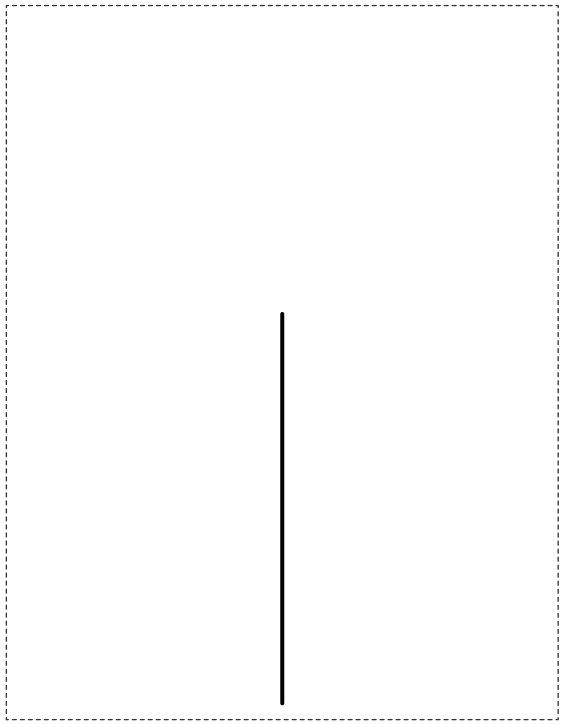
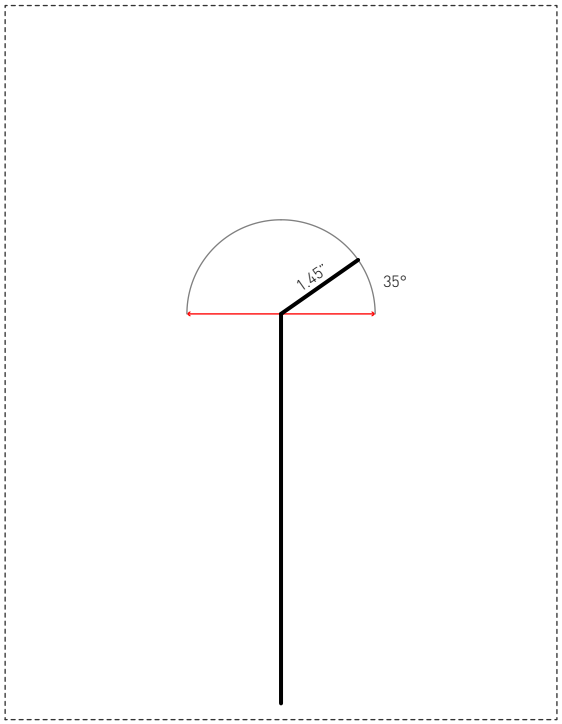
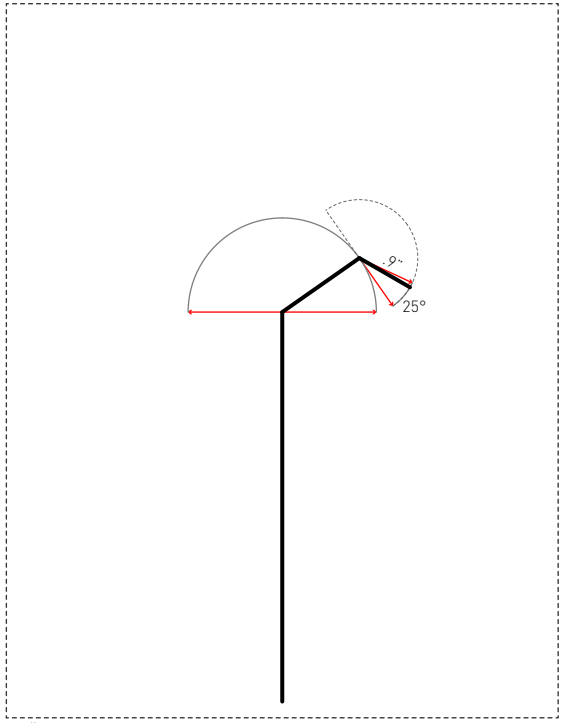


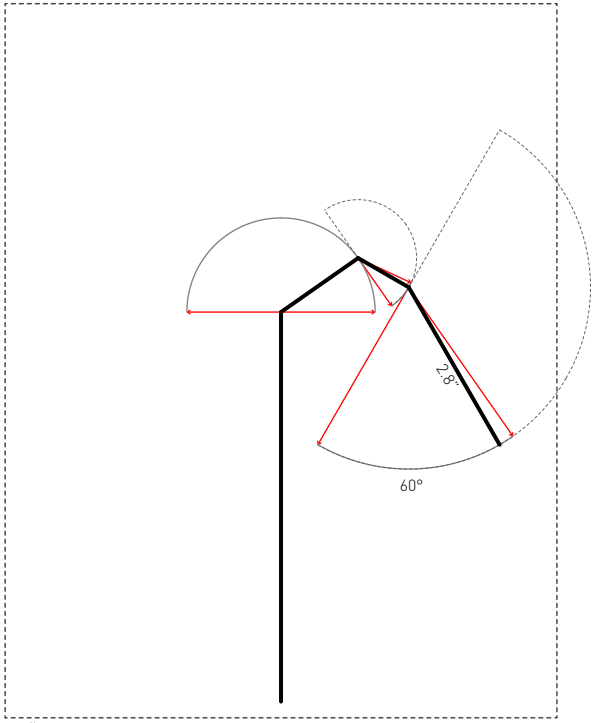
1. Draw a 6" vertical line to start the drawing



2. "Neck Circumference" 1.45" @ 35°



1. "Bicep Circumference" .9" @ 25°



1. "Shoulder to Shoulder" 2.8" @ 60°

ASSIGNMENT 1.1
INSTRUCTIONS:

Step One:
1. Begin the assignment by taking ten length measurements of various parts of your body. This set of measurements should have some type of conceptual alignment such as a set of circumferences or series of length measurements of different appendages. Record each dimension.
2. Along with each measurement, you should record the corresponding range of motion of each part measured, expressed in degrees.

Example:
1. Neck Circumference -- 14.5" - Range of Motion -- 0° - 180°
2. Bicep Circumference -- 9" - Range of Motion -- 0° - 30°
3. Shoulder to Shoulder Length -- 28" - Range of Motion -- 0° - 65°

Step Two:
1. Apply a scale factor of approximately 10:1 or 10 inches = 1 Inch, to each of the ten measurements taken. Define a specific angle within the range of motion for each part measured

Example:
1. Neck Circumference -- 1.45" - Range of Motion -- 35°
2. Bicep Circumference -- 0.9" - Range of Motion -- 25°
3. Shoulder to Shoulder Length -- 2.8" - Range of Motion -- 60°

2. Using your set of dimensions and ranges, begin constructing a drawing, similar to the example on the left. Start by drawing a vertical line with a dimension of 6", and then continue drawing a series of lines, at the specified scale, applying rotations in a clockwise manner. Each successive line should be drawn at an angle measured from the tangent line of the circle constructed using the previous line as a radius

3. The resulting drawing should produce a spiraling effect. Allow lines to overlap and intersect one another, but always maintain a clockwise spiral.

Step Three:
Using the drawing produced in Step Two, begin carefully bending a length of steel wire to match the drawing. Bending should only be performed with a pair of pliers. Do not attempt to bend the wire with your hands, as you will produce kinks and other undesirable effects. You should produce an exact replica of the 2-D drawing, through a series of careful bends. This wire-form should be produced with one continuous length of wire.

4.111 Introduction to Architecture & Environmental Design

Spring 2014