

Math Problems:

1. One point linear perspective is based upon 2 or more straight lines joining in one specific location to create the illusion of depth and distance.

Create your own one-point linear perspective diagram. Lay your blank page length-wise in front of you. First draw a horizontal “horizon” line in the middle of your paper. Draw a dot in the middle of your horizon line – this is your vanishing point. From your vanishing point draw 4 straight lines out to the corners of your page. Within the V’s created on the sides you can draw trees/hydro poles etc from the top of the V to the bottom from the edge of your paper in towards the middle – make sure they are evenly spaced!

Look at your diagram – something beyond the use of lines is occurring to create the illusion of depth and distance. What is the additional math that is being used? Why is it successful?

2. Ratios are used to figure out proportions of objects all the time in art. For example, to keep the human body in proportion when rendering it, an artist can use the head as a basis. Whatever the size of the head, the rest of the body + the head should equal 7 to 8 head lengths, the breadth of the shoulders will be approximately 1 head width and so on.
 - a. Using this type of relational math, work out what would be the best unit of measurement in the picture below to keep everything in proportion if you were to render this image.
 - b. Demonstrate how this portion of the entire image relates to maintaining proportion within the image.



