

## THE HUMAN FIGURE

### BASIC PORPORTIONS

The average body is from 7 to 7 1/2 heads high. In art, we generally use 8 heads. Eight heads is considered perfection. Many individuals and most models do fit the perfect 8 head high porportion. This has nothing to do with heighth. Once I drew a nude of a woman 5'2" and she had a perfect 8 head high figure.

Note that though the proportions for the average face fit 85% of the population, the 8 head high measurements probably fit 40%. If you are drawing a portrait or figure study, draw the proportions in relation to that individual, or to the mood and style you wish to create.

### HALFWAY POINT

The crotch area is normally the half way point: 4 heads for the torso and 4 heads for the legs. Obviously, there are individuals with extra long legs, and others with unusually long torsos, so draw them accordingly.

A common error for beginning artists is to draw the legs too short. Often, they are fine from the top of the head to the crotch, but get lost in the length of the upper leg to the knee.

### SECOND HEAD DISTANCE

The second head distance comes to the underarms in men and women.

Women's breasts run directly across from the underarms, with the nipples being slightly below. The bottom of the breasts extends approximately 1/3 below the underarms. Naturally, there are endless variations according to the individual woman. It's not uncommon for the inexperienced artist to place the breasts on the collar bone or close to the waist. Keep in mind that a bra is made to support "under the arm," and you'll remember the general placement.

Men do not have the extra rounding so their nipples run along the second head line with one head unit between them.

### THIRD HEAD DISTANCE

The next head in women comes to the waist with the belly button located slightly below the waist.

It's the opposite for men. Their next head distance comes to their belly buttons and their waists are below. Sometimes, the belly button will be lower and even with the waist, but it will never be lower than the waist.

If you are unsure if someone is a man or woman, just ask the location of their navel.

Women's waists are higher so they have room in the womb to carry babies. Men's waists are lower, giving them longer backs and better leverage to lift items. If you have a man and woman of equal height, weight, and physical prowess, the man will always be able to lift more, just by sheer leverage.

Women's waists are one head length across and men will measure slightly larger than one head length.

Elbows are located at this third head distance down in both men and women, at the waist in women and the navel in men.

#### FOURTH, FIFTH, SIXTH, SEVENTH & EIGHTH HEAD DISTANCES

The fourth head comes to the crotch in both men and women.

There are two more heads to the bottom of the knees, and then two final two heads to the feet.

#### CENTER OF BALANCE

A man's center of balance is in his shoulders, whereas a woman's is in her hips.

Men's shoulders are generally three heads width across (using the width measurement of the head, not the length) and two heads in the waist.

Women run approximately 2 1/2 head widths in both the shoulders and hips, with variations a bit larger or smaller on the hips according to the individual.

These proportions allow for increased upper body strength in men, and balance and support for women in the hips as they carry babies both before and after birth. Notice that a woman will carry a child on her hip, but a man will carry a child in his arms or on his shoulders.

There is an experiment that illustrates the different centers of balance. Place a light chair against a wall. Have a man and a woman, in turn, lean over the chair at a right angle, head touching the wall, and try to pick up the chair as they straighten up. 95% of men are unable to do it. Unless he pushes back a bit to get momentum, he is totally off balance and will be unable to stand up and lift the chair simultaneously. A woman will lift the chair easily.

#### ARMS

The arms are 4 heads each way from the middle of the neck to the tips of the fingers, thus creating a perfect balance of 8 heads in either direction with all limbs extended.

#### LEGS

Note that the muscle structure on the lower leg is higher on the outside of the leg and slightly lower on the inside. It's the opposite for the ankle bones. The inside bone is higher and the outside bone slightly lower.

#### HANDS AND FEET

Pay particular attention to the size of the hands and feet in relation to the individual. Beginning artists may draw them to perfection with the exception that they are often far too small in relation to the body. A quick check, but not an absolute, is that the hand will be the length of the face, and the foot will be one head length or slightly more.

#### HANDLING THE EDGES ON MEN & WOMEN

Women should generally be drawn with softer angles, as they have a natural layer of fat (could be applied to some men, as is the opposite applicable for women who work out).

Men should be drawn more angular with sharper edges.

## HEAD SIZES

Men's heads average 9"

Women's heads average 8 1/2"

Babies one year old average 6"

The head growth is quite slow for children, equalling only 2" to 3" more by adulthood

## CHILDREN'S PROPORTIONS

One year old: 4 heads

Three years old: 5 heads

Five years old: 6 heads

Ten years old: 7 heads

15 years old: 7 1/2 heads

Adult: 8 heads (ideally)

The legs in children, from birth, grow nearly twice as fast as the torso.

## PERSPECTIVE, FORESHORTENING & ANATOMY

This entire chapter has been based upon proportions that are flat renditions, not applicable to figures drawn at angles requiring perspective. It is possible to work out the angles and proportions using vanishing points. This can be particularly helpful when working out a composition entirely from your imagination, as well as a good learning tool. It is not advisable to depend on it for everyday figure drawing.

Refer to the section in the Drawing Technique chapter titled The Initial Sketch, for help on seeing foreshortening when working from life or from a photo.

These proportions are also only surface notations and are not meant to replace anatomical study. They are strictly general guidelines.

Pick up good books on anatomy and draw and study the references until you are quite familiar with the structure.

**Figure drawing from life is a must.**

Sketch your family or friends using the three minute gestural method to help you recognize and draw the figure quickly.

Draw from plaster casts, if you have access to them. They allow extensive three dimensional study without movement or interruption.

