

NORMAL, $7\frac{1}{2}$ HDS

THE ACADEMIC
PROPORTIONS
USED IN MOST SCHOOLS.
(RATHER DUMPY)



IDEALISTIC, 8 HDS

MOST ARTISTS ACCEPT
8 HEADS AS NORMAL



FASHION, $8\frac{1}{2}$ HDS

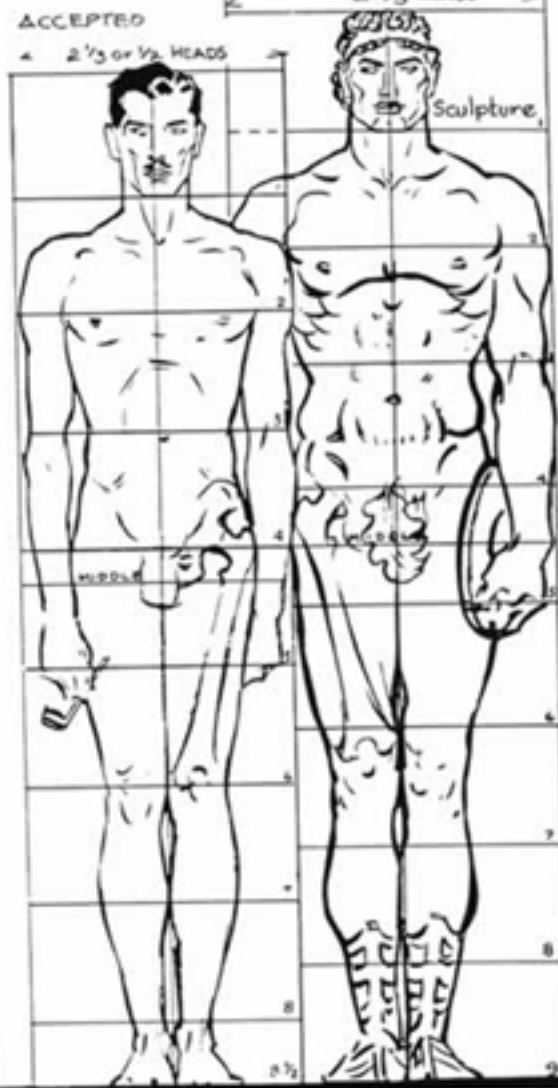
ACCEPTED

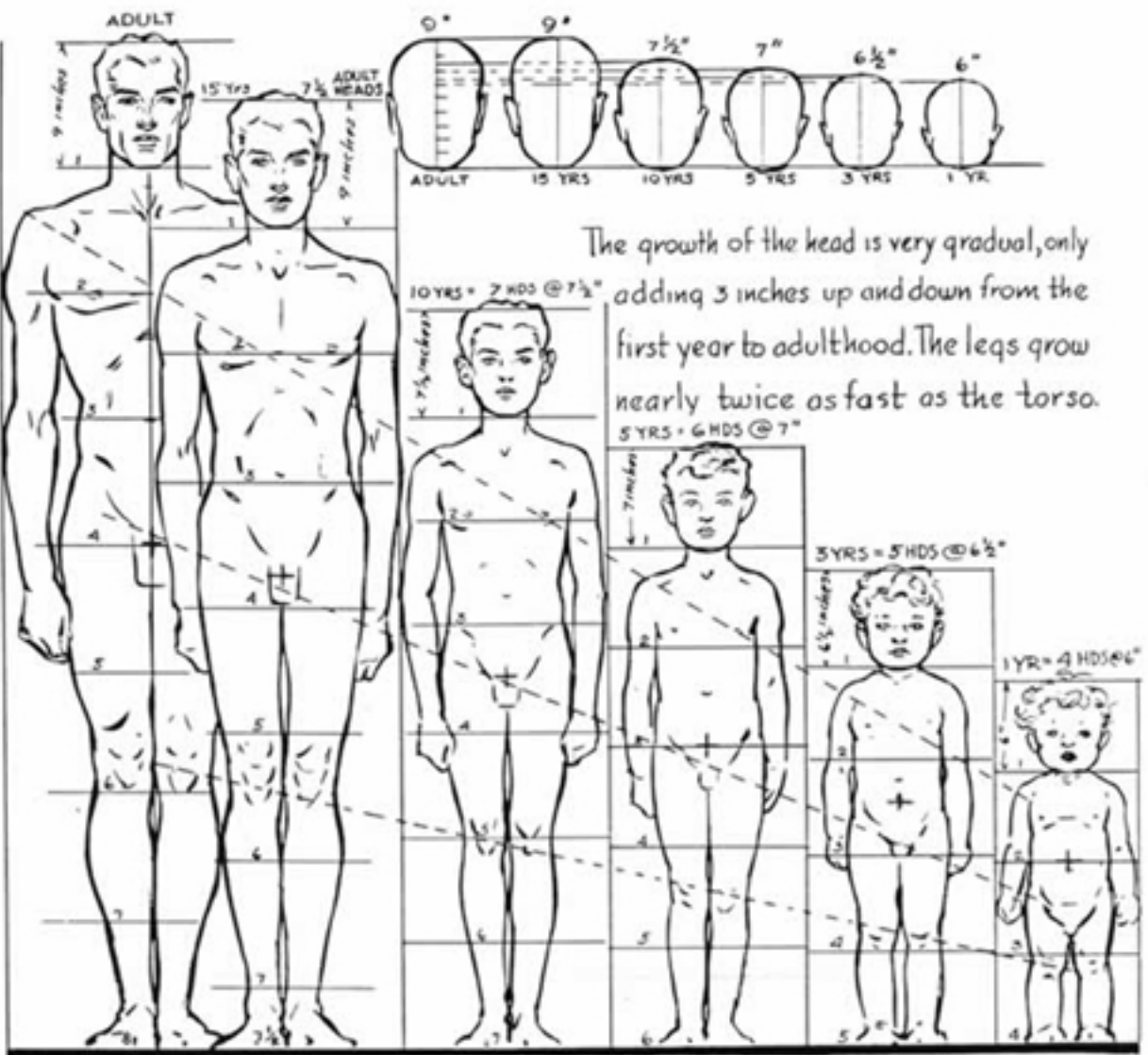
$2\frac{1}{3}$ or $\frac{1}{2}$ HEADS



HEROIC, 9 HDS

$2\frac{2}{3}$ HEADS

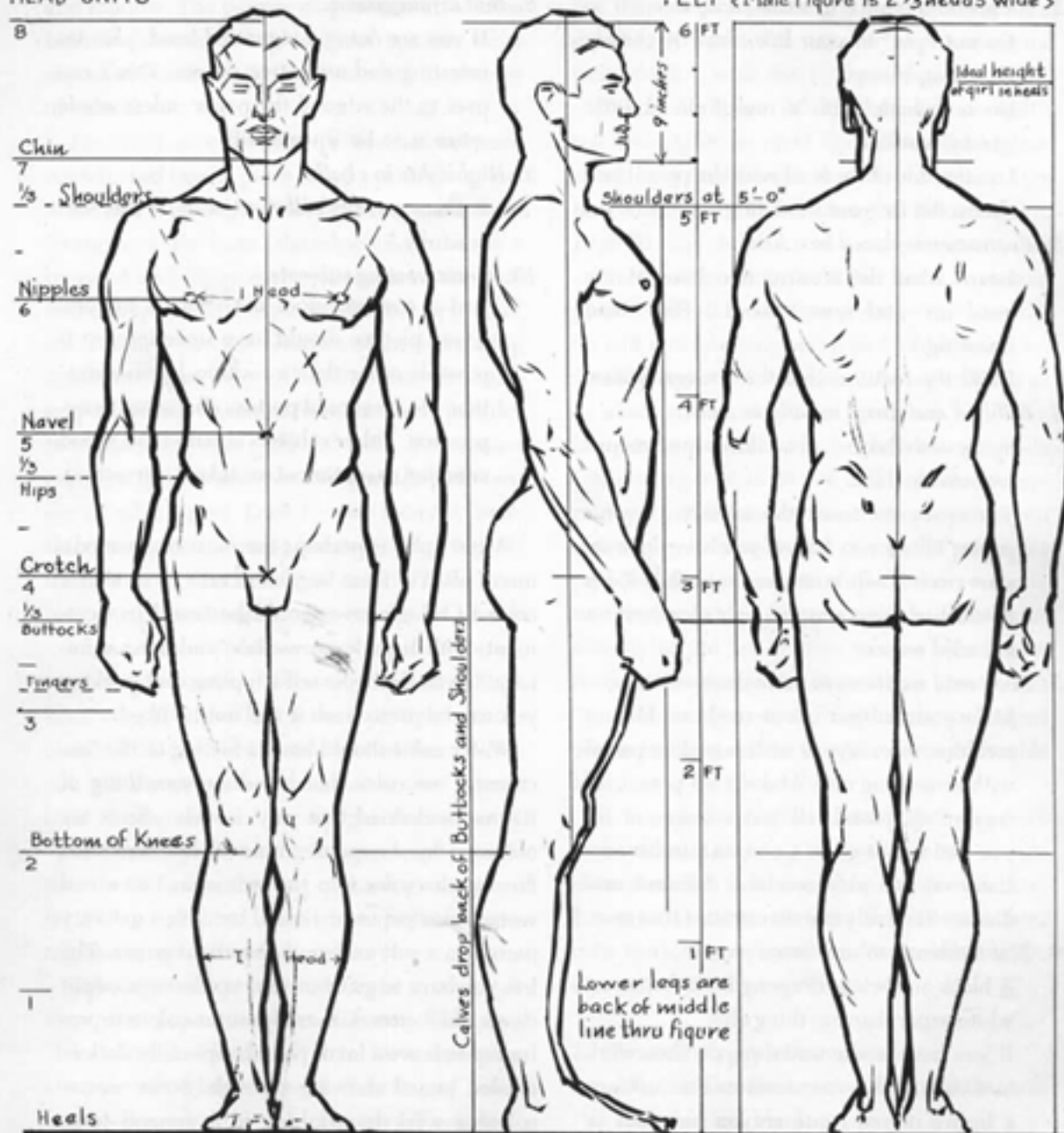




IDEAL PROPORTION, MALE

HEAD UNITS

FEET < Male Figure is $2\frac{1}{3}$ heads wide >



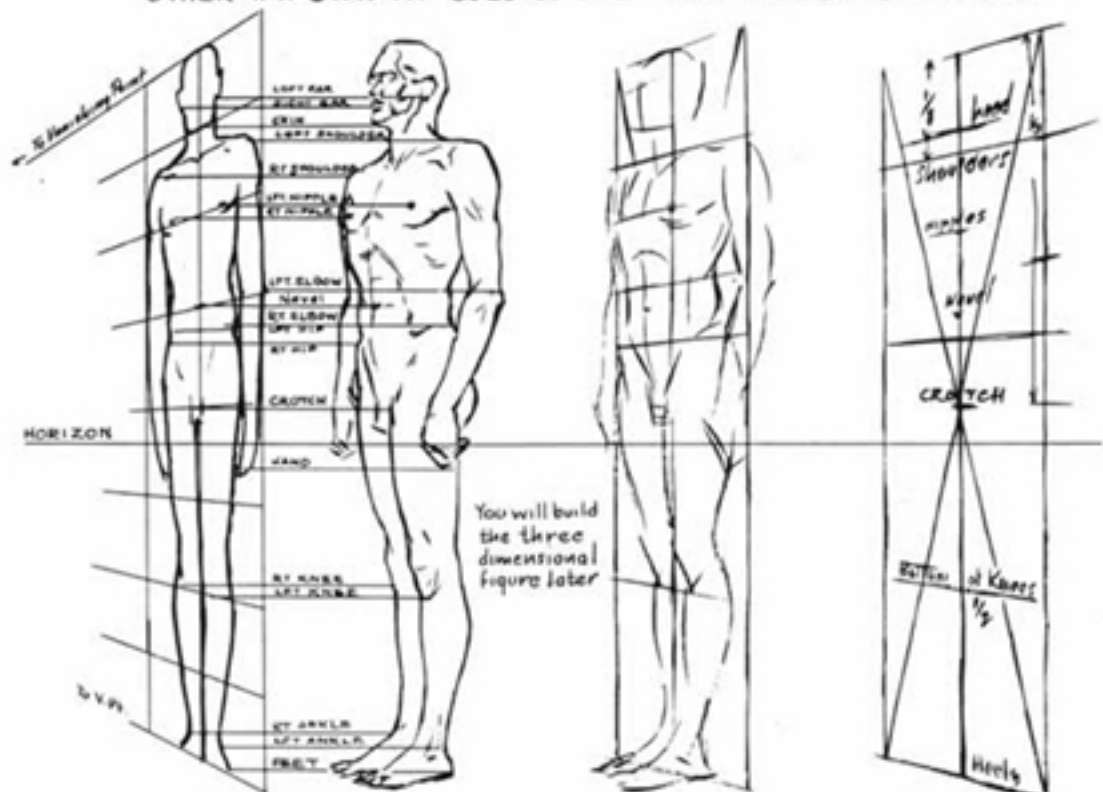
Take any desired height, or place points for top of head and heels. Divide into eighths. Two and one third of these units will be the relative width for the male figure. It is not necessary at this stage to attempt to render the anatomy correctly. But fix in your mind the divisions.

Draw the figure in the three positions: front, side, and back. Note the comparative widths at shoulders, hips, and calves. Note that the space

between nipples is one head unit. The waist is a little wider than one head unit. The wrist drops just below the crotch. The elbows are about on a line with the navel. The knees are just above the lower quarter of the figure. The shoulders are one-sixth of the way down. The proportions are also given in feet so that you may accurately relate your figure to furniture and interiors.

THE FLAT DIAGRAM

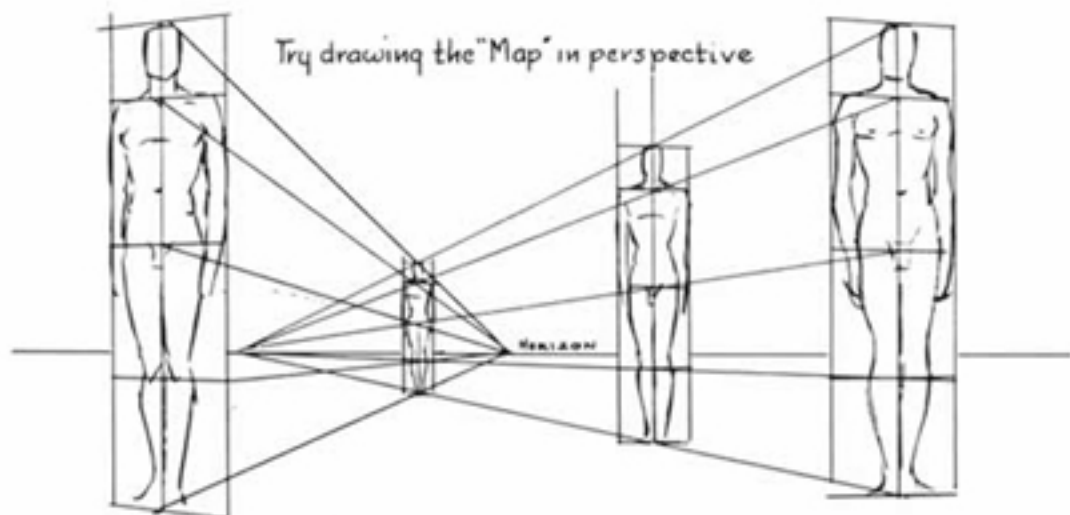
OTHER IMPORTANT USES OF THE "MAP" OR FLAT DIAGRAM.



All points of the figure can be put in perspective with the "Map" as guide

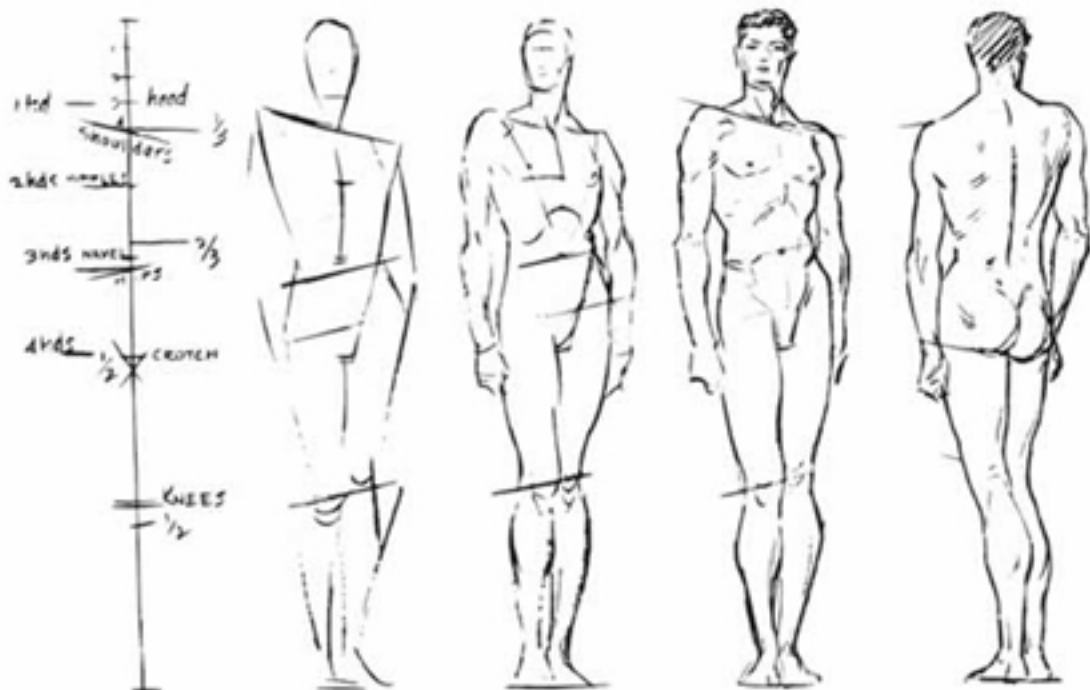
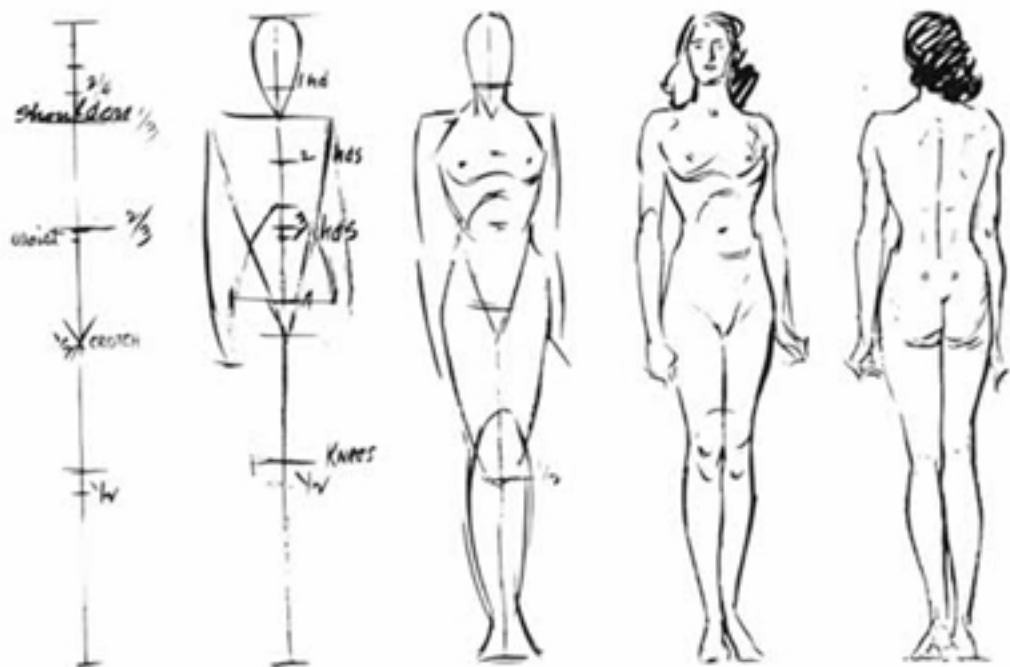
Quick "Set up" in perspective

Quick "Set up" of the "Map"

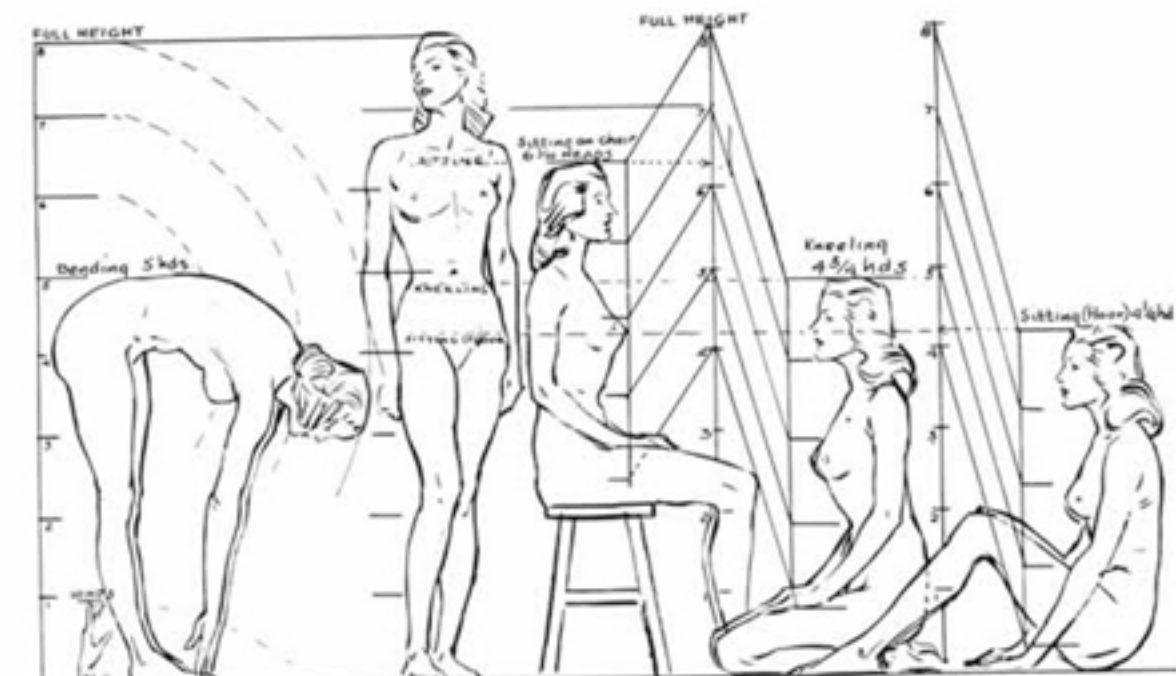


The proportions of one figure can easily be projected by perspective to others.

QUICK SET-UP OF PROPORTIONS

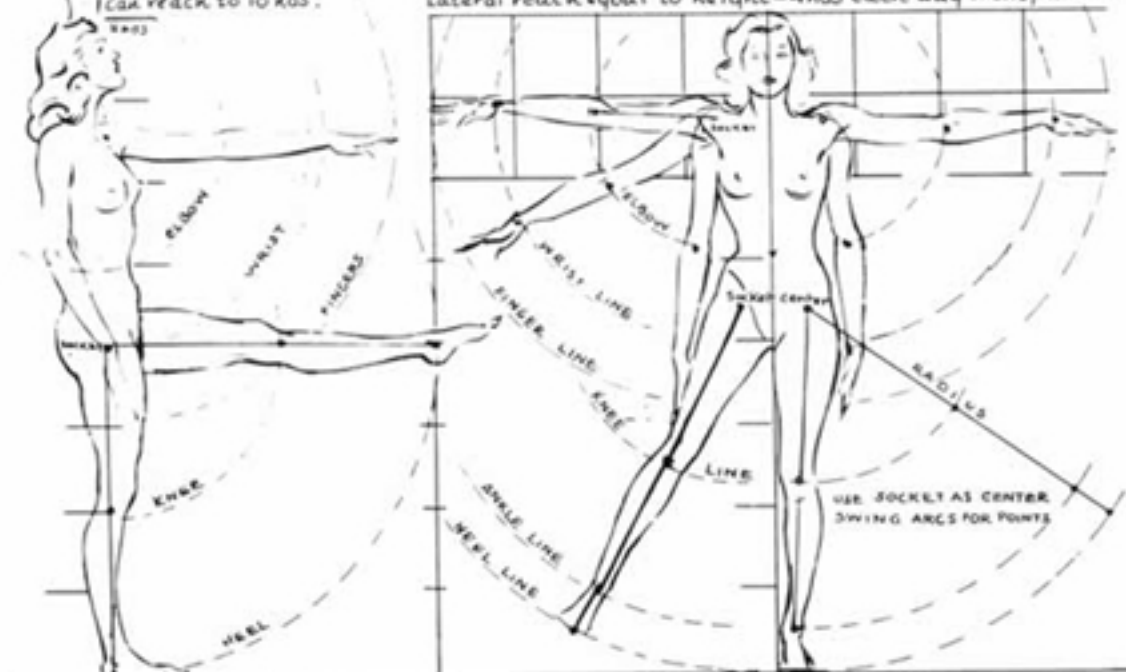


PROPORTIONS BY ARCS AND HEAD UNITS



How to project head units to poses other than standing - showing relative heights of each can reach to 10 kds.

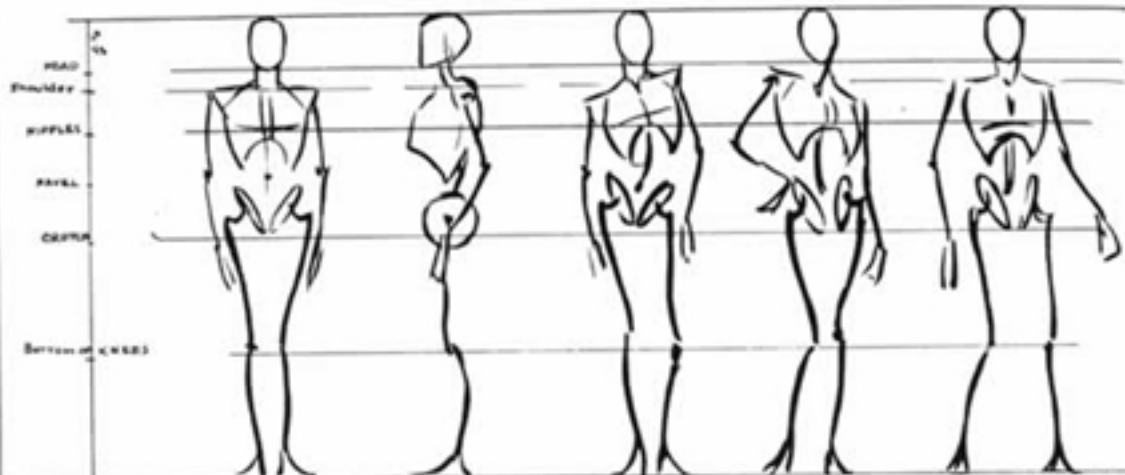
Lateral reach equal to height - 4 kds each way from pit of neck



A simple method of finding lengths of extended limbs. Later you will do this in perspective.

WE BEGIN TO DRAW: FIRST THE MANNIKIN FRAME

THE FIRST PROBLEM: HOW SHALL THE WEIGHT BE CARRIED?



PROPORTION LINE MANNIKIN FRAME SIDE WEIGHT ON RT. FOOT WT. ON LFT. FOOT WT. ON BOTH FEET



WEIGHT ON PELVIS WT. ONE KNEE, ONE FOOT BOTH KNEES HANDS AND KNEES ONE FOOT ONLY

ALL FIGURE ACTION SHOULD BE BASED ON A DISTRIBUTION OF THE WEIGHT OF THE BODY



ON ALL FOURS COMBINATION HANDS, PELVIS AND FEET SUSPENDED BACK AND PELVIS

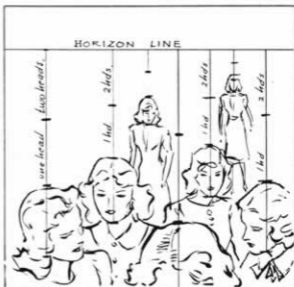
"HANGING" FIGURES ON THE HORIZON



You can "hang" your figures on the Horizon line by making it cut through similar figures in the same place. This keeps them on the same ground plane. Note Horizon cuts men at waist and the seated women at chest. The one standing woman at left is drawn relative to the men. Simple?



You can also "hang" heads on the Horizon line. In this case it cuts men's heads at the mouth, the women at the eyes.



Here we have measured a proportionate distance down from the Horizon. I have taken two heads as an optional space.

MOVEMENT IN THE MANNIKIN FRAME

LET US STRIVE FOR LIFE AND ACTION FROM THE VERY BEGINNING. DRAW, DRAW.



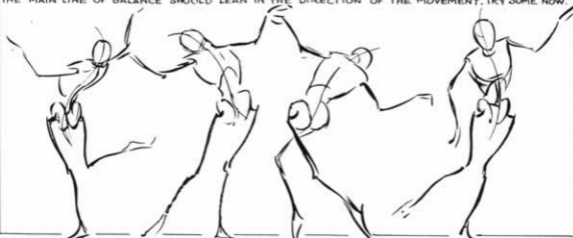
THESE ARE
"STATIONARY
PIVOTS"

TRY TO FEEL A CENTER OF GRAVITY. DISTRIBUTE THE WEIGHT OVER A CENTRAL POINT. MAKE NUMEROUS STUDIES.



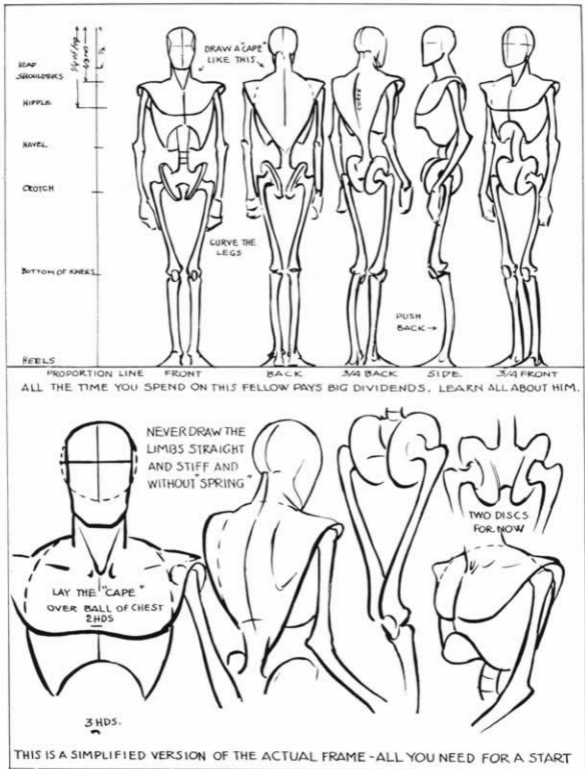
THESE ARE
"MOVING
PIVOTS"

THE MAIN LINE OF BALANCE SHOULD LEAN IN THE DIRECTION OF THE MOVEMENT. TRY SOME NOW.



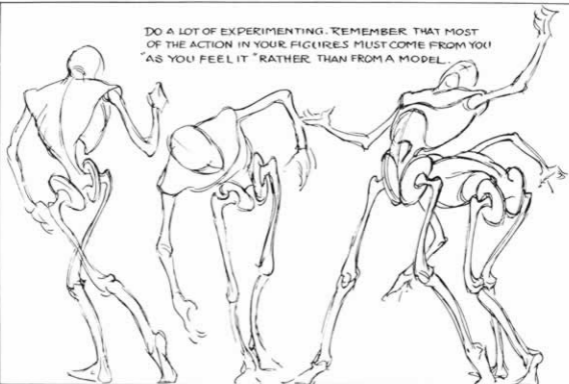
YOUR FIGURES MAY BE BUILT UPON CURVED LINES FOR MOVEMENT AND GRACE. AVOID RIGHT ANGLES

DETAILS OF THE MANNIKIN FRAME

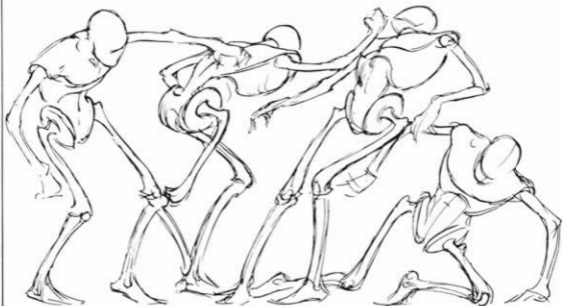


EXPERIMENTING WITH THE MANNIKIN FRAME

DO A LOT OF EXPERIMENTING. REMEMBER THAT MOST OF THE ACTION IN YOUR FIGURES MUST COME FROM YOU "AS YOU FEEL IT" RATHER THAN FROM A MODEL.



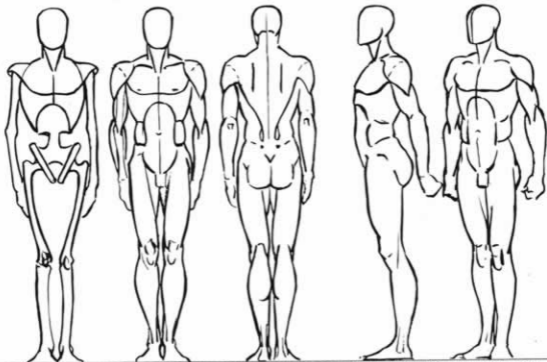
YOU WILL SOON LEARN TO EXPRESS YOURSELF. A VITAL EXPRESSION IS MORE IMPORTANT HERE THAN ACCURACY.



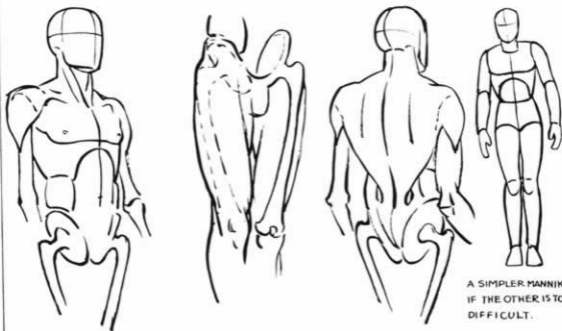
YOU CAN USE THIS TYPE OF SKELETON WHEN PLANNING ROUGHS, LAYOUTS, COMPOSITIONS.

ADDING BULK TO THE FRAME

THE GROUPS OF MUSCLES SIMPLIFIED.



DEVELOPING THE PREVIOUS FRAME WITH SIMPLIFIED MUSCLE GROUPS LAID ON TOP.



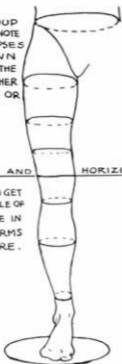
A SIMPLER MANNIKIN
IF THE OTHER IS TOO
DIFFICULT.

WE WILL STUDY THE "ACTUAL" BONE AND MUSCLE CONSTRUCTION LATER. GET THIS.

DING PERSPECTIVE TO THE SOLID MANNIKIN



HERE IS A GROUP OF CYLINDERS. NOTE HOW THE ELLIPSES NARROW DOWN AS THEY NEAR THE EYE LEVEL, EITHER FROM ABOVE OR BELOW.

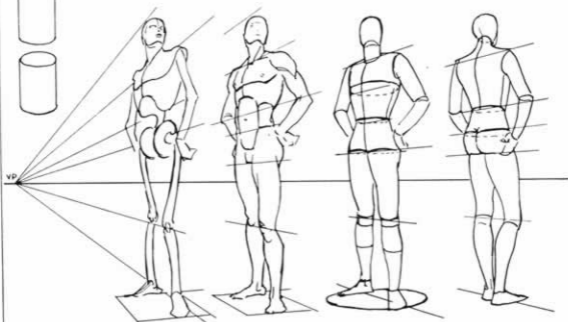


EYE LEVEL AND HORIZON

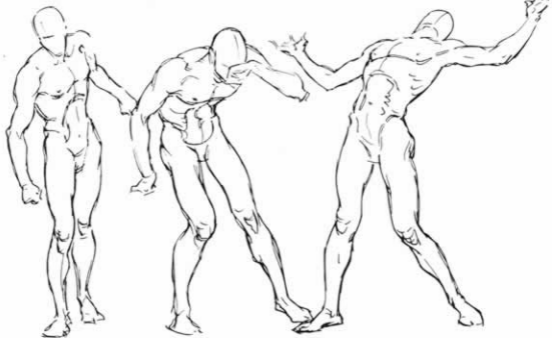
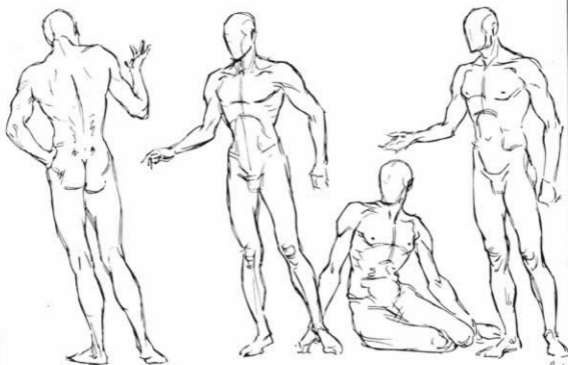
FROM THIS YOU GET THE PRINCIPLE OF PERSPECTIVE IN THE ROUND FORMS ON THE FIGURE.



TRY DRAWING YOUR MANNIKIN FIGURE TO THE HORIZON

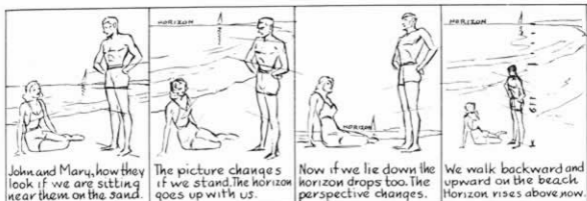


SKETCHING THE FIGURE IN ACTION FROM IMAGINATION



LEARNING TO "FEEL" AND SET UP THE FIGURE IN ACTION IS NOT AS DIFFICULT AS IT LOOKS

THE JOHN AND MARY PROBLEMS

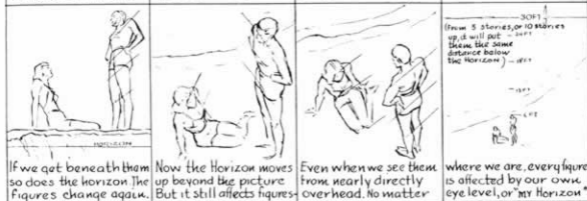


John and Mary, how they look if we are sitting near them on the sand.

The picture changes if we stand. The horizon goes up with us.

Now if we lie down the horizon drops too. The perspective changes.

We walk backward and upward on the beach. Horizon rises above now.



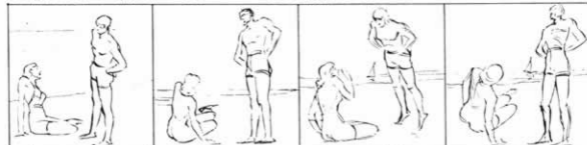
If we get beneath them so does the horizon. The figures change again.

Now the horizon moves up beyond the picture. But it still affects figures.

Even when we see them from nearly directly overhead. No matter

where we are, every figure is affected by our own eye level, or "my horizon".

SOME THINGS THAT MAY HAPPEN WHEN FIGURES ARE NOT RELATED TO A SINGLE TRUE HORIZON

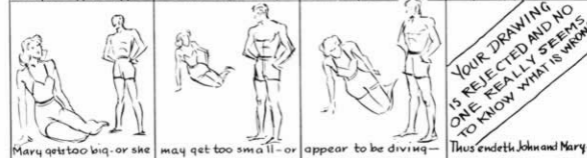


The figures appear tipped

or somehow wrong -

John may be falling - or

Mary doing gymnastics



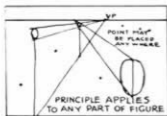
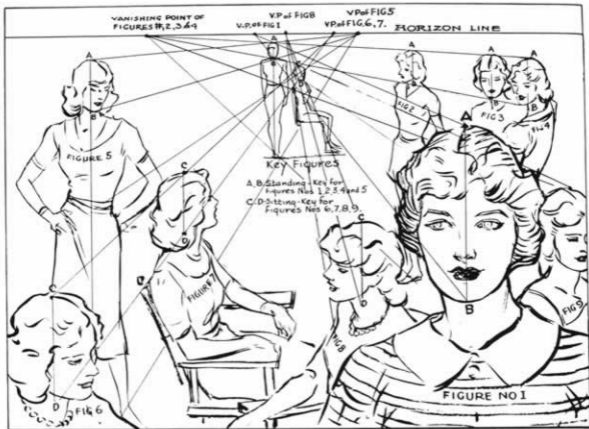
Mary get too big - or she

may get too small - or

appear to be diving -

YOUR DRAWING IS REJECTED AND NO ONE REALLY SEEMS TO KNOW WHAT IS WRONG
Thus endeth John and Mary.

FINDING PROPORTION AT ANY SPOT IN YOUR PICTURE



Many artists have difficulty in placing figures in their picture and properly relating them to each other, especially if the complete figure is not shown. The solution is to draw a key figure for standing or sitting poses. Either the whole figure or any part of it can then be scaled with the horizon. *AB* is taken as the head measurement and applied to all standing figures; *CD* to the sitting figures. This applies *when all figures are on the same ground plane*. (On page 37 there is an explanation of how to proceed when

the figures are at different levels.) You can place a point anywhere within your space and find the relative size of the figure or portion of the figure at precisely that spot. Obviously everything else should be drawn to the same horizon and scaled so that the figures are relative. For instance, draw a key horse or cow or chair or boat. The important thing is that all figures retain their size relationships, no matter how close or distant. A picture can have only one horizon, and only one station point. The horizon moves up or down with the observer. It is not possible to look over the horizon, for it is constituted by the eye level or lens level of the subject. The horizon on an open, flat plane of land or water is visible. Among hills or indoors it may not be actually visible, but your eye level determines it. If you do not understand perspective, there is a good book on the subject, *Perspective Made Easy*, available at most booksellers.