The ball of the foot should touch the ground.

- The sole of the foot should reflect the angle and the direction of the kick.
- The heel is exaggerated.

The legs are stocky and stylized, allowing view of only the tips of the toes. There is hardly any unevenness in the feet's contours.

Both feet should have essentially the same silhouette.

The feet of the 1:5 character have complicated silhouettes that include the heel, the ankle, and the arch of the foot.

Inward curve at the ankle and then bulge of the bony joint are clearly visible on the 1:5 character's foot.

How the foot touches the ground dramatically affects the foot's shape.
Drawing a 1:4 Head-to-Body Ratio Character

Start by drawing four circles of the same size.

1. Stack four circles of the same size.

2. Draw an X for the face and circles for the joints. Plan to position the groin underneath the hip joints.

3. Halfway mark

- Head
- Torso
- Waist guideline
- Groin guideline
- Legs

Completed layout of the torso and limbs

Layouts for the joints may be drawn underneath the second circle. Adjust the groin's position while drawing the legs.

1:4 head-to-body ratio character theater
Drawing a Girl

4. Draw the arms and legs and add the face and hair.

5. Sketch the costume’s layout.

6. Adjust the contours and add in the details to finish.

Ref. Fig.: Starting with the same layout but dressing the figure in different clothes and thickening the eyebrows produces a boy character.

Drawing a Boy

For the boy, use larger circles for the shoulder joints and broaden the shoulders.

Differences in the eyebrows alone can distinguish the genders of 1:4 head-to-body ratio characters. Since the 1:4 ratio character’s proportioning matches that of a skinny child in his preteens or younger, this head-to-body ratio is well suited to works of manga where gender is not physically emphasized and relatively androgynous characters.

These torso layouts indicate the changes that must be made to distinguish a male from a female character. A difference in gender may be indicated by differences in torso width.

The above shows a layout with muscular shoulders to evoke a strongly masculine appearance.

Even with thin eyebrows, the body build still makes the character appear masculine.

Girls’ torsos tend to be slimmer (narrower).

Boys’ torsos tend to be broader.
Portraying the Hands of 1:4 Head-to-Body Ratio Characters

This section covers how to stylize the hands of a 1:4 head-to-body ratio character. While the length and proportioning of the fingers are relatively that of a real hand, the palm is relatively small. Use round forms for the joints and fingertips.

Sample fist of an attractive (tall) character (Hands underneath those drawn within circles represent sample hands of attractively proportioned characters.)

Rock (Gripping)

Scissors

Paper (Open hand)

Lightly clenched hand

Hands covering the mouth

Hands carrying an object
Tips in Head-to-Body Ratio Application

Examples of Common Ways Proportion Distinguishes Characters: Parents and Children

Different head-to-body ratios are often used to distinguish adult characters from child characters, as children and adults have different proportioning. Select the head-to-body ratio appropriate to the character.

Easy Methods of Application:
Height Adjustment

1:4 head-to-body ratio

1:3 head-to-body ratio

1:6-1:7 head-to-body ratio (1.6:5); homemaker

If both heads are drawn at the same size, a 1:4 head-to-body ratio character will be one head-length taller than a 1:3 character. The same applies to characters of taller head-to-body ratios as well.

The figure seen to the left is drawn at a 1:12 head-to-body ratio (a fashion plate figure). The head is small, and the figure is not suited either to use in manga or dynamic movement. However, it does allow focus on clothing owing to the body occupying a larger portion of the figure and is consequently frequently used for fashion plates, etc.

"Head-to-body ratio" refers to the use of the head as a unit of measurement to determine the figure’s full height.

Older sister: 1:4 head-to-body ratio; junior high school student

Younger brother: 1:3 head-to-body ratio; elementary school student

Mother: 1:6-1:7 head-to-body ratio (1.6:5); homemaker

The head-to-body ratio selected depends on the artist’s preferences. A 1:4 head-to-body ratio character might become an elementary school student, while a 1:5 ratio character might be a junior high schooler. Design your characters so the viewer will be able to distinguish between them at a glance.

If the heights are kept the same, then the “taller” the character’s head-to-body ratio, the smaller the head becomes.

In contrast, a figure drawn at a 1:3.5 head-to-body ratio as seen above has a sense of vibrancy. The face and pose attract the viewer’s attention more than the costume worn. Consequently, this head-to-body ratio is commonly used in manga and cutout frames.
Drawing the Clothes

This section covers how to sketch a *chibi* character, using an attractively proportioned character as the point of departure. The less the number of head-lengths comprising the full height, the greater the degree of simplification and abstraction.

### Jacket and Miniskirt

#### 1:8 Head-to-Body Ratio

The jacket’s open front constitutes a key design point on the character drawn at a 1:8 head-to-body ratio seen to the left. Consequently, the appearance of the figure underneath the clothing must first be established, using a nude sketch.

#### 1:4 Head-to-Body Ratio

The boots’ toes and overall form have been simplified.

#### 1:3 Head-to-Body Ratio

Key modification points: The creases seen on this figure have been simplified and the number of buttons, reduced compared to the original character.

#### 1:2 Head-to-Body Ratio

The torso is small, requiring the jacket’s collar to be small as well.

Key modification points: The number of creases has been reduced, and the buttons have been omitted altogether.

The boots could potentially end up looking like tall galoshes, so ensure that the toes are pointy.
**1:4 Head-to-Body Ratio**

1. When sketching the figure layout, be certain to establish the positions of the chest, the waist and the groin, and the elbow and knee joints.

2. Sketch layouts of the face and clothes.

**1:3 Head-to-Body Ratio**

1. Draw the body's layout. At this point you should also sketch layouts of the 1:3 head-to-body ratio character's distinctive arms and legs.

2. Draw the boots over the legs' layouts.

3. Use the knees as a guide when drawing the skirt's hem.

**1:2 Head-to-Body Ratio**

1. Body layout

2. Sketch the figure in a pose while adjusting the layout.

3. Add the clothes.

The above shows the front of the jacket of the original attractive character. Simple straight lines and curves were used to reproduce the jacket front on the *chibi*. 
1:8 Head-to-Body Ratio

Key modification point: The holes in the belt have been omitted.

The shorter torso means that the side of her tummy is no longer visible. Her purse was enlarged to turn it into a visual accent.

The long legs of the 1:8 head-to-body ratio make the character difficult to balance visually without sketching the entire figure, including those parts obscured in the final image.

1:4 Head-to-Body Ratio

1:3 Head-to-Body Ratio

Key modification points: The holes in the belt have been enlarged, while the number of holes has been reduced. The kerchief knot at the back of her head has been enlarged, and the purse's size has been stylistically adjusted (i.e. shrunken) to match the chibi character.

1:2 Head-to-Body Ratio

Key modification points: The holes in the belt have been eliminated. Note that modifying the character's build affects how the body frames the purse.
1:4 Head-to-Body Ratio

Use circles to denote the joints’ layouts while sketching the body’s contours.

1:3 Head-to-Body Ratio

Establish in which directions the head and the body face when drawing the contour layout and sketch the arms and legs using rough contours.

1:2 Head-to-Body Ratio

Adjust the contours and sketch the purse’s layout.

Even though the circles used for the initial layout were sketched roughly, the end result was still an accurately proportioned 1:4 character. Sketching a character does not mean drafting. There is no need to draw perfect circles for the layout.

Use a rectangle for the torso when sketching the contour layout.

Match the purse stylistically to the figure’s proportioning. The sandals’ heels cause the character to gain a certain degree of height.
Long skirts have the tendency to make the torso look long, so the head-to-body ratio was dropped from 1:8 to 1:7.5 to shorten the torso. The clothing covers a tremendous portion of the figure, making an accurate preliminary nude sketch vital.

Key modification points: The shorter torso accentuates the figure's triangular silhouette.

Key modification points: The bow has changed positions. The proportionally larger bow heightens the character's sweet and adorable appearance.

Key modification points: The bow on her chest has been made smaller, while the skirt's pleats have been accentuated. The way her hair hangs has been adjusted to suit her shorter arms.
1:4 Head-to-Body Ratio

Draw the figure in its entirety when sketching the contour layout.

Draw knee and ankle guidelines in order to determine where to position the skirt’s hem.

The bow is centered on the torso below the chest. It is important that the preliminary sketch clearly indicate where the body’s various parts are located.

The hem falls to around the ankle.

1:3 Head-to-Body Ratio

As this figure is composed from a front view, a clearly defined centerline (axial line) should be added at the contour layout stage.

The above figure includes layouts of the hair and clothing. Establish where the skirt hem’s position at this stage.

1:2 Head-to-Body Ratio

The 1:2 character’s proportionally shortened arms are physically incapable of being clasped behind her head. Thus, the figure’s pose should be adjusted as seen above.

The hair has been modified to make it fall over the arms.
1:8 Head-to-Body Ratio

Key modification points: The necktie has been widened, while the number of jacket buttons have been reduced. Raising the waist creates the appearance of long legs, retaining a sense of the original character’s handsome build.

1:4 Head-to-Body Ratio

Key modification points: The bunched creases at the bent elbow have been reduced, and the trousers’ exterior contours have been straightened. The proportionally larger feet give the figure visual stability.

Tapering the trousers’ legs on this 1:8 head-to-body ratio character makes the legs appear long, even though the groin is positioned at the standard halfway mark.

1:3 Head-to-Body Ratio

Key modification points: Bunching at the elbow has been omitted, while the creases at the jacket’s side have been simplified and exaggerated. The buttons have been eliminated entirely. Simplifying and emphasizing the jacket’s open front set the pose.
1:4 Head-to-Body Ratio

Using the four-circle layout as a guide, give the figure's silhouette form.

Draw the belt along the waist guideline and add the costume's contours.

Draw creases as if radiating from a single point.

Use a curved contour to draw the corner of the open jacket rolling up in the distinctive manner illustrated.

The trouser legs bulge at the ankles.

1:3 Head-to-Body Ratio

Draw a centerline bisecting the groin.

Draw the clothing. Any ripples or crinkles occurring around the trouser cuffs should be drawn at this point.

1:2 Head-to-Body Ratio

The hand cramped in the pocket constitutes a key composition point. Show the elbow jutting out from the layout stage.

Draw the bottom of the jacket, using the hand shoved in the pocket as a guide.
Casual Wear

1:7.5 Head-to-Body Ratio

1:4 Head-to-Body Ratio

1:3 Head-to-Body Ratio

Key modification points: To recreate this 1:3 version, enlarge the collar and the epaulets to exaggerate them, and simplify the show laces, the rip at the knee, the bandage on the cheek, the goggles, and other identifying details.

1:2 Head-to-Body Ratio

Key modification points: The collar and epaulets have been enlarged. Since the posture is now held more erect than the original, the foot stepping forward has been made larger to emphasize the act of walking.

The selection of a 1:7.5 over a 1:8 head-to-body ratio results in a character that appears more convincingly like a youth than a young man in a suit.

Key modification points: Modifying the character's actual build results in his gait being transformed from a brisk walk to a self-assured stride.
1:4 Head-to-Body Ratio

Use the X across the face as a guide when drawing the goggles.

Exaggerate distinguishing features, such as the collar and epaulets.

The less the number of head-lengths used for the character's height, the more complicated details, such as the soles of the shoes or their laces, should be either simplified or omitted.

When drawing a contour layout of a character in motion, sketch a manikin-style layout, indicating the joints' locations and then adjust the pose.

In response to the modified posture, show more of the sole of the shoe for added emphasis.

1:3 Head-to-Body Ratio

Angle the layout to create the illusion of the character slightly leaning forward.

The centerline serves to draw attention that the figure is standing perpendicular to the ground plane.

After having roughly sketched in identifying features, such as the collar, the goggles, the rip at the knee, etc., continue to develop the composition.

1:2 Head-to-Body Ratio

At this body size, the collar, epaulets, and other identifying features are difficult to exaggerate proportionally, so emphasize the act of walking instead.

No changes have been made to the goggles and clothing's design.
Stylize and abstract the shoes to match the sketch character's foot shape. The less the number of head-lengths used to draw the character, the more details should be left out.

**School Penny Loafers**

1:4 Head-to-Body Ratio  1:3 Head-to-Body Ratio  1:2 Head-to-Body Ratio

- Penny loafers worn by a 1:4 character
- Penny loafers worn by an attractive, "tall" character
- Penny loafers worn by a 1:3 character
- Penny loafers worn by a 1:2 character

**Sneakers**

- Sneakers worn by a 1:4 character
- Sneakers worn by an attractive, "tall" character
- Sneakers worn by a 1:3 character
- Sneakers worn by a 1:2 character

**High-heeled pumps**

- Pumps worn by a 1:4 character
- Pumps worn by an attractive, "tall" character
- Pumps worn by a 1:3 character
- Pumps worn by a 1:2 character
Selecting the Head-to-Body Ratio

Artists accustomed to drawing characters unconsciously and consistently use head-to-body ratios of their preference. Make an effort to discover which head-to-body ratios suit your own tastes.

1. The hair adds extra height to the head, so be sure to draw a horizontal guideline touching the top of the head minus the hair.

2. Draw a guideline at the bottommost point of the jaw.

3. Break down the character's total height into units of one head-length.

   - Head-length: 1.8 cm (approx. 23/32")
   - Full height: 13.7 cm (approx. 5 2/5")
   - $13.7 \div 1.8 = 7.61$
   - This character has a head-to-body ratio of 1:7.6. This may be rounded off to 1:7.5.

4. Draw horizontal lines at intervals of one head-length for the figure's full height.

   - Draw a horizontal line on the shoes using the heel as a guide.

Rounding off the Head-to-Body Ratio

- 1:1.6 becomes 1:1.5.
- 1:3.3 becomes 1:3.5.
- 1:4.2 becomes 1:4.

Often characters will be drawn at irregular head-to-body ratios, like 1:2.3 or 1:7.2. Try to simplify the head-to-body ratio, so that a 1:2.3 would become a 1:2.5 or a 1:7.2 would become a 1:7, etc.
Da Vinci's Proportions

Leonardo da Vinci’s *Vitruvian Man*, which shows a human figure circumscribed inside a circle and a square is an illustration of human proportions. This section turns the *Vitruvian Man* into a *manga* character.

Leonardo da Vinci drew *Vitruvian Man* (a.k.a. *Canon of Proportions and Proportions of Man*) during the late 15th century. Vitruvius, after whom da Vinci’s study of the human proportions was named, was a first century BC ancient Roman architect. Da Vinci drew Vitruvian Man according to the human proportions described by Vitruvius in *De Architectura*, a treatise on architecture in which he wrote that a man could be circumscribed within a circle and a square. The *Vitruvian Man* presently appears on the Italian 1 Euro coin. (In the collection of the Academy of Fine Arts, Venice)

As with the 1:5 character, the feet of the 1:4 character still touch the circle, but the fingers do not reach the square. On the contrary, the distance between the fingers and the square’s perimeter has widened. As the number of head-lengths comprising the character’s total height lessens, the shorter the arms should be drawn to achieve visual balance.

The fingers lie outside of the circumference.

The fingers of the arms extended out straight to the side touch the square’s perimeter.

Contrasted with a 1:5 Head-to-Body Ratio Character

Contrasted with a 1:4 Head-to-Body Ratio Character

This figure shows a 1:4 character with the head and torso made wider. The arms and legs also became wider; however, they correspond proportionally to da Vinci’s *Vitruvian Man*.

This illustration of the 1:4 character to the left with her arms hanging to her sides shows that while she might proportionally match Vitruvius’s description, her arms appear bizarrely long.

The feet touch the circumference.
Conclusion:
The law of *manga* character proportioning states that short arms result in a visually balanced character when the character is proportioned to be short.

Ref. Fig.: A 1:4 head-to-body ratio drawn with arms long enough to reach the square’s borders

Overly long arms result in awkward proportioning.

The above shows the head of a 1:8 head-to-body ratio character paired with shrunken and modified torsos on two 1:2 bodies of different builds.

The distances from the square’s borders to the hands increase even further.

1:2 Head-to-Body Ratio
Unless the arms' lengths are doubled, the hands will not be able to reach the square’s borders.
Proportional Sketching from Low and High Angles

Figures viewed from above or below are drawn in perspective, which generates visual impact.

Low Angle Compositions

The figures on this page were composed as if viewed from below.

Viewing a standing figure from a seated position creates a low angle composition in the mind's eye.

Draw the figure as if narrowing toward the top.

Waist and knee guidelines take an upward arcing curve.

1:6.5 head-to-body ratio

1:3 head-to-body ratio

1:2 head-to-body ratio

Draw a simple solid form to capture the general form.

Use an angle like this when showing a character floating in space or when standing over a glass panel, etc.

Viewed from underneath
High Angle Compositions

The figures on this page were composed as if viewed from above.

The head becomes larger in a high angle composition.

Looking down on a figure creates a low angle composition in the mind's eye.

The top lid of a can becomes visible when viewed from a high angle.

Model diagrams

1:6.5 head-to-body ratio
1:3 head-to-body ratio
1:2 head-to-body ratio
1:3 head-to-body ratio

From directly overhead, the head comprises almost all of what can be seen.

For a character with attractive proportions, some of the arms, legs, and torso are visible.

For a 1:3 head-to-body ratio character, some of the arms and legs are visible.

For a 1:2 head-to-body ratio character, the arms and legs are scarcely visible.

High Angles within Level Compositions

Eye level
Below eye level

In a standard standing pose, any body part beneath the face when viewed becomes composed from a high angle.

As a result, guidelines for the waist and skirt hem describe downward arcing curves.

Parts of an object appear increasingly from a low angle and curves gradually more dramatic as the eye travels down the given object.
High and Low Angles

The chin’s underside becomes visible from a low angle, while the top of the head comes more into view from a high angle. Pay careful attention to the eyes’ positions when sketching the character.

**Low Angles**  
Draw heads viewed from a low angle.

Front view of a standard character

The undersides of the chin and the nose become visible from a low angle. The eyes take on crescent-shaped outlines.

Abstraction should be echoed throughout the entire character’s design.

The eyes retain their shape but shift high of center when viewed from a low angle. The undersides of the mouth and chin come more into view.

Stylization such as seen in this character may be used with 1.2 to 1.6 head-to-body ratios.

The portion of the head above the forehead disappears from view from a low angle. The undersides of the mouth and chin come more into view.

Moderate stylization such as seen in this character may be used with 1.3 head-to-body ratios and greater.

Include the bottom surface of the nose even if the nose is small and abstracted.
High Angles: Compose the head from a high angle when the character is looking down.

The shape of the nose changes, and the nostrils are no longer visible.

1:2 head-to-body ratio

1:3 head-to-body ratio

1:4 head-to-body ratio
Putting Low and High Angles to Practice

First draw the composition from a level view before composing from a low or high angle.

Pose 1

Low Angle: Viewed from the Lower Right

The elbow is hidden behind the torso.

The girl is looking down in the original composition. Consequently, the underside of the chin is hardly visible in the low angle composition as well.

The head and body form a sideways "V".

The low angle accentuates the swell of the breasts.

The inside of the blouse is visible.

The feet shift close to the picture plane in the low angle version, requiring that they be rendered in more careful detail than in the original composition. Carefully executing those parts close to the picture plane in a low angle composition gives the character a sense of presence and makes her more convincing.

From Sketching Manga-Style Vol. 1; page 150; “The ABCs of Drawing Clothes”
Using Attractive Characters as a Basis for Chibi Character Designs

This section covers designing a chibi based on this original character.

Figures depicted within the circles show parts of the original attractive character.

For the chibi, the sense that the character’s head is turned toward the picture plane has been emphasized.

Refer to the hand and sleeve on the original character when determining their angles on the chibi.

Bunching and creases around the shoulder have been omitted.

The sleeve cuff has been simplified, and the hands and fingers have been shortened and thickened to look stylistically more like those of a chibi.

Sleeve cuff

When drawing a chibi, reduce the amount of creases and bunching in the fabric by around 1/3 to 1/5.

Sleeve cuff
Converting to a Low Angle Composition: Low, Left Angle

When the torso is composed in profile, showing where the shoulder attaches to the torso gives the torso a sense of volume.

The head faces the left.

In this composition, the use of a straight line from this low angle perspective causes the stomach to appear taut, giving the character an attractive build. If an upward curve were used to describe the pants' waist, the belly would appear to stick out.

The low angle causes the waist guideline to take on an upward curve.

The left arm is turned toward the picture plane.

In the original composition, the knees are drawn close together indicating that the legs are actually closer together than they appear in the low angle composition. However, this is not a technically drafted drawing, so artistic license was used to draw the legs further apart, thereby heightening the low angle composition's impact.

The head is almost perfectly turned in profile, so one of the eyes was omitted from the chibi version of the low angle composition.
Converting to a High Angle Composition: High, Left Angle

Use lines that give the figure a sense of volume.

Use an ellipse to draw the base of the neck.
The clavicle emphasizes the shoulders' upper surfaces.

This contour follows the curve of the neck.

The blouse seam is effective for illustrating the upper surface of the shoulder.

Centerline

This sideline gives the hip a sense of volume.

The blouse's hem curls up, describing an arc.

The angles of the arms and positions of the hands and knees (i.e. how the legs are held) become clarified when viewed from overhead.

Simplify the blouse's open collar and chest contours when drawing the *chibi* version.
Converting to a High Angle Composition: Moderately High, Right Angle

Draw the centerline as an "S" curve.

Draw a downward arcing curve underneath the chest and at the waist to capture the body as a solid.

Because this is not a dramatic, bird's-eye view, the body appears long.

The cuff follows the wrist's curved surface.

This angle makes characters with smaller head-to-body ratios appear endearing.
Draw the blouse collar as if wrapping around the neck.

The pocket curves, creating a sense of a round buttock.

The pants fit snugly against the waist, allowing a clear sense of the posterior's form.

From the front, these guidelines appear akin to seams connecting body parts.
Converting to a Low Angle
Composition: Viewing from Below

The torso is viewed almost straight on from this angle, which emphasizes torsion in the neck and waist, resulting in a dynamic composition.
Converting to a Low Angle
Composition: Low, Left Angle

The above is composed from an angle that brings the face clearly into view. The torso shifts to face sideways. Giving a clear view of the face creates a feeling of high drama.
Converting to a High Angle Composition: Left, High Angle

While the face has shifted away from view, the act of leaning forward, a sense of depth, and the billowing of the jacket have become emphasized. This is an effective composition for creating a heightened sense of speed.

Converting to a High Angle Composition: Rear, High Angle

The face and gun in the above have become obscured from view. However, the load-bearing leg is now clearly visible, heightening the sense of physical force, thereby emphasizing dynamism over speed.
This page shows several studies of the pose, examining from a variety of angles the arc of the torso, the directions and angles of the head, arms, and legs, and various other aspects of the original attractive pose.

This study shows the pose from a moderately low angle. The arms' angles have to be established through trial and error.

This study was drawn with the intention of clarifying the pose of the original composition while giving it form from a low angle.
Rear, High Angle Study, Overhead Study, Etc.

Key poses may either look impressive depending on the angle or may be effective only from one specific angle. The studies on these pages demonstrate that same angles do not work well with the pose in the original composition.

This study shows the character from a rear, high angle, clarifying her posture, the way the legs are spread, and how the arms are held.

As the character is looking up, only the underside of her chin is visible.

This knee layout circle serves more as a guide for the leg’s girth than to indicate the joint’s size. From this angle, the left and right legs share virtually the same girth.

This ultimate low angle shows the figure from directly underneath. Poses that are dynamic from directly above are still dynamic from directly below. Note how circles were used in this study to mark where the legs meet the hips, the knees, and other joints.
While the motion of the original composition is lost from this angle, it does create a dramatic composition.

Angles that accentuate the buttocks work effectively with poses where the posterior juts out.
La Maja Desnuda, one of Goya's most recognized works, is commonly used as an example of a posed nude woman. With assorted nude images, glossy centerfolds and similar images saturating today's media, viewing Goya's masterpiece as a small, black-and-white reproduction makes it seem flat, while the pose strikes us as clichéd. However, if we attempt to draw or paint it ourselves, we discover meticulously calculated curved contours artfully reflecting the supple flesh, masterful technique used to portray three-dimensionality within a simple pose, and evidence of other sophisticated technical skill and portrayal so that we are overwhelmed by this ultimate expression of physical feminine beauty.

These next few pages show Goya's nude from a variety of comprehensible angles.

La Maja Desnuda ("The Nude Maja"; ca. 1797-1800) by Francisco de Goya (In the collection of the Museo del Prado)

This sketch shows the nude woman viewed from a low angle around her knees. The portrayal of the knees contrasts with the body's suppleness.
This moderately high, left angle composition draws attention to the nude woman's gentle, feminine curves.

Retaining the Ambiance of the Face

The drawing below reflects the distinctive characteristics of the position of the bangs, the eyes, and the bridge of the nose.
This angle from the right side offers view of the contour extending from the back to the posterior, which is not visible in the original Goya painting. The form of this contour can be inferred from the chest and belly’s contours, which are visible in the original. The undulating exterior contours were carefully rendered, while maintaining awareness of the voluptuous, soft flesh.
Chapter 3

Stylization for Use in *Manga*

The artist conveys the pleasure in a work of *manga* to the reader by exaggerating the characters' actions and emotions. A movement or facial expression that is implausible for a real human being merely constitutes just one of many common performances for a *manga* character.

Yet, often what the artist considers an "exaggeration" when drawing does not appear to be an exaggeration at all by the reader. In actuality, there are aspects of exaggerated portrayal or, in other words, aspects of full-on stylized portrayal of a character that are difficult to learn solely from drawing a standard, "attractive" character.

The essentials of extreme character stylization may be learned through drawing super-deformed *chibi* characters in action and through *chibi* character portrayal, given that *chibis* are in actual fact characters drawn using stylized proportions. Mastering the stylization of *chibi* character action and emotion will also significantly improve your standard "attractive" character portrayal.

This chapter covers stylized portrayal, focusing on *chibi* characters.
Three Elements in Portraying Motion

1. The full figure should be divided into three units: the head, the torso, and the legs.
2. Care should be taken in positioning the waist and the groin.
3. Awareness should be maintained of the posture and direction in which the body leans.

Posture
The spine is the key to establishing in which direction the body leans.

Waist
The waist’s position shows torsion in the body and gives the figure proportional balance.

Groin
The groin’s position establishes where the legs connect to the torso the torso’s length.

To establish the posture, when drawing the layout, imagine marshmallows on a tilted stick.
Steps in Drawing a Character Running

1:2 Head-to-Body Ratio

Posture (Direction in which the body leans)

Sketch the layout. Reinforce the shapes of the eyes, arms, and legs. Establish the waist’s position and add the clothing. Final image

1:3 Head-to-Body Ratio

Determine the posture and sketch the layout.

Waist

The groin’s position constitutes the guideline for the bottommost point of the torso. Final image

1:4 Head-to-Body Ratio

Waist

Pelvis (Hips)

Groin

Determine the posture and sketch the layout. Mark the pelvis with a circle when establishing the groin’s position. Use the pelvis layout (i.e. circle) as a guide to draw the legs. Draw the costume over the figure. Final image
Drawing Common Actions

Walking (Front View)

Sketching the Body

Draw stylized characters in motion, maintaining the identifying characteristics of that motion as demonstrated in attractively proportioned characters, whose movements are the closest to those of real people.

The basics of drawing a character in motion are the same as drawing a figure. Establish where the waist and groin should be positioned based on the head-to-body ratio and then complete the drawing.

1:7 Head-to-Body Ratio

The sole of the shoe is visible.

1:2 Head-to-Body Ratio

Draw the arms and legs in contraposition. The right arm and forward extending left leg constitute key points in the figure above.

1:3 Head-to-Body Ratio

1:4 Head-to-Body Ratio

Drawing the Clothes

First sketch the character as a nude or dressed in a leotard and then draw over that any clothes you prefer.

1:2 Head-to-Body Ratio

1:3 Head-to-Body Ratio

1:4 Head-to-Body Ratio
Stylization Starts with the Layout

1:7 Head-to-Body Ratio

1:3 Head-to-Body Ratio

1:2 Head-to-Body Ratio

1:4 Head-to-Body Ratio

The final images shown below reflect the posture and appearance of the limbs captured at the layout stage above. Stylization gives your characters' movements sparkle and vitality, so do not feel that you have to reproduce faithfully what you see on this page.

The 1:2 head-to-body ratio figure is walking erect. Simple curved lines have been used to render the subtly angled arms and legs.

This 1:3 head-to-body ratio figure leans forward slightly. The front foot extends forward in an exaggerated manner.

The 1:4 head-to-body ratio figure shares virtually the same posture as that of the original. However, bending in the arms and legs has been exaggerated.

1:2 Head-to-Body Ratio

1:3 Head-to-Body Ratio

1:4 Head-to-Body Ratio

Drawing a character with chibi proportioning requires stylization. When sketching the initial layout, ensure that it reflects the distinguishing features of the original (i.e. attractively proportioned) character. When you sketch the layout, you will find that stylization allows your own artistic style to stand out in the chibi's posture and limb proportioning.
Running (Front View)

1:7 Head-to-Body Ratio

The centerline drawn through the head and body forms a sideways "V".

Shifting the direction of the centerline as it moves from the head to the body generates a sense of movement. This is a particularly effective technique to use with *chibi* characters, who have small torsos.

1:3 Head-to-Body Ratio

In the model pictured above, the groin acts as a boundary where torsion shifts directions from the upper to lower body.

Draw the head, torso, and limbs in contraposition to generate a sense of running.

Note that while this figure wears an entirely new outfit, her arms and legs still move in the same manner, and her hair still falls in the same manner as the original.

1:2 Head-to-Body Ratio

The layout adheres to the original model.

This figure sketch reflects the proportions of a 1:4 head-to-body ratio.

The 1:4 ratio version shown here displays a larger volume of hair than the original. The accentuated hair underscores the figure's overall adorable appearance.

While this character shares the same figure design as the original, the face, hairstyle, costume, and shoes were changed to create a new, original character.

Dressed in a leotard

Dressed in the same costume as the model
1:2 Head-to-Body Ratio

Try drawing two marshmallows on a tilted stick to create a forward leaning posture.

Final image

Figure Sketch

This line defines the bottommost point of the torso where it connects to the legs.

1:7 Head-to-Body Ratio

Add layouts for the arms and legs to the body layout.

This shows the figure leaning at a 45° angle. Having the figure lean forward generates a sense of speed.

1:3 Head-to-Body Ratio

Use the proportions for a 1:3 ratio when sketching the full figure layout.

Waist guideline

Draw the legs using the line denoting the lowermost point of the torso as a guide.

1:4 Head-to-Body Ratio

This sketch shows the body drawn in units.

Forward leaning figure

Use waist guideline to determine the belt’s position.

When drawing the full figure layout, pay attention to where you position the elbows and knees in order to proportion the arms and legs.
Looking Back (Full Figure)

1:7 Head-to-Body Ratio

The positioning of the feet and angle of composition have been modified to create the above. A high angle would cause these short legs to disappear from view. Therefore, to retain the poses of the arms and legs seen in the original when drawing your own character, shift the angle of composition.

1:2 Head-to-Body Ratio

To reproduce the above, simplify the positioning of the feet and angle of composition.

1:3 Head-to-Body Ratio

Posture (Angle of tilt)

Shoulders
Waist
Groin
Knees
Feet

When using a difficult angle of composition, such as a moderate high angle, draw guidelines for the shoulders, waist, groin, and feet as well as for the posture.

1:4 Head-to-Body Ratio

The trick to making the figure appear stably balanced is to draw the shoulders, waist, groin, and feet guidelines parallel to each other.

1:2 Head-to-Body Ratio

Tilting the head creates a sense of movement.

1:4 Head-to-Body Ratio

As with the 1:3 ratio figure, draw a layout and then flesh out the figure.
Looking Back (Bust Close-up)

1:7 Head-to-Body Ratio

1:2 Head-to-Body Ratio

The head-to-body ratio determines the figure's proportioning. Therefore, a layout of the character's full figure should be drawn initially even to produce just a bust close-up. This is because the width of the neck and shoulders alone suggest the actual head-to-body ratio to the viewer.

Draw the body from the shoulders down in a pose as needed.

1:3 Head-to-Body Ratio

Posture (Angle of tilt)

Draw the spine guideline at an angle to achieve a satisfying posture.

Draw the top of the neck and the load-bearing foot along the centerline.

This creates the illusion of the character standing while glancing back over her shoulder.

1:4 Head-to-Body Ratio

These images capture the center of gravity in the process of shifting. The character appears to be glancing over her shoulder while walking.
Manga Stylization to Portray Actions

This section covers the basic stylization of common action poses that may be applied to almost any type of manga.

Five Common Stylized Postures

The root of action portrayal lies in evoking a sense of speed, and the following five simple postures allow you to distinguish between difference rates of speed.

- Leaning Back
- Erect
- Leaning Forward
- Leaning Forward Dramatically
- Level with the Ground Plane

Adding the Arms and Legs (Running)

- Slow
- Average
- Fast
- Faster
- Full tilt or at a frantic pace

Jumping

Being conscious of the different postures will allow you to show characters jumping in a variety of manners appropriate to the situation.

- Leaning forward dramatically portrays a high-paced, flash moment where a character evades an obstacle.
- Leaning back suggests a character hurtling forward with speed.
- An erect pose suggests less force. This figure appears to be jumping over an obstacle.
- Leaning forward again suggests a character jumping with speed. Adjust the flow of the hair and positions of the limbs to suggest a character descending or leaping down.
- A level posture suggests a floating jump.
Running: Five Postures

Leaning back suggests a slow pace, while the further forward a figure leans, the faster it seems to be moving.

Profile View

When drawing a character leaning back, lower the groin's position.

To make the figure appear level to the ground plane, draw the body leaning forward to approximately the level of the groin.

Front View

Narrow the shoulders and draw the torso from a moderately low angle.

The further forward the figure leans; the more the torso should be foreshortened.

Draw the figure leaning forward to approximately the level of the groin.

3/4 View

Draw the body arcing back.

Draw the axial (center) lines at angles to capture the appropriate posture.
Rear, 3/4 View

Use the spine to establish the posture.

Rear View

Use the waist guideline to establish the posture.

When leaning back, the waist describes a downward curve.

When erect, the waist follows a straight line.

When leaning forward, the waist follows an upward curve.

Draw the figure maintaining awareness of how the spine would appear, even if the back will not be visible in the final image.

When leaning forward dramatically, the waist becomes hidden behind the posterior, and the posterior's contour then becomes a substitute for the waist.

Changing the Positions of the Head, Arms, and Legs When Running

Looking down

Looking up

Looking back

Even though the posture, arms, and legs remain the same, in the figures seen here, shifting the direction in which the head faces allowed for the portrayal of a variety of situations.

In the figures to the right, the posture and direction in which the head faces remain the same, but the altered arm and leg positions produce completely different atmospheres.

The way the hand is held also reflects the character's emotional state.
Jumping: Five Postures

Leaning back creates the illusion of moving in an upward or forward direction, while leaning forward suggests moving in a directly vertical rather than onward direction, with more dramatic leaning heightening the effect.

Profile View

Arching the leg suggests the direction of motion and speed.

The greater the body’s forward incline, the more the arms swing back.

Front View

Adding a shadow underneath the figure creates the illusion that she is airborne.

3/4 View

Extending a leg in a downward direction suggests that the character is leaping down from directly above.

Shifting the same figure so that the extended foot points forward creates the illusion that she is moving in a horizontal direction.

An erect jumping figure appears the same as an erect running, so add a shadow underneath to create the illusion that the character is suspended in air.
Landing: Five Postures

Leaning back suggests nimbleness and buoyancy, while leaning forward portrays the force of impact or speed (i.e. elevation) of the leap.

Profile View

- Leaning Back
- Erect
- Leaning Forward

Raising one leg emphasizes the sense of light nimbleness.

Drawing both feet on the ground generates a sense of weight.

Use a dramatically leaning forward posture to portray a character kneeling on one leg.

The level pose produces a character striking an unusual pose when landing on the ground.

Front View

- Large distance
- Short distance

The greater the distance between the arm and the torso, the more relaxed the character appears.

In the above, the arms separate just barely from the torso.

Her hand just scarcely grazes the ground with her fingers.

With this posture, the arms are positioned a shoulder-width apart.

3/4 View

The leg touching the ground is extended.

The legs bend slightly at the knees.
Using the Legs' Positions to Suggest Directionality

The position of a single leg suggests the direction of propulsion.

Example: Leaning forward

One knee shifted forward suggests descending to the ground from directly above.

One leg swung back suggests leaping forward from a rearward direction to touch the ground.

Vertical effect lines

Arced effect lines

Descending from above

Leaping forward from behind.
Stylized facial expressions and movements are essential to capturing characters in moments of ordinary, unconscious acts.

**Yawning** Draw a large, gaping mouth.

1:4 Head-to-Body Ratio

Showing a character yawning with a downcast gaze makes her look sweet and endearing.

1:3 Head-to-Body Ratio

At the beginning and end of a yawn, we tend to assume an ordinary posture.

1:2 Head-to-Body Ratio

Have the mouth occupy more than half of the head.

We tend to turn our faces upward during a yawn’s climax.

Here, the mouth is exaggerated such that it extends beyond the head’s exterior contours. The mouth’s interior has been simplified.

Establish the mouth’s size at the layout stage in order to gain a concrete idea of how the final image should appear.

From a high angle, the circles included in the yawning figure’s layout grow smaller the further down the eye travels.

When a character is yawning broadly, make the face appear straining. To make the character look cute, omit drawing the mouth’s interior.
Sneezing causes the entire body to tense unconsciously. When sneezing, the body tends to assume characteristic poses, such as the elbows jut out, the hands curl into fists, etc. The face does not smile.

1:4 Head-to-Body Ratio

The entire body becomes involved in the act of sneezing, so show movement in the hair and skirt hem even if the character is standing.

The layout above is actually the act of leaping down. However, it also lends itself to portraying a sneezing fit suddenly striking a character while walking along, etc.

1:2 Head-to-Body Ratio

The above shows the mouth distorted to exaggerate the "ah!" part of the sneeze. Show the mouth widening exaggeratedly to the sides.

This figure shows the mouth distorted to exaggerate the "choo!" part of the sneeze. The breath blows forcefully from the mouth, so show the mouth rounding exaggeratedly as if pronouncing the sound "oo".

1:3 Head-to-Body Ratio

The above portrays the moment that a sneeze blows the mask off the character's face. The composition was intended to make the sneeze appear so forceful that it might even blow the character, herself away, so the figure was drawn forming a large "U".

Drawing an arcing back and arms jutting out portrays the character's feelings of hostility at being stricken by a sneeze. This is effective for portraying a growing sense of desperation in the face of an unstoppable sneeze.
This act may be applied to a range of situations from when a character simply feels itchy to throwing a tantrum.

Note that the hand's fingers are not clenched into a fist. Show the fingers buried halfway into the hair.

On a character drawn at a 1:2 head-to-body ratio, the hand is able to reach no further than the forehead.

These circles functioned as layouts for determining the legs' lengths from the knee to the foot.

The above shows a girl who appears to be holding her head. The effect lines and sound effects convey movement and itchiness.

The above shows a character with her head turned down while she scratches it. The arms were omitted. Instead, multiple hands scratch the head.

Left hand
Right hand

Each hand lies at a different angle and has differently positioned fingers. All of the hands should be drawn at approximately the same size.
The above layout displays the act of holding the head. This pose may be applied to reacting with alarm, etc.

The feet rock back on their heels, suggesting an agitated psychological state.

The figure to the left is a preliminary sketch. The addition of five to six curved effect lines creates the feeling of violent motion.

To produce the above, first the hair layout was drawn, and then extra arms were added. Merely adding four arms and two hands sufficiently evoked a frantic atmosphere.

The above shows the girl with the curved effect lines as the arrows indicated in the preliminary sketch.
Gobbling Food

Drawing a single character with multiple faces and bodies creates the illusion of fast-paced motion.

The girl reaches for everything in sight. The figure echoes evoke a sense of rapid movement. The theme of the above composition is "hunger."

Here, three bodies suggest rapid movement to the right and left. Now, "greed" seems to be more the theme rather than "hunger."

The central body turns a bottle upside down to chug down its contents, while the right and left bodies add an up and down movement to the overall composition. This creates the effect of a stop-motion camera within this whirlwind of action, suggesting that the character is relishing eating and drinking so much that she can't help but gorge herself.

Here we see a girl gobbling meat at a tremendous pace. Both the piece of meat and hand are portrayed using echoed images.

The figure echoes to the right and left were added after the center body.

The figure echo may consist of nothing but a face and arms.

Effect lines on the right and left suggest rapid right to left movement.

The center body should be drawn first.

This composition shows two figure echoes with torsos, creating a somewhat slower pace.

The portion of the arm obscured by the piece of meat was included in the preliminary sketch.
Start by drawing the central figure. If this particular figure's movements must be made to appear rapid, then add multiple arms, etc. at this stage.

Next, other actions this character performs are added. Drawing the echoes' heads facing different directions and striking diverse poses makes the composition more interesting. All of the figure echoes should have the same sized heads.

Add special effect lines that match the movements depicted in the composition.

Add details and sound effects (as handwritten words) to complete the composition.

Final image of the character vigorously gorging herself.
Stylizing Emotions

Stylized emotions work well when they are exaggerated and melodramatic. Make an effort to master using the face and body to portray emotions.

Cheerfulness

Laughter and feelings of joy, delight, etc.

The eyebrows form a roof-like shape.

The eyes are inverted "U"s.

The mouth forms a right side up "U".

Sparkling effect

These are the distinguishing features of "cheerfulness" as seen on a character designed to look like a doll.

Smiling: Effects of the Mouth

Use the mouth to indicate delight, joy, and cheer.

Regardless of whether the character has upturning or downward slanting eyes, showing the corners of the mouth turned up will give the character a cheerful expression.
Joy Portrayed through the Body

Showing the body extending outward and arcing back suggests a cheerful, happy mood.

Exuberant

Having the body arc backward when running and jumping also suggests a buoyant, bubbly mood.

Delight → Rapture → Bursting into Dance: Heightened Expressions of Joy

A body extending into outward directions is used to portray each mood.

The elbows lift away from the torso, leaving the sides exposed.

Showing one leg raised creates the appearance of leaping with joy.

The actions of leaping and raising both arms express delight and jubilance. The tautly extended fingers and open palms evoke a cheerful atmosphere.

Draw the limbs radiating in four directions to portray rapture or elation.

Show the arms waving above the head or the arms and legs extending away from the body to portray an ecstatic or thrilled emotional state.
Laughing While Standing

To portray a character standing erectly and laughing, show the chin tilted up.

Include the neck.

The torso becomes foreshortened.

Showing the palms faced away from the body generates a jovial mood.

Draw a rough layout.

To portray a character bending over with laughter, draw the upper body leaning forward and use a moderate high angle composition.

Draw the upper body.

To show a character twisting with laughter, draw the head and body turned in two different directions.

Draw the body arched like a bow to portray a character thrusting her head back and laughing. This is the posture a character will assume when holding her belly in laughter.

Showing the underside of the foot sends the figure off balance, creating a sense of movement.

Collapsing with Laughter: Actually Falling Over and Laughing

Rolling on the ground with laughter involves balling up the body. The elbows and knees bend.

Pounding the ground with laughter consists of the character lying on her stomach. Showing only one arm and one leg bent evokes a sense of movement.

The character ends up lying on her back when bowled back with laughter. Showing both arms and legs or both legs extended removes a sense of movement, while showing one leg and one arm bent creates movement.

The torso is rounded.

Raising the chin brings the face into view, creating an atmosphere of open brightness.

Having the arms and legs extend away from the body creates an open, jolly mood.
Laughing Face Composed from a Low Angle

As the chin rises, the magnitude of the laugh appears to increase.

The underside of the raised chin is not visible in the above. The hook-shaped nose and longish neck are key features of this head.

Raising the chin even further results in a face composed from a low angle. The underside of the jaw is now visible.

Raising the chin to an even greater extent results in the proportion occupied by the features above the mouth to decrease.

Here, the head tilts dramatically back in laughter. The mouth and nose are the only features visible.

Atypical Smiles: Smiles with Contorted Eyebrows and Mouths

Sneer

Tearful smile

Sardonic smile

Mocking laugh

Strained smile

Using asymmetry in the eyebrows, eyes, or mouth eliminates a cheerful atmosphere. These techniques are used to portray subtle emotions.

Jolly Furniture and Flowers

Using arcing (outward extending) forms is an effective technique with subjects other than humans.

To suggest an inanimate object dancing, position its various props and accessories in a radiating pattern.

Draw the mouths of animals in a smile.

Stylized, blissful joy consists of drawing exposed palms, the soles of the feet, and open limbs extending in four directions in addition to a smiling face. Use these techniques to portray a cheerful, bright mood.
**Eyebrow and Mouth Effects**

Use the eyebrows and mouth to express anxiety, loneliness, sorrow, and other unhappy emotions.

- **Anxious, worried**
- **Sad, anguished**
- **Increasingly anxious and melancholic**
- **Sad; on the brink of tears**
- **Crying**

Note the wrinkle at the brow. Furrowed eyebrows form a curved roof-like shape.

- **Happy roof-shaped eyebrows**
- **Sad curved, roof-shaped eyebrows**

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**Glumness**

This section looks at disappointment, sorrow, loneliness, anxiousness, and other gloomy emotions.

- The head faces down.
- The shoulders sag.
- The drooping head and sagging shoulders cause the neck to become obscured from a front view.
- Draw the shoulders sagging and the figure on her knees, etc.
- To sketch the pose layout, draw two marshmallows on a tilted stick. Conceive of a character as turning inward or curling into a ball when portraying a gloomy emotional state.
- When the character becomes depressed, etc. show the melancholic emotional state reflected in her carriage by the entire body “turning inward.”
Anxious Body Language: Intensifying Degrees of Anxiety

Mildly apprehensive: The shoulders sag, and the back rounds.

Anxious: The head gradually droops (example of turning inward). Draw the arms and legs pulling inward, closer to the body’s center.

High anxiety: The arms and legs pull in close to the body’s center, making the body smaller.

The rounded back, dark shadows, high angle perspective, etc. evoke the air of dejection and fretfulness.

Showing the neck, arms, legs, and other body parts pulling inward toward the body’s center projects an atmosphere of apprehension and lonely sadness, even if the figure is standing.

Unhappy Animals and Furniture

Animals and furniture are also drawn with rounded “backs.”

The limp cup handle depicted using undulating contours creates a sense of dispiritedness.

Use inward turning forms.

The giraffe above displays the use of undulating contours and downcast forms.

The above composition illustrates a stylized rendition of a gloomy emotional state: loneliness. The sad, curved roof-shaped eyebrows, the drooping shoulders, and the forward hunching posture all evoke a sense of forlorn. The feet are spread apart, reinforcing the sense of standing alone and overall lonely atmosphere. If the feet where positioned close together, the posture would appear apologetic rather than forlorn.
This section covers irritation, aggression, and other destructive emotional states.

**Anger**

The hair is standing on end.

Raised eyebrows

Contorted mouth

Hand curled into a fist

Flames

Pigtails

The pigtails standing on end have already been included in the pose layout. Show awareness toward using on-end or bristling and forward-looking or confrontational postures when drawing angry characters.

The shoulders are squared — (indicating irritation).

The above shows a character walking around seething, annoyed, or irritated. Energy generated from such feelings of anger causes us to assume outward facing or confrontational postures. Make an effort to adopt “angry” body language in your artwork, such as walking on the toes, squared shoulders, etc.

*Common Icons Used to Portray Anger*

- Anger icon
- Seething icon
- Lightning icon

**Angry Eyebrow Effects**

Use upwardly angled eyebrows to portray discontent, irritation, fury, and other angry emotions.

- **Furrowed brow**
  - Malcontent: Mild irritation

- **Angry icon**
  - Annoyed: Increased irritation

- **Horns**
  - Rage

- **Lightning**
  - Explosive fury

The greater the number of lightning icons drawn, the more intensely furious the character is.

Numerous seething icons suggest extreme rage.

We tend to tense our eyebrows when angry, causing a furrow to develop in the brow.
Discontent: The feet shift apart, and the arms cross, creating a triangular silhouette. This projects an angry edginess.

Growling: The forward leaning posture suggests that anger has boiled to the surface. The head juts forward.

Fury, Part 1: The above illustrates venting rage. The raised chin and face indicate that the girl is yelling. The character’s entire body portrays explosiveness.

Fury, Part 2: Here, the girl leaps forward in anger. If the target of anger (enemy) had been included in the composition, we would have the sense that she was charging toward the target with an explosion of energy. Actions such as this are typically rendered moving on a straight trajectory.

Portraying Directionality (Portraying the Direction of Movement)

Forward leaning postures have directionality. Merely drawing the character with a tilted posture portrays angry movement.

Seething icons should be drawn emitting from the body’s center. Position the icons in a radiating pattern.

The above composition shows a stylized portrayal of fury. Energy emitted in an upward direction is commonly used to suggest anger, justifying the expression “boiling with rage.” Draw the hair standing on end and stiff, squared shoulders. The widely spread feet, the bent arms positioned at the hips, the forward lurching posture, the bent neck, and forward glaring expression are all expressions of tension that accompany “anger.”
Portraying Anger and Shouting  Vertical motion in the face is key to portraying anger in close-ups.

The teeth clench, and the face turns down, indicating building anger.  

When shouting or exploding in anger, the head rises and faces forward.

Draw the mouth on a diagonal to depict clenched teeth.  

Use a trapezoid to depict a mouth yelling.  

Normally, the neck is omitted from this pose or angle.  

A triangular mouth would suggest laughter.  

Show the head facing downward suggests that the character is speaking in anger.

A closed mouth suggests stewing in anger.  

Looking up and clenching the teeth suggest suffering endurance.  

Portraying the Inside of an Open Mouth

Merely shouting: Draw the upper and lower rows of teeth.

Yelling in moderate anger: Draw the upper and lower rows of teeth with lines as if threads connected some of the teeth.

Bellowing in extreme anger: Use hatching to darken the inside of the mouth. This rendition carries the most impact.
The portrayals covered in this section suggest a mixture of complex emotions: being caught by surprise, fear, joy, etc.

The hair stands on end.

Special effect portraying shock

The eyes are large with tiny irises and pupils.

Shouting (wide-open mouth)

Leaping off the ground

As seen in the pose layout, radiating motion is the key to portraying surprise. The arms are extended out, while the girl jumps up. The hair standing on end is yet another element contributing to the overall radiating forms.

**Surprise: A Variety of Mixed Emotions**

Surprise reflects a variety of emotions, including joy and anger.

Bewildered, dumbstruck

Taken aback

Astonishment, caught unaware

Surprise, shock: The standing lock of hair is one stylization technique used to portray shock.

Frightened, terrified shock

Excited, joyful surprise

Appalled, angry shock
Surprised Body Language

Surprise is reflected in almost every aspect of the above character carriage, from the way his body bends forward to the way he leaps back to avoid the snake and even in the stylization of his face. Beads of sweat and tears are other potentially effective touches.

Here, the character leans slightly forward in mild surprise. She holds her arm in front of her torso.

In this expression of intense surprise, the character now pulls back her hips while spreading both arms broadly.

To portray delighted surprise, as illustrated here, show the figure leaning back slightly while raising the shoulders.

The above shows the character arcing her back as she reacts with fear. She has been taken unawares by something from behind, causing her to freeze in terror. The result is a backward leaning pose with the arms extended over the head.

The straight lines demonstrated in this figure result from the character stiffening as a tremendous shock bowls her over. The body is stiff and seems about to capsize. Artists will often show the character fainted in the next panel.

Here, the character has received a severe stun, sending her into utter shock, demonstrated by this open pose. This is one means of illustrating panic when the context does not permit having the character faint.

Adorable Expressions of Surprise

Show the eyes cross and the cheeks blush to make the character appear endearing. Note that characters are made to look cute in their surprise only in situations calling for "mild astonishment."

Blackened irises, crossed eyes, and a mouth rounded to form an "O" create an innocent visage.

Not blackening the irises instead produces a startled look.

Increasing the distance between the upper eyelid and the iris makes the eyes appear crossed, even in profile.
Surprise Causing the Heart to Leap from the Chest

The three primary elements here are the asymmetrical eyes, large mouth, and tears.

**Linear movements**

The limbs extend away from the body as if on a flat plane as the figure stiffens. This reaction still allows the character to look adorable.

**Arcing movements**

Here, the character has been startled by something from behind, so the figure arcs back in an exaggerated manner. The character’s original, sweet prettiness has been lost.

**Linear and arcing movements**

This illustrates an extreme, stylized reaction. The original appearance of any character is shattered in this radical of a rendition.

Recovering from Surprise

**This forward leaning pose is a posture of relief after having received a mild shock.**

The inward directed pose illustrated above reflects exhaustion after having received an overwhelming shock, causing the release of intense energy.

**The above shows a figured flopped down limply. The upper body arcs back as the character sits down.**

After receiving a deathly shock, the character collapses limply on the ground with her limbs sprawled in four directions.

The above, stylized rendition of surprise shows the character jumping. Although the head tilts slightly back, the neck is still not visible, as the character is actually ducking her head. This was intended to evoke a sense of the character stiffening in surprise. Not only the upper body, but the extended fingers and the hair—the entire figure arcs back subtly, intensifying the atmosphere of shock.
Subtle acts such as whether the body parts are directed inward or outward or face up or down convey the character’s mood.

Postures That Convey a Gloomy or Dreary Emotional State: Turning Inward (Introversion)

1:2 Head-to-Body Ratio

The body is curled into a ball, and the head faces down, conveying extreme dejection.

Crawling on all fours with the face directed down conveys a sense of gloom and disappointment.

The above figure is crouched with a rounded back and is hugging the knees. That we cannot see the face alone projects a gloomy atmosphere.

This figure stands limply with a rounded back and with the head facing down. This is the most popular pose for suggesting disappointment.

1:3 Head-to-Body Ratio

1:4 Head-to-Body Ratio

Effects of the Head’s Direction

Showing the head tilted down with a downcast gaze alone projects an air of glumness.

Drawing the head facing up creates a bright, cheerful atmosphere.
Poses That Convey Cheerfulness: Turning Outward (Introversion)

1:2 Head-to-Body Ratio

Standing with a tall, straight back and raised chin reinforces the sense of a positive mood.

Standing with an arched back reflects an idealistic, hopeful, aspiring, robust attitude.

Stretching conveys the sense of being relaxed, tranquil, and cheerful.

Jumping and other images of leaping or soaring constitute one means of portraying delight.

1:3 Head-to-Body Ratio

1:4 Head-to-Body Ratio

The Effect of Cocking the Head

Tilting the head is another stylization technique.

Happy
Sad
Angry
Surprised
Exaggerating with Facial Shadows

Facial shadows are a technique that allows the artist to accentuate dips and bumps on the face's surface in order to heighten the emotional state projected. Facial shadows are primarily used with 1:4 head-to-body ratio *chibi* characters or characters with attractive proportions drawn at a ratio of 1:5 or above.

The Fundamentals in Using Shadows to Suggest Three-Dimensionality

Shade the face, maintaining awareness of the effects of lighting (where shadows form as a result of the manner in which light strikes the face).

To the left is a sphere with the shadow's boundary rendered in hatching. This is an abstraction technique that may also be used with *chibi* characters.

Basic circle: The illusion of a sphere cannot be created without shading.

The addition of shading turns the circle into a sphere.

Basic face: The basic face has no shadows.

Adding shadows underneath the hair, nose, and jaw; to the side of the face; and to other areas gives the face a sense of volume.

Using hatching to create a shadow boundary to the cheek adds a charming touch to the character's face.

Character with *chibi* proportions

Attractively proportioned character

The abstracted shadows seen above underneath the girl's nose and chin may be used with *chibi* characters as well.

The shadows illustrated above work well with realism-style *manga*.
Using Facial Shadows to Enhance Emotions

Facial shadows are used to heighten intense emotions, such as shock, anger, anxiety, and fear.

**Shadows Portraying Anxiety and Fear**

The following shadows were applied assuming a low-angled light source.

Front view
Without shading

The key feature is the shadow on the brow between the eyes.

Profile view
Without shading

No shadows form underneath the chin.

3/4 view
Without shading

The shadows underneath the eyes are cheek shadows.

On characters drawn at a 1:4 head-to-body ratio, facial shadows are primarily rendered using vertical lines.

Darkening the mouth's interior generates a creepy atmosphere.

Solely adding shadows underneath the eyes or to the forehead produces sufficiently effective results.
The following shadows were applied assuming a light source that lit 70% of the face from above and another light source that lit 30% of the face from below.

Front view
Without shading

This 1:4 ratio character displays shadows underneath the eyes.

Profile view
Without shading

Shadows also fall across the side of the face, evoking an intense atmosphere.

This face shows a shadow added to the bridge of the nose. Shading the cheeks can make the character appear excessively cute, so apply cheek shadows with caution.

3/4 View
Without shading

Realistically speaking, a shadow would not form on the bridge of the nose. However, the shadow is an effective touch, so go ahead and add it to your own work.

Hatching on the upper bridge of the nose is convincing, as it also may be construed as a shadow formed by the furrowed brow.
These shadows are combined with the face’s angle of composition to create the desired effect and are used to dramatize glaring (to heighten the mood), shouting (to intensify the sense of anger), glancing back anxiously (to intensify the sense of apprehension), and other contexts.

**Gliming (Heightening the Mood)**

Low angle composition

Show the face lit from an above light source and add shadows to the forehead, the nose, the lips, and underneath the jaw.

In the case of a character with chibi proportions, add minor shadows underneath the eyes and on the nose.

**Shouting (Intensifying the Sense of Anger)**

High angle composition

For this emotion, setting the light source somewhere above the head and adding shadows to the forehead, underneath the eyes, and underneath the chin produces effective results.

The above shows vertical lines added from the forehead to the sides of the eyes. The shadows added to the corners of the eyes are also effective.

**Glancing Back Anxiously (Intensifying the Sense of Apprehension)**

Level angle of composition

The above shows shadows added only to the forehead and underneath the jaw (to the neck).

For the example seen to the left, shading was added to the forehead and the side of the face.

Shading solely the forehead sufficiently heightens the sense of worry.
Emotion and Movement Expressed in the Rough Sketch

Portrayal of Emotion and Movement as Seen in the Cover Illustration

The roof-shaped eyebrows give the character a gentle expression.

The corners of the mouth rise to form a "U". The intension was to avoid an overly exaggerated smile.

The *chibi* (super-deformed) proportions results in a stylistically de-emphasized neck.

The posture and positions of the legs are the same as those used to portray a character running or jumping and are used to make the character's actions endearing.

The lightly clenched fist gives the character a pretty, girlish air while portraying a sense of fluster. It also gives the composition a sense of dynamism, distinguishing it from a still image.

Portrayal of emotion and movement begins at the rough sketch stage. The cover illustration of this book constitutes a prime example of emotion and movement being established at the rough sketch stage.

The wide-open eyes evoke the feeling of surprise, while showing the eyes slightly crossed gives the expression an adorable air.

The neck is stylistically rendered to suit a character designed with attractive proportioning.

The mouth forms an "O"—a technique for portraying surprise.

The completed line drawing reflects the facial emotion and movement portrayed in the rough sketch.

The smile was fine-tuned to make it appear more reserved by opting for a mouth smaller than that in the rough sketch. However, the smile still displays the subtlety of the original.

Movement in the skirt imparts a sense of dynamism.

Hatching on the cheeks creates the illusion of blushing.

Under drawing

The primary impetus in creating the rough sketch was to condense emotions and moods to their essence to achieve ambiguity. However, if the composition had been left as is, this would have been weakened as the contours were adjusted for the under drawing. Consequently, when cleaning up the lines for the under drawing, hatching was added to the main character's cheeks to create the illusion of blushing, thereby heightening the emotion portrayed as well as accentuating her girlish appearance.

The process of producing a final under drawing does not consist of merely tracing the lines of the rough or original sketch. The process extends beyond simply reviving what was created in the original sketch. Rather, it is a process that gives birth to something new.
Chapter 4

Character Design and Color Design

Head-to-body ratio sketching is applied to a wide range of character designs. Acquiring the skills necessary to distinguish differences in height, build, and proportioning allows you, the artist, to design a cast of characters and profiles that match the target audience or contents of the individual work. This chapter teaches how design characters and how to use the head-to-body ratio sketch so that it will reflect the character design looking at creating character designs for a family to demonstrate the process.

Furthermore, character design is used frequently to produce illustrations or cutouts (single frames) as well as manga and anime. Since character design is also commonly used particularly in illustration as a means of coloring in applying the finishing touches, this chapter presents the practical application of coloring, founded on character design.
Character Design as Role Assignment

The head-to-body ratio is a technique that allows the artist to perfect the proportioning and build of his or her characters. Use the head-to-body ratio to give each character a sense of individuality.

Designing a Family

A family of characters is a compilation of character sketching employing various head-to-body ratios. Determine what image the character should project before drawing.

Father: He plays golf and had a muscular build when younger—a run-of-the-mill character, who is fairly mediocre at his job, hobbies, and as a father.

Mother: She is youthful for her age. Concerned about her body's appearance, she tends to favor figure-concealing clothing as a result.

Daughter: Her school performance is fairly average, and she does not excel in anything in particular. The only thing exceptional about her is her height. She is secretly envious of her vivacious mother and grandmother.

Son: He is an aloof, collected child who does not overtly display his emotions. However, he does have a strong sense of justice. He excels at both school and sports.

Grandfather: He is quiet, and when he speaks, his wife and daughter frequently interrupt him. He likes cats and collects antique weapons. He has a black cat.

Grandmother: She is gentle and ladylike but tends to be talkative. She has many friends and hobbies and particularly likes gardening.
Distinguishing Height Differences

The character’s profile determines his or her height. Characters drawn at the same head-to-body ratio may project differences in height if their head sizes are different.

Father: (1:6.5) He is average but slightly portly. Give overweight characters a slightly shorter head-to-body ratio.

Mother: (1:7) The mother is a cheerful character. This ratio helps to project a slim and active impression.

Daughter: (1:8) A tall character, the daughter has been given a moderately small head. Care was taken to ensure she did not appear ridiculously taller than her mother and father.

Son: (1:5) To project a composed and intelligent impression, this ratio gives the son a smallish face and long legs.

Grandfather: (1:7) As the mother’s father, he has been given the same head-to-body ratio as she. A moderately shorter height makes the character appear more convincingly elderly, so his face was drawn on the small side.

Grandmother: (1:7) She was given this ratio and a smallish face to create the look of an energetic elderly woman.

Family Tree of Faces

The daughter’s eyebrows and eyes are similar to the father’s. She inherited the downward slope of her eyes from both her mother and father.

Father

The son’s nose and eyebrows are similar to the mother’s.

The mother inherited her hair from the grandmother.

Grandfather: Father of the mother

Grandmother: Mother of the mother and the source of the downward sloping eyes present on the mother and granddaughter.

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Nude Sketches

Double-checking Builds and Proportioning

Sketching the figure consists of determining the head’s size, determining the overall height, determining the groin’s position and then fleshing out the figure, so really there is little room for error. However, when designing a large number of characters, it is a good idea to double-check the proportioning to ensure that the builds match the image intended for the character as decided in the individual character designs.

The nude sketches of the family seen above include the cat, hidden behind the grandfather’s legs in the final image.
**Drawing the Clothes** Dress the characters in costumes that best suit the images intended.

### Double-checking Eye and Shoulder Levels

The eye levels of the main characters, and of the protagonist in particular, are vital. In dialogue scenes, whether a particular character gazes up or down when talking helps the artist convey to the reader whose lines are being delivered.

- Eye level of daughter
- Shoulder level of daughter
- Shoulder level of father and mother
- Eye level of son
- Groin level of father
Role Assignment and Character Design

A Respect-inspiring Dad

Maintain flexibility when devising your character designs, matching the design to the setting, the personality profile, and the role.

Setting: A blue-collar father battles a crooked land shark. In this situation, strategic positioning of the characters makes the father appear strong and respect-inspiring. The protagonist is positioned in the center of the composition. His posture is straight, and he wears a courageous expression on his face.

Make use of the character designs in drawing the composition.

When positioning the daughter next to the father, verify where her groin level should be located in relation to his to reflect that she is taller.

Confirm the position of the mother's face as she clings to the son.

We bend at the hips when leaning forward, so the level of the groin remains in the same position as when standing up straight. Positioning the daughter's groin level at exactly the same height as in her character design sufficiently establishes the difference between her height and her father's.

Half of the mother's body is hidden behind the father, so it was necessary to draw a full figure layout for the mother on the back of the drawing to capture the proper figure proportioning.

The peripheral characters are positioned around and close to the protagonist to make him appear impressive.
Changes in Facial Expressions

The key points in altering facial expressions lie in the irises and pupils, the eyebrows, and furrows and wrinkles.

Even outrageous changes may be made to the character depending on the setting, which in this case is war or battle action.

The typical father: Note the large irises and the gentle eyebrows.

Father in a time of peril: Make the irises smaller and show the eyebrows rising. Accentuate the corners of the mouth and emphasize the furrow in the brow and the wrinkles at the corners of the eyes. Darken the shadows on his neck.

Showing the father shouting or displaying a similar angry reaction with the mouth open is an effective portrayal capable of changing the impression the character projects.

Here, muscle has been added to the father’s original portly build to turn him into a convincing soldier.

Drawing Facial Expressions That Reflect the Character’s Personality and Design

The subtly furrowed brows and clearly delineated irises and pupils create the sense that the daughter has the strength to maintain her gaze on her target, despite feelings of worry.

The dramatically knitted eyebrows and almost virtually straight-on angle of perspective elicit a sense of vigor while simultaneously underscoring feelings of trepidation.

As the son’s original design is that of a cool cucumber, his eyebrows knit only slightly. He averts his gaze, creating the impression of a concerned but aloof character.

Designing Villains and Bad Guys

Troublemaker A

The profile of the villain who threatens the family’s tranquil household reinforces the father’s image as the family’s protector.

Troublemaker B
When faced with an emergency, the family bonds together and becomes battle-ready. To portray such circumstances, the artist needs to outfit each family member in a costume and weapon that reflects his or her individuality. Furthermore, having some of the characters transform dramatically while others remain relatively the same allows you, the artist, to expand your character repertoire.

Dramatically Transformed Characters

Regular Appearance

Battle-Ready

When in a pinch, the daughter becomes a potent dynamo.

The grandfather becomes a man of action when faced with a crisis.

The father has a propensity for pressing his luck.

The mother is always to meet a challenge.

The son is typically a cool cucumber.

The grandmother is likewise calm and collected.
Character Design by Trial and Error

The character designs of the individual family members may require modification depending on how the plot develops.

The father's head-to-body ratio remains the same at 1:6.5. However, his build has been slimmed down. His distinguishing feature is now a large head.

Daughter A: This design consists of giving the daughter broader shoulders resulting in a brawner appearance. The head-to-body ratio remains 1:8.

Daughter B: In this design, the daughter still retains the same shoulder width, but her shoulders are now squared instead of rounded. She is now short in stature, drawn at a ratio of 1:7. The concept is that she transforms into an alternate identity.

The son has been shifted to a more muscular build at a ratio of 1:5.

The grandfather is now a long-legged 1:7. His character has been tweaked to give the impression that there is more to this grandfather than meets the eye.

The grandmother retains her 1:7 head-to-body ratio but has been given an inhumanly fit build. This gives her an otherworldly mystique, which becomes foreshadowing for future plot development.

The mother has been dropped from the story, so she has not been redesigned.
Redesigning the Characters with *Chibi*-proportioning

Establish differences in the characters' heights using ratios between 1:3 and 1:4. Half (0.5) and quarter (0.25) head-lengths yield large visual differences in height.

- Father: 1.35 head-to-body ratio
- Mother: 1.35 head-to-body ratio
- Daughter: 1.3 head-to-body ratio
- Son: 1.2 head-to-body ratio
- Grandfather: 1.3 head-to-body ratio
- Grandmother: 1.3 head-to-body ratio

The father and mother are a quarter head-length taller than the daughter.

The daughter as the protagonist is drawn at 1.3.

The son is three-quarters of a head-length (approximately one head) shorter than the daughter.

The grandfather is a half head-length shorter, but the *geta* (platform sandals) adds another quarter head-length to his height.

The grandmother is the same height as the grandfather, but the lack of *geta* gives her the appearance of being shorter.

When drawn to typical, attractive proportions, the grandfather's *geta* adds one-sixth of a head-length (less than 20%) to his height, an amount measuring to approximately half an ear. This makes his head-to-body ratio within the prescribed range.
Manga-esque Character Designs
A commingling of attractive and chibi-influenced proportions

Father: 1:2.5 head-to-body ratio
Mother: 1:6 head-to-body ratio
Daughter: 1:5.5 head-to-body ratio
Son: 1:2 head-to-body ratio
Grandfather: 1:3.5 head-to-body ratio
Grandmother: 1:3 head-to-body ratio

The father has a large head, while the son has a small head. The daughter, mother, and grandparents all share the same-sized head.

Character Stylization the Manga Way

Attractive Proportions
Chibi Proportions
Mixture

1:6.5 ratio dad
1:3 ratio dad
1:2.5 ratio dad

1:8 ratio daughter
1:3 ratio daughter
1:5.5 ratio daughter

Standard proportioned cat
Chibi cat
Manga-style, gigantic cat

Capturing Differences in Height

With the mother as the tallest character, this line denotes half her height.

Simplify differences in the heights of the manga's characters to make them readily apparent to the reader.
There is the assumption that a 1:8 head-to-body ratio is the ideal proportioning, but there is no need to stick with that ratio slavishly. Opt for the proportional balance that you prefer.

Morita tends to favor an attractive proportioning of 1:7.5.

This guideline indicates where the neck and head connect.

Morita has captured the torso as a cylinder. The moderately high angle composition causes the waist and groin guidelines to take on downward curves.
This line captures the curved surface of the forearm and gives it a sense of three-dimensionality.

The shoulders lie along a straight line owing to the low angle composition.

This marks the juncture of the chest and abdomen. It facilitates conceiving of the chest as an independent unit, allowing Morita to identify how the back and side surfaces relate to the unit as a solid.

This unit becomes the waist and abdomen.

This line denotes where the posterior begins.

This contour establishes the shape of the chest including the ribcage, producing the impression of a trim abdomen.

This centerline functions as a guide for the spine.

The right leg will hide this layout line in the final image, so there is no need to correct the line. It functions to indicate how the posterior and thigh connect.

This guideline denotes where the leg meets the foot.

Morita captures the toes as a unit. He uses a curved line to generate a sense of volume.

The above shows where Morita adjusted the direction in which the foot faced. If an aspect of the sketch does not match the image Morita has in his mind, he fixes the drawing immediately.
Morita draws an X on the top of the head. This facilitates establishing the crown of the head, which is critical to composing from a high angle.

These lines denote guides for the clavicles, the chest, and the hips. From a high angle, all of these lines describe downward curves.

When producing your own artwork, avoid drawing the centerline as a perfectly straight line. Instead, have it describe undulations on the figure’s surface.

Use upward arcing curves for the shoulder, chest, and waist guidelines. This facilitates imbuing the figure with a sense of volume when composing from a low angle.

Morita draws all centerlines so that they adhere to the figure’s surfaces. While the face’s centerline slopes toward the body, the chest’s guideline slopes outward, thereby describing the torso’s depth.

This guideline defining where the leg attaches to the hip also indicates where the bottom of the torso is located.
The Actual Sketching Process

This guideline denotes where the leg meets the foot.

The head layout consists of a circle and X.

Head Layout

Morita sketches the facial features. What results may be considered the under drawing establishing the facial expression.

Cleaning up the Contours

A dashed line is used at the layout stage.

Morita uses dotted or dashed lines instead of solid lines for contours that will not appear in the final image.

If you plan to ink the drawing immediately afterwards, or if you are a beginning artist, go ahead and pencil in a solid line through the arm.

Morita positions the groin approximately 3.5 head-lengths (i.e. halfway) along the figure’s full height.

Completed full figure drawing
Finishing Touches and Key Points in Evoking a Sense of Volume

Completed Nude Sketch

Morita reinforces the contours underneath the breasts to create the illusion of volume and impart a sense of presence.

This muscle contour, which connects the underarm to the chest, generates a sense of volume for the region surrounding the underarm while giving the torso the illusion of depth.

Note how the base of the thumb and palm were executed to give the hand the illusions of depth and volume.

The manner in which the inside of the thigh has been rendered heightens the sense of volume of the cylindrical thigh.

This line denoting where the leg meets the hip imbibes the lower abdomen and the legs with a sense of volume.
Drawing Costumes

Morita added the clothing by laying a separate sheet of paper over the nude sketch and then tracing portions of the figure.

Morita added shoulder pads to the coat in order to portray her small but firm shoulders. He left a gap between the coat’s contours and the shoulders underneath to suggest a personality fiercer than the character’s body build might imply.

Morita used curved contours for the exposed cuffs. This creates the illusion of a round arm.

The arced belt contour portrays the torso’s curved surface. Morita primarily used curved contours for the pants to heighten the sense of three-dimensionality in the legs.

The boots enhance the shape of the feet. The trick is to go ahead and draw a shoe with attractive contours irrespective of the actual contours of the bare foot underneath.

The costume is actually drawn on a separate sheet of paper.
Adding Tone

For your own artwork, determine where shadows will lie, which regions will be left light, and which regions will be darkened before adding the tone.

Ref. Fig.: This figure shows tone applied according to the line proof indicating where shadows would be applied. Even though this figure was produced using the same assumed light source, how highlights, fabric textures (the presence of light reflections etc.), and other elements are handled produces tremendously different results.

The clothing has the luster of shiny vinyl. The intended color palette was black and purple. To represent these colors in black and white, either gradation or solid black tone should be used for the coat and pants, while a 10% random dot tone should be used for the hair, and a 20% random dot tone should be used for the coat's lining.

*The above percentages are intended as guides for selecting the level of saturation with black having a saturation level of 100% and white having a saturation level of 0%. 10% is a rather light shade, while 80% is extremely dark.

Representation of the Hair

In the figure above, highlights have been added in bands around the head. This is the simplest and most common mode of adding highlights, which were created by rubbing the tone with an abrasive ink eraser (less occasionally referred to as a "sand eraser").

To create this effect, a circle of tone was etched in a jagged pattern to reveal white.

To create the above, after having etched the tone in a jagged pattern, another sheet of tone was applied on top and then etched in strategic areas.
Coloration

Anime Cel Coloring

Clearly delineating the shapes of areas of shadows and areas of reflected light results in a coloration akin to an animation cel.

Draw a line proof indicating where shadows and colors will be positioned before actually coloring the composition. If the clothing will have a lustrous sheen, which will cause areas of creases to become highlighted, mark the creases as "white" or "light."

This line proof contains contours indicating where luster highlights would appear on the shiny vinyl costume.

Color flesh shadows as indicated in the line proof. It is important to conceive of the subject as a solid at the line proof stage.

*The four-color printing process is often referred to as the "CMYK process" as it involves the use of the colors Cyan, Magenta, Yellow, and black (letters of acronym capitalized). A mixture containing 2% cyan, 47% magenta, and 54% yellow produces a color that may be used to represent "flesh shadows."

The above shows the figure with areas of light and shadow accentuated. Dark areas were given clearly delineated forms and then filled with color.
All about Coloring

Animation Cel-Style Coloring
In this version, the material of the coat and pants has been portrayed as cloth. Coloring following the same process as outline previously. First, the shadows were given clearly defined forms, and then the color was added.

Airbrush-Style Coloring
The coat and vest are portrayed as made of a supple fabric, while the pants have the appearance of tight leather. No clearly defined lines were used to divide areas of color from areas of shadow. Instead, Morita added color while lightening areas where the surface rises (to create the appearance of being touched by light) and blurring boundaries to achieve fuzzy transitions.

The hair's color was changed to match the hue of the coat.

To create this effect, Morita used a dark color for the vest and gave the pants a dull sheen. This heightened the contrast between the vest and the coat, resulting in a distinct visual effect, even when viewed from a distance.

Airbrush version

Airbrush-style skin

Animation cel-style skin

How Execution of Light and Shadow Yields Different Textures

Exaggerating the contrast of black and white produces the illusion of shiny vinyl.

Jeans or tight pants

Adding a lustrous sheen and then blurring borders create the look of leather.

Eliminate a sense of sheen to produce a cloth-like effect.

To create the look of latex, accentuate the contrast between light and dark by blackening the pants overall and then blurring borders while retaining a lustrous sheen.
Coloring the Cover Illustration

Basic Steps: When coloring large compositions, start with characters drawn using attractive proportions.

1. Color the skin.
2. Color the hair and clothing.
3. Add a shine to the hair and color the mouth.
4. Color the irises and pupils and add highlights. Add red blush to the cheeks to finish.

Coloring the Skin to Generate Three-Dimensionality

- Hair shadow
- Shadow underneath the eyebrow
- Shadow at the corner of the eye
- Nose shadow
- Lip Shadow
- Shadows defining the clavicles and chest

Flesh tone: Light tone
- C: 0%
- M: 10%
- Y: 19%
- K: 0%

Standard shadow: Medium tone
- C: 1%
- M: 30%
- Y: 40%
- K: 0%

Dark shadow: Dark tone
- C: 6%
- M: 40%
- Y: 51%
- K: 0%

Darken hair roots and underneath the chin to create visual accents. This will enhance the sense of three-dimensionality.

Coloring the Hair and Clothing to Generate Three-Dimensionality

The four basic colors may be mixed to create various hues.

- Composition of a light flesh tone:
  - C (Cyan): 0%
  - M (Magenta): 10%
  - Y (Yellow): 19%
  - K (Black): 0%

- Y (Yellow): 19%
- M (Magenta): 10%

Alternate light and dark shades using curved strokes while visualizing the arm as a solid.
Coloring *Chibi* (Super-deformed) Characters

1. Color the skin.
2. Color the hair and the clothing.
3. Color the skirt and stockings.

Color the skin to generate a sense of three-dimensionality. Positioning a dark tone next to the skin produces a visual variation of light and dark, which evokes a sense of volume.

Color the small face in simple swaths of hue.

Lightening the periphery of the leg just inside the contour creates the illusion of a solid object.

Flesh tone: Light tone
- C: 0%
- M: 7%
- Y: 13%
- K: 0%

Standard shadow: Medium tone
- C: 1%
- M: 11%
- Y: 27%
- K: 0%

Dark shadow: Dark tone
- C: 1%
- M: 11%
- Y: 37%
- K: 0%

To color the clothing, use large shadows to portray how the fabric falls.

Light
- C: 0%
- M: 0%
- Y: 0%
- K: 0%

Dark
- C: 0%
- M: 0%
- Y: 0%
- K: 0%

Capture the bulges of the individual pleats as triangles, repeatedly alternating light and dark.

**Coloring the Hair**

Color the hair in a radiating pattern with the hair whorl at the center, shaping the hair into locks and bunches.

Add shine to individual locks of hair, by applying a stroke of light color over dark. This will generate a sense of three-dimensionality.

To finish, create the circular highlight by adding a white ring.

Final image
Finishing Touches: Lightening Borders
The Effects of Balancing Light and Dark

The above is not quite complete. Lightening a few contours to enhance the visual variation of light and dark is all that is needed to finish the composition.

Forms' contours are traced using an extremely light tint of yellow (approx. 16%). As pictured in the color plate, the result is a deep red. A saturation of 16% yellow refers to the hue saturation. In this case the tint used is one-sixth of the original, fully saturated hue.

Before adding the light contour
After tracing the contours with 16% yellow

Light contours were also added to the skirt and stockings to make them stand out more clearly.

The region behind the character's head lacks light tones, so light contours were also added to the ends of her hair tufts.

Last, highlights are added to the hair in the back of the head and to the cheeks to finish.
Putting Colored Pencils to Practice

Artwork by Hiroko Shioda

1. Coloring the Skin and White Shadows

Using the all-familiar colored pencils to color your artwork is the first step toward creating a line proof or mockup. This section covers the basic steps in coloring.

Color the skin and other areas for which you have already determined the color. Establish the light source’s location and (to the girl’s upper left in this case) and add shadows underneath the nose, on the sides of the cheeks, and other areas as you color the composition.

For this composition, Shioda uses a slightly darker tone for areas of skin covered by shadow.

Shioda has colored the white corset cover to indicate shadows on the undergarment. Typically greys, and light blues or even light tints of other hues located around the character’s clothing or body are often used to apply shadows to white surfaces.

Next, Shioda adds light or soft colors such as yellow, brown or tan, light blue, lilac or pale purple, etc. Green, red, and black are strong colors. She gently applies soft or light colors. To portray shadows, Shioda adds extra layers of color, gradually building up and darkening the shade.

2. Applying Light Colors
3. Applying Dark Colors and Adding Details to Finish

Last, Shioda adds dark colors like green, red, and black. She avoids bearing down too much on the pencil. The trick is to relax the arm and gently color using the pencil. Always maintain awareness of where the light source is located.
Tricks to Applying Color: Coloring Areas Away from the Light Source First

Shioda works toward the light source when she applies pigment.

The tops of ruffles are touched by light, making them the lightest areas of fabric.

The areas underneath the chest and shoulder ruffles are blocked from light, forming dark shadows.

Shioda colors the costume starting with dark areas and moving toward the light tops of fabric ripples.

Shioda leaves white areas directly touched by light. Allowing these areas to remain white helps to evoke a sense of three-dimensionality.

Shioda colors the area of shadow underneath, adhering to the arm’s contour while imagining that the arm forms a boundary for the shadow.

When coloring your own artwork, work toward the light source.

Start with the base of the collar and work outwards.

The same applies to coloring animals.

Light Source

Under drawing
Figure sketching constitutes a vital element of using color to portray three-dimensionality. Take extra effort to structure all figures carefully.

Family member character design (c.f. p. 152)

To draw the hat, Shioda gives the cone a sense of volume while establishing the angle of the brim.

Composition layout: This is produced at the same time the characters are sketched as nudes.

Use an ellipse to portray the shape of a skirt hem.

Costume Design

Long skirts and gowns make it difficult to achieve the correct proportions in the length and silhouette, so Shioda makes a careful nude sketch of the fairy godmother before dressing her.

Shioda used separate sheets of paper to design the cat’s collar and pumpkin.
Transparent line drawing showing the nude figures, costumes, and primary props (e.g. the pumpkin)
Sample Novelty Roles: Creature Girls

Use proportional and *manga* sketching to design or portray not only adorable human characters, but other characters as well.

The above shows characters with ears attached to the top of the head. Ensure that the tips and bases of the ears are located in the same positions in both the front and profile views.

Ears attached to the side of the head are positioned about the same level as human ears.

Draw an ellipse to mark the layout of where the ear attaches to the head. This will give the ear a sense of volume.

The ears' movements affect how the viewer perceives the characters emotional state or mood, and the ears not only make the character visually interesting but also expand the range of emotional portrayal available to you, the artist.
Steps to Drawing

1

As when drawing a normal human, start with a circle-and-X layout to draw the head.

2

This layout of the hair represents its silhouette or outline.

Sketch layouts for the eyes, ears, and hair.

3

Final image

Assorted Ears
Try to use a wide range of animal ears from dogs and cats to more exotic animals.

Triangular ears:
Dogs, cats, foxes

Pointed ears:
Deer, giraffes, boars, etc.

Floppy ears:
Dogs, elephants

Round ears:
Bears, lions, etc.

Tall ears:
Rabbits
Characters with Tails

Seated cat (Rear view)

The tail attaches at the coccyx (tailbone).

Make-believe tail

Bunny tail

When designing a *chibi* creature girl, make her limbs smaller and rounder while enlarging the ears and tail, since these constitute the character's distinguishing features.

1:2.5 head-to-body ratio