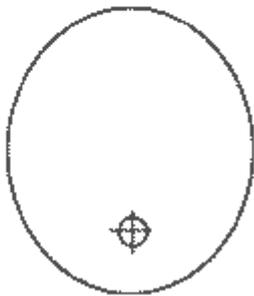
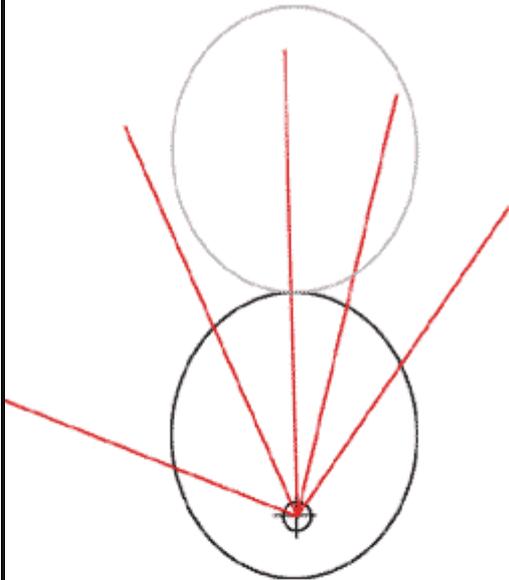


This first step is important to understanding how the hand is constructed and where the pivot points are. Once you are comfortable with the proportions of the hand it will be easier to draw it in different positions. For now let's concentrate on the basic "Spread Fingered" hand. Follow along and study your own hand as you go.



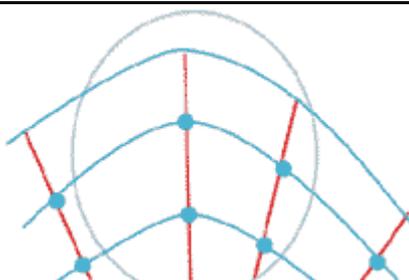
### Hands : Step 1- the oval

Draw an oval. Much like the one you see to the left. Designate a point on the lower center line of the oval. This is the anchor point we'll use for our fingers.



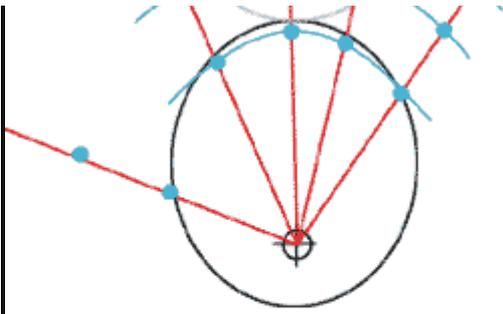
### Hands : Step 2- radials

Draw 5 lines radiating out from the anchor point. The longest line will be the middle finger...make it just slightly shorter than 2 oval lengths.



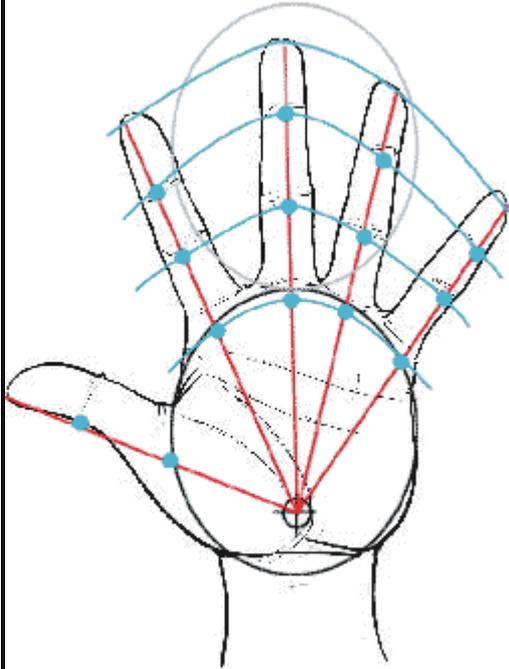
### Hands : Knuckle placement

The remaining finger lengths fall on an arc from the height of the middle finger. The knuckle closest to the tip of the finger is slightly less than 1/3 the way down from the finger tip. The next knuckle splits the



difference between the remaining length to the top of the palm oval.

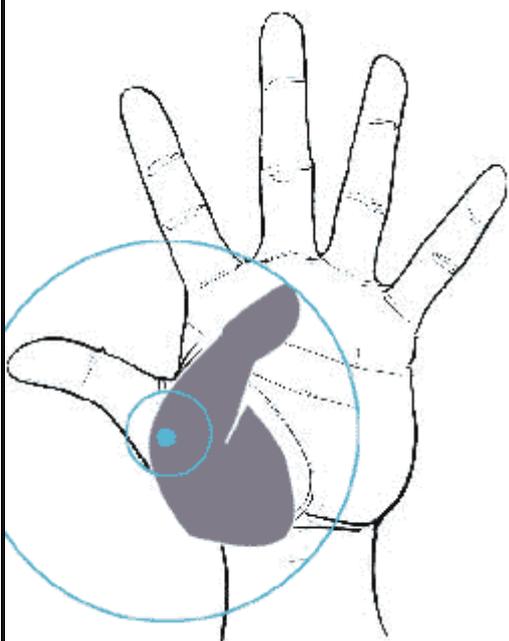
The thumb has 3 knuckles as well but the anchoring is hidden inside the palm.



### Hands : Fleshing in

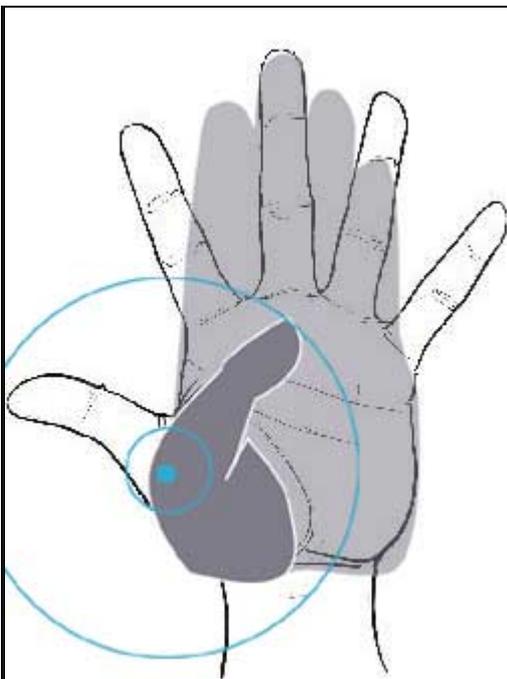
Flesh in the fingers as shown here. The fingers start narrow at the base..widen at the first knuckle then taper down again toward the tip. Believability is added by drawing creases in the places the hand bends the most...at the knuckles and along the palms. Look at your own hand for reference. Everybody's hand is slightly different. This hand is definitely mine.

(Notice I am Right handed and that's why my hand model is a Left hand)



### Hands : The opposable Thumb

The thumb kinda has it's own thing going on. It rotates around on its own axis. The thumb swings inward on its Anchor Knuckle and bends down at its second knuckle to point at the base of the Ring finger. The thumb's arc peaks at the middle knuckle of the index finger.



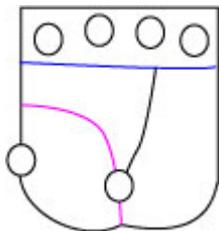
### Hands : Finger lengths

The Index finger and the Ring finger are nearly the same height..about the halfway point of the middle finger "tip". The Ring finger is just slightly longer.

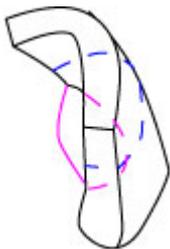
The Pinky finger comes up to the last knuckle line of the Ring finger.

Notice how the hand is not Square but Wedge shaped.

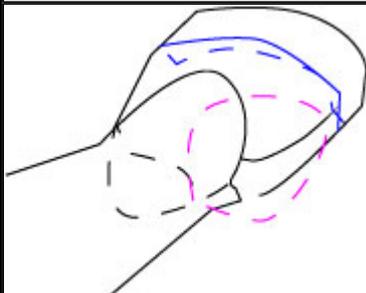
Hands are a nightmare for most artist...myself included. It's hard to construct it in basic shapes so I don't really try. Instead I break it up into major forms and really pay attention to where it folds and bends. **MAKE SURE YOU HAVE READ THE FIRST HAND TUTORIAL!** This one doesn't deal with proportions like the other did. This is more the form of the hand.



The hand is kinda like a shovel...that's what we use it for sometimes. You're palm gives you the lines you need to see were it bends. Above the top blue line is the first row of knuckles.

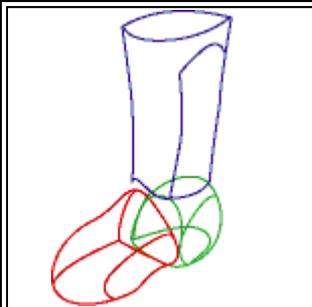
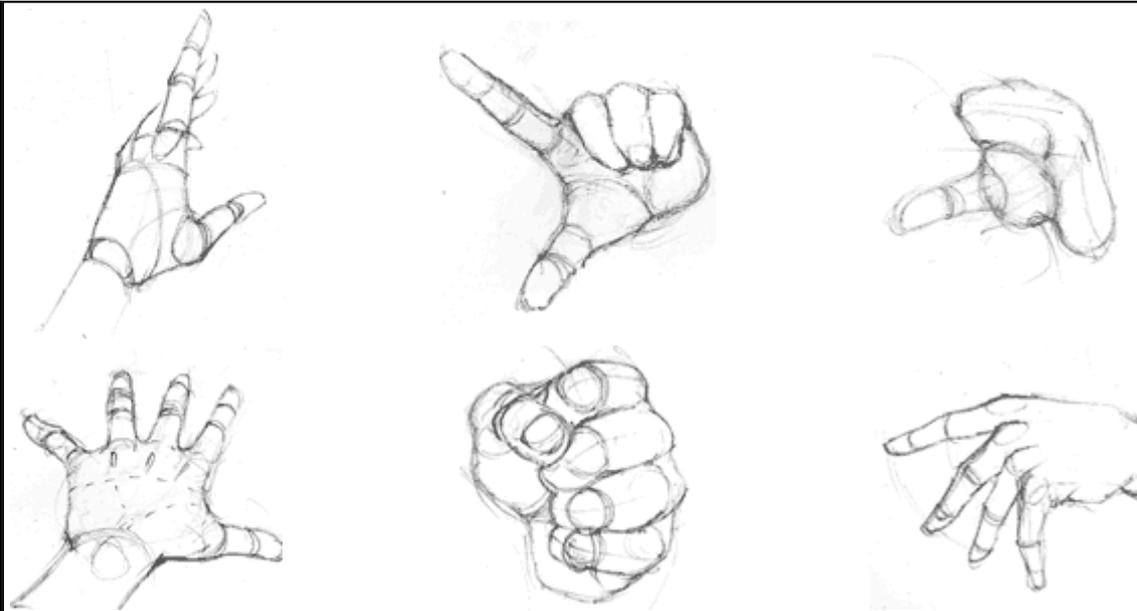


Don't make the hand a flat wedge. It curves and follows the contours of the lines on the palm. Notice how the thumb side of the palm pivots from the center.



even when drawing the hand from the back..pay attention to the fold lines in the palm. It will help you draw more natural positions for the thumb and fingers.

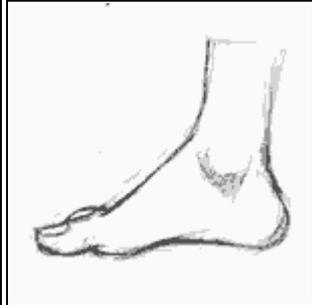
Below is a series of hand studies I drew based on the above diagrams. I kept some of my stucture lines in tact so you could see what I was thinking when I drew them



### The Foot: Know your basic forms!

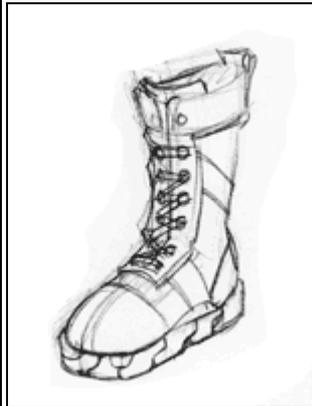
Like everything else you draw, the foot also consist of basic forms. I break it down into 3 parts.

- 1) a cylinder for the shin
- 2) a half a peanut for the front
- 3) A roundish shape for the heel



### Side view

Here you can kinda see those basic shapes beneath the foot. The shin comes into the ankejoint which then branches back for the heel and forward to the toes. Notice the foot does not sit FLAT on the ground plane..there's an arch between the toe pads and the heel pad.



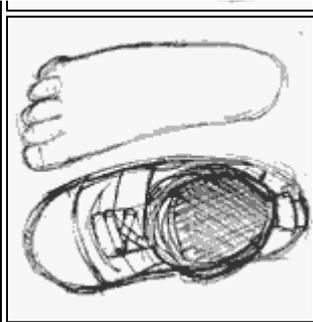
### If the shoe fits...

A shoe is basically just a wrap for the basic foot shapes. Looking at pictures of shoes will give you ideas for styles. Here I chose a modified US Army Jungleboot. Make sure you make the Sole of the shoe go below where the bottom of the foot would be. There's about a 1/4 of an inch to 4" of rubber between the bottom of the foot and the bottom of the sole.



### If your stuck...

Draw the foot first. That will give you a better idea on how to wrap the shoe around the foot form.



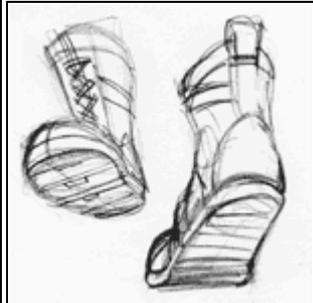
### **the Wedge**

Notice how the foot is shaped like a rounded wedge the bend IN towards the body's center. The toes are also arced like the fingers of the hand...the middle toe is usually the longest.



### **The Instep**

Okay, this foots a bit wide but you see the important structures. Everyone's seen foorptints in the sand. The heel and Ball of the foot are linked by the outside edge of the foot. The arch of the foot doesn't come into contact with the ground.



### **Mastering forms in perspective**

Once you understand how a foot is put together you can start getting creative with action poses. Take a good look at those basic shapes I drew in step one and see if you can find them in this drawing to the left.

Practice Practice Practice!