

Name _____

Date _____

West Islip Technology Department

Period _____

Drawing Tools
Activity # 3

Read the directions below carefully and then draw the triangles, lines, and circles required for each exercise. These exercises will be completed on a piece of 12 x 12 drawing paper, which will be divided into FOUR squares in the following manner:

- 1 vertical lines will be drawn 6" inches away from the end of the paper
- 1 horizontal line will be drawn 6" inches from the bottom/top of the paper

Your drawing layout should resemble the following:

1	2
3	4

Exercise 1: Draw 5 lines parallel to each other, with a $\frac{3}{4}$ " space between each line. The line sizes will be ($\frac{3}{4}$ ", $1\frac{5}{8}$ ", $2\frac{1}{2}$ ", $3\frac{7}{8}$ ", $4\frac{1}{4}$ "). All lines must be centered left-to-right in box 1 using the same center line. Lastly, the first line drawn will be $\frac{3}{4}$ " in length and will begin $1\frac{1}{2}$ " up on the vertical center line that you must draw using a light construction line.

Exercise 2: Use the slide rule and a triangle to draw three sets of perpendicular lines. The starting point for the base of set # 1 will be 1" up and $\frac{3}{4}$ " over from the bottom left hand corner of box 2. The base line for each set should be 1". After you draw the base for set # 1, the gap in between each base will be $\frac{3}{4}$ ".

- Set # 1: 1" base, and $2\frac{3}{8}$ " perpendicular line from center of base
- Set # 2: 1" base, and $3\frac{7}{16}$ " perpendicular line from center of base
- Set # 3: 1" base and $4\frac{3}{16}$ " perpendicular line from center of base

Exercise 3: Use the slide rule and a triangle to draw two triangles. The starting point for Triangle # 1 should be 1" up and $\frac{3}{4}$ " over from the bottom left hand corner of box 3. Make sure to leave a $\frac{3}{4}$ " gap between the base of Triangle #1 and #2.

- Triangle # 1: Base $1\frac{3}{4}$ " and Height from center of base $2\frac{5}{8}$ "
- Triangle # 2: Base $2\frac{3}{8}$ " and Height from center of base $3\frac{3}{16}$ "

Exercise 4: Draw a $3\frac{5}{8}$ " circle in the center of box 4 using a compass. Inside of the circle, draw a square tangent to all four sides of the circle by using the slide rule and a triangle.