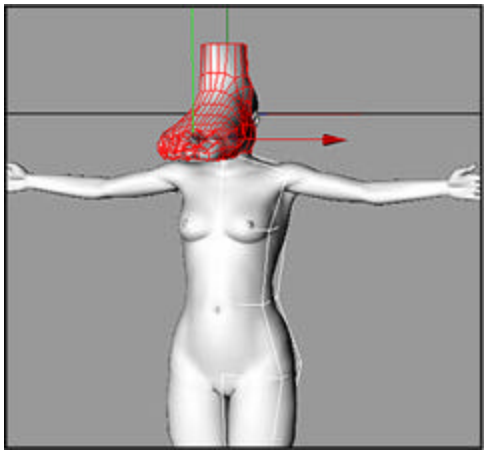
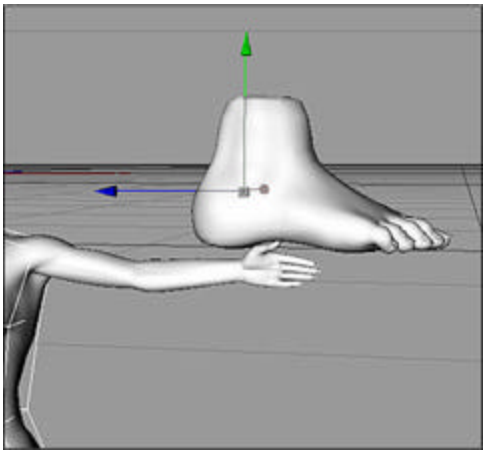
Project Based Tutorials - Human Modeling: Meissie

Human Modeling: Meissie: Modeling the Leg	**Works with:**	**Requires:**
	XL	Version 6+

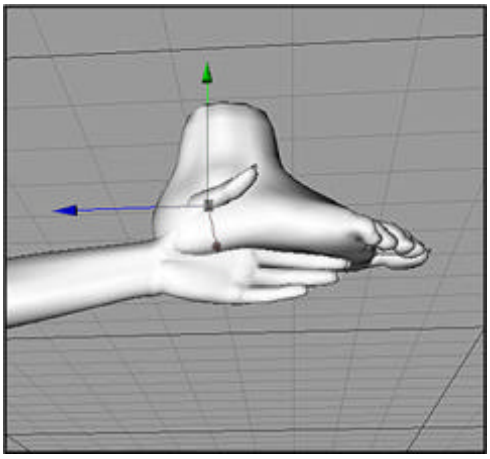
Step 1: After pasting the foot in the body document, you will see that it's rather large. It needs to be scaled down. You will use the hand as reference.

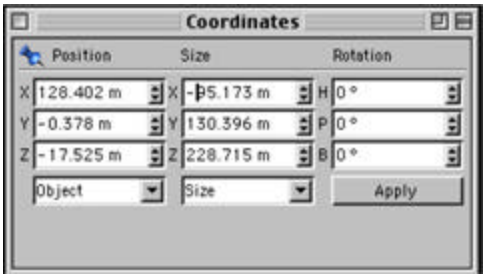




Step 2: Rotate the foot 90 degrees on the H axis and place it on top of the hand.

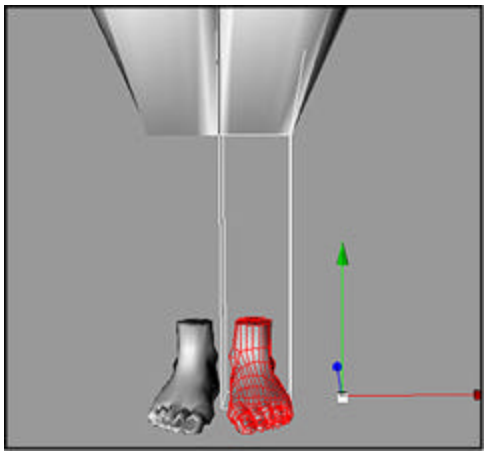
Step 3: Activate the Scale Tool (Tools=>Scale) and scale the foot down until you get something similar to the picture shown. The heel of the foot should be about the size of the wrist and the "ball" of the foot about the size of the end of the fingers. As with the hand, you're stuck with a right foot and need to make it the left one.

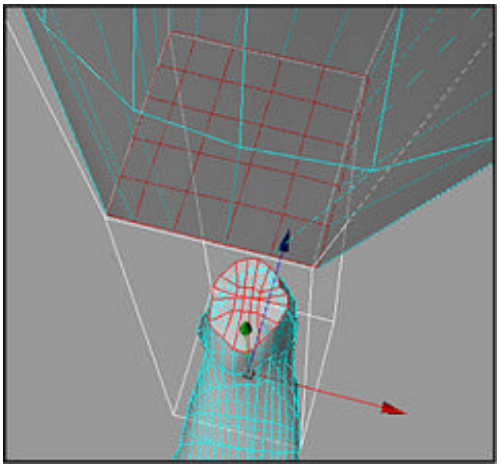




Step 4: With the foot selected add a minus to the X Size in the Coordinates Manager and hit Apply. Your foot is now a left foot. Don't forget to Reverse the Normals (Structure=>Reverse Normals), since they are now facing inward.

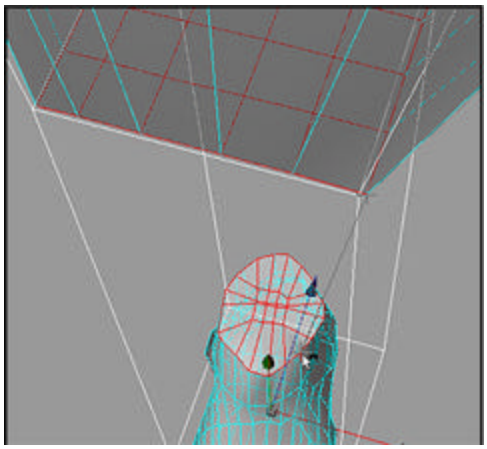
Step 5: Place the foot with the sole at the bottom of the 'bodyguide'. In the Object Manager make the foot a child of the body and choose Functions=>Current State to Object. Drag the 'old body with foot' in 'bodybackup'.

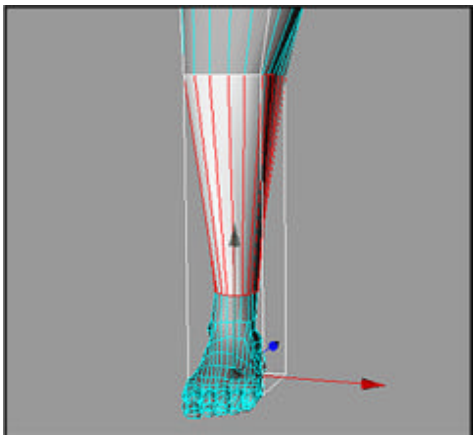




Step 6: Select the top polygons of the foot and the bottom polygons of the knee.

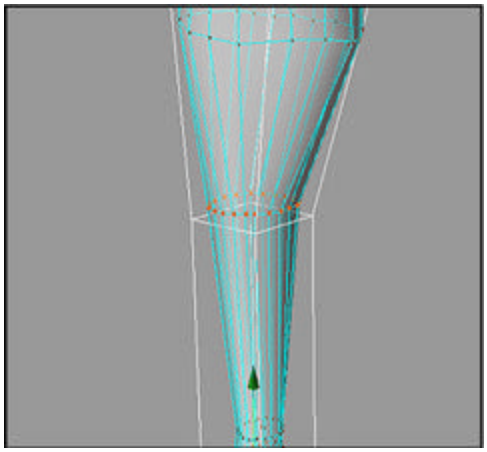
Step 7: Activate the Bridge Tool (Structure=>Bridge) and drag a connection from the left front corner of the knee to the left front corner of the foot.

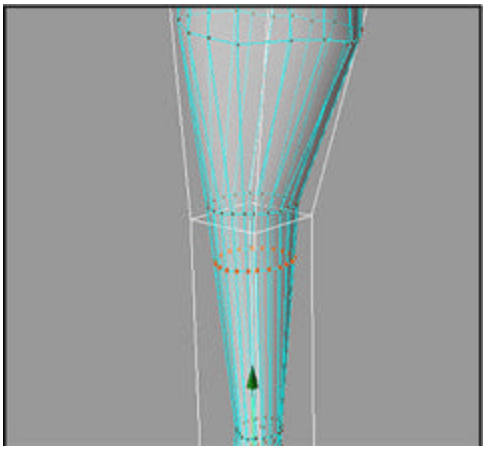




Step 8: You should get something similar to the picture shown. Lock the Y axis and round the knee part somewhat with the help of the Magnet Tool (Structure=>Magnet).

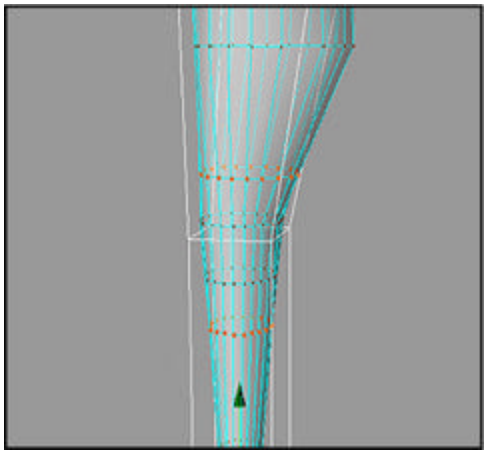
Step 9: Using the Points Tool (Tools=>Points) select the points as shown and drag them a bit above the knee edge of the bodyguide.

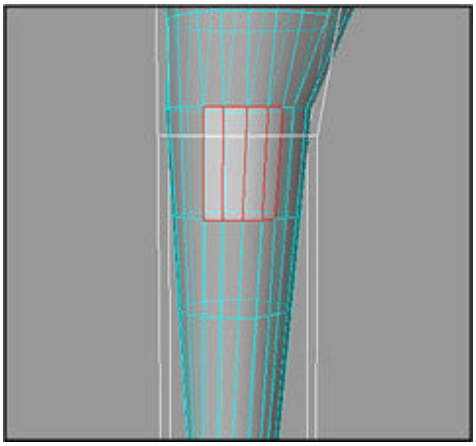




Step 10: Activate the Knife Tool (Structure=>Knife) and cut the lower leg as shown.

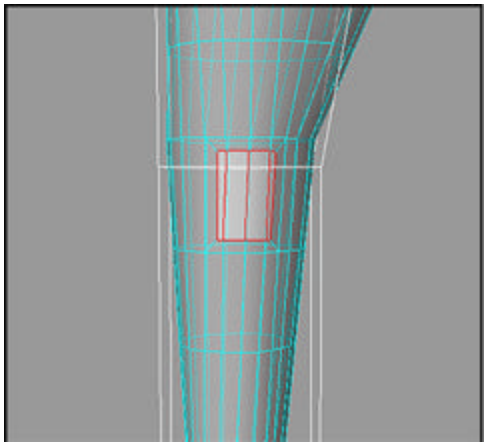
Step 11: Knife the leg two more times.



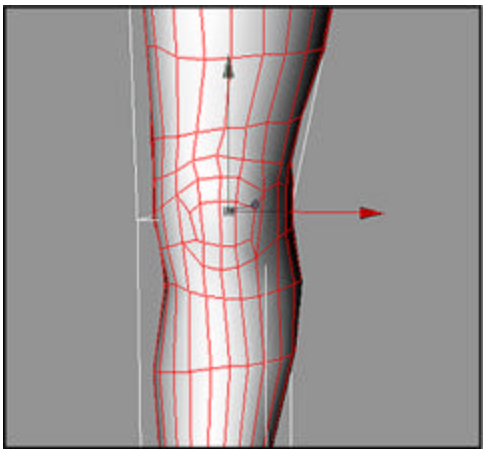


Step 12: Switch to Polygons mode and select the four polygons as shown. These will form the kneecap. Remember that there were five polygons in the front, so you will have to choose which four polygons will be part of the knee. The first four polygons from the left were chosen here.

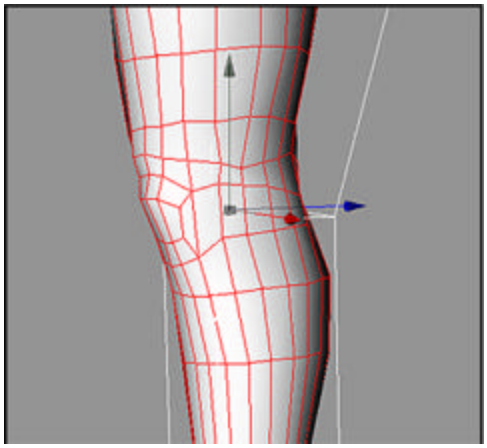
Step 13: With the four polygons still selected activate the Extrude Inner Tool (Structure=>Extrude Inner) and extrude the polygons inward. You have now created your basic leg with the minimal amount of polygons needed. Drag a copy in 'bodybackup' and save your work.

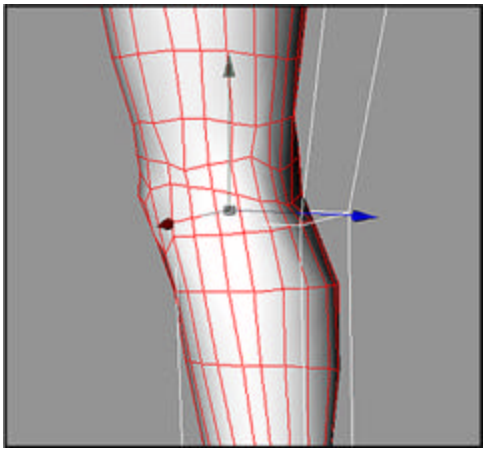


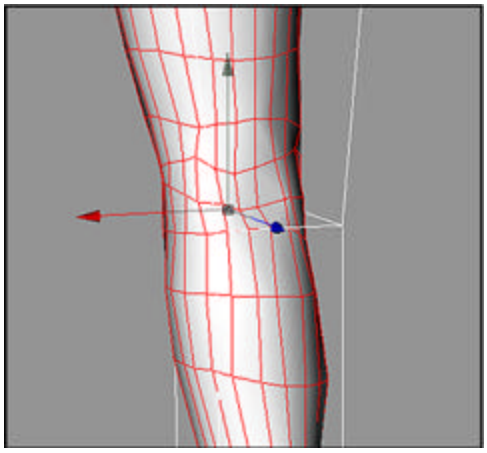
Step 14: All that's left is the hard part...modeling. Depending on the amount of detail you want, you can add more polygons with the help of the Knife Tool or Arndt von Koenigsmarck's Cutter Plugin (www.vonkoenigsmarck.de).

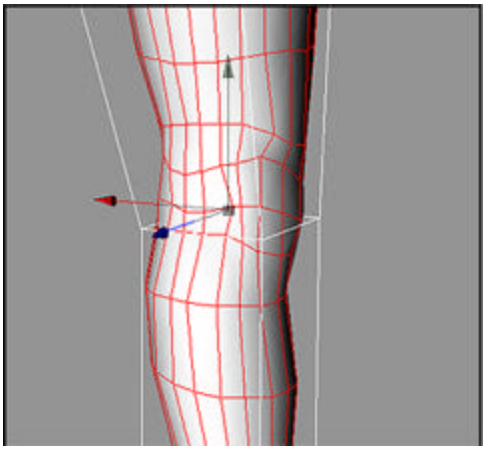


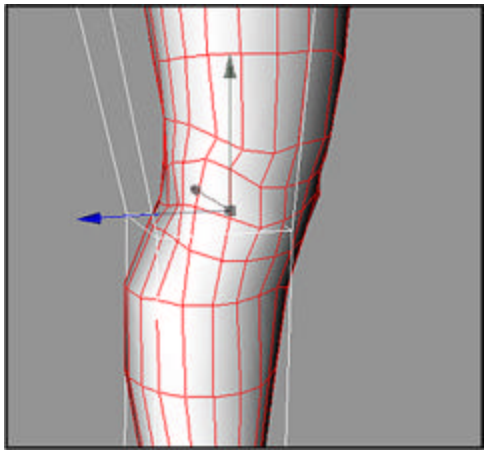
Step 15: The next few pictures show that the knee area was cut two more times using the Cutter Plugin. This tool was created by Arndt von Koenigsmarck and can be downloaded at (www.vonkoenigsmarck.de). The images below will give you an idea where all the knee polygons will ended up.

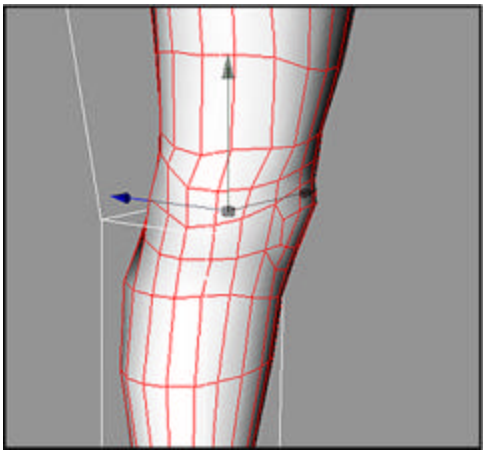


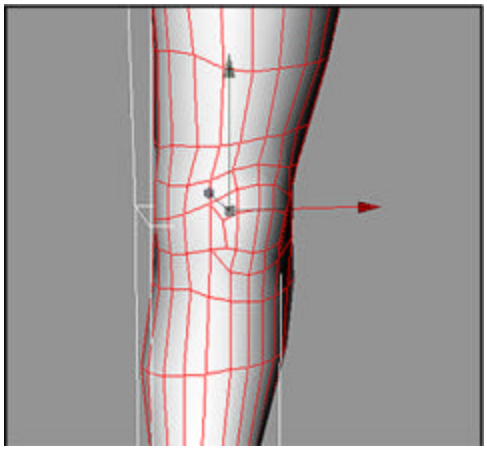


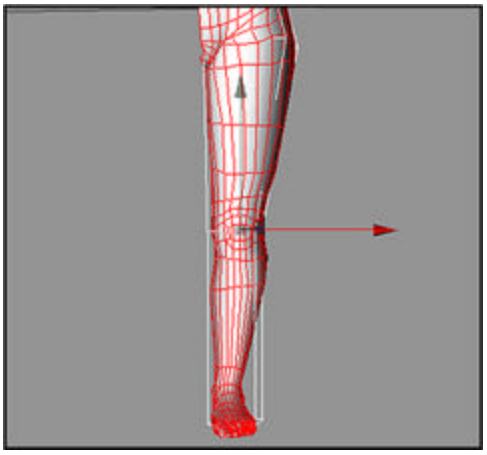


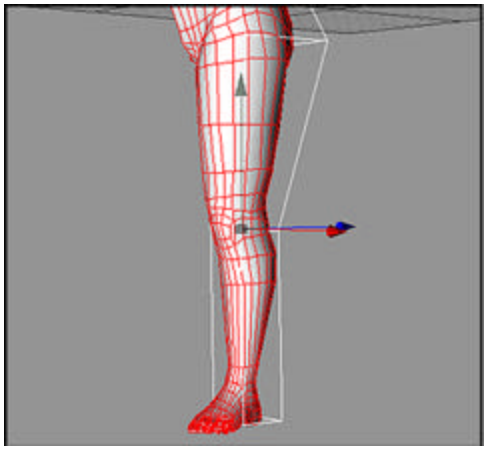


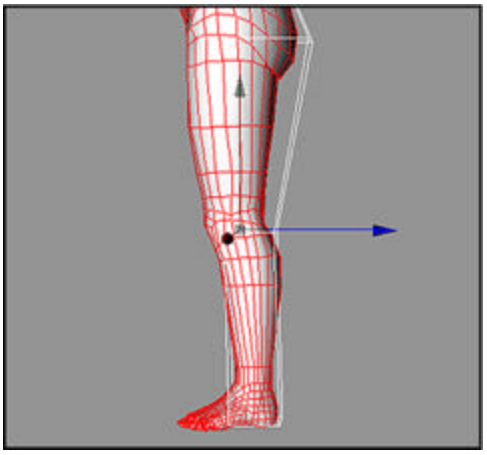


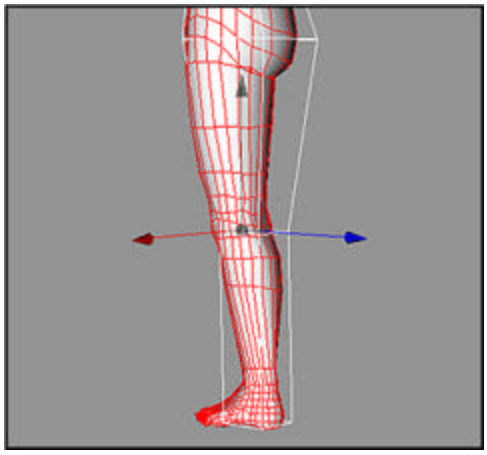


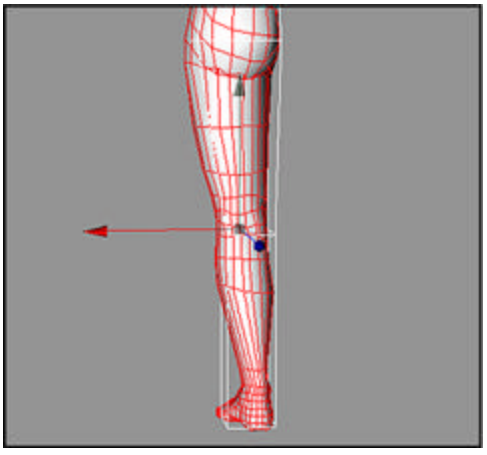


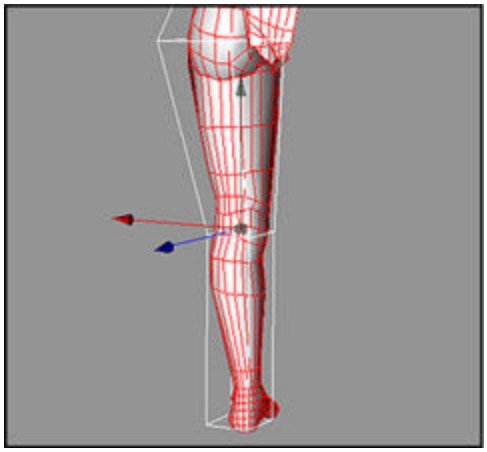


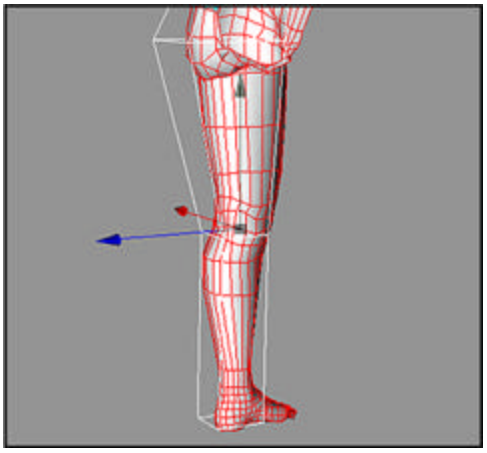


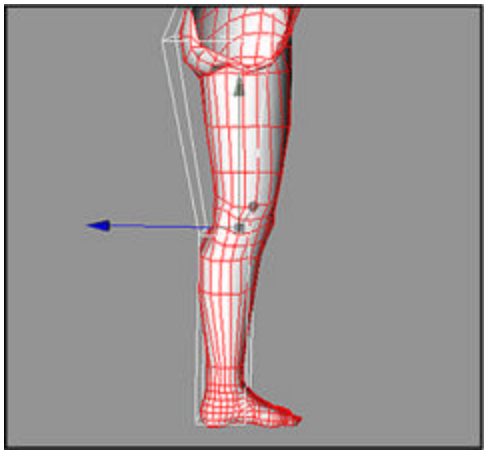


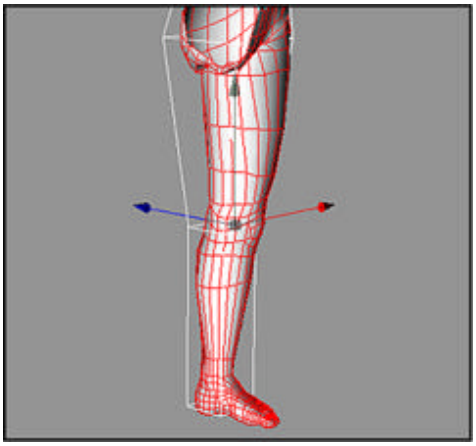


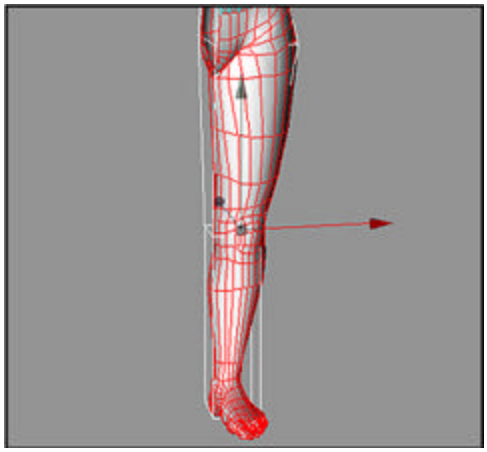












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