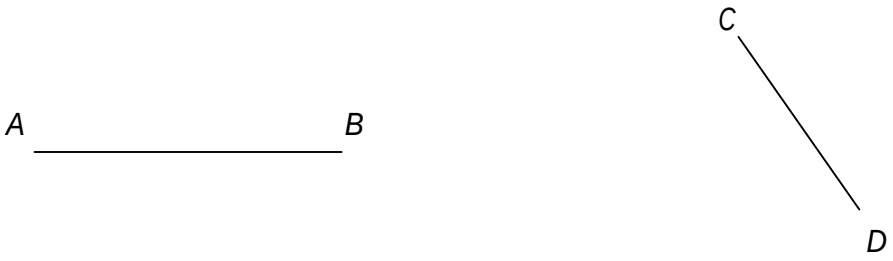
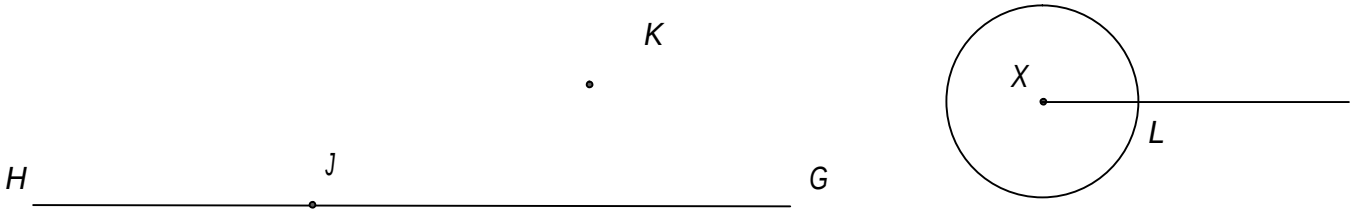
Geometry – Constructions **Assignment #13**

1. Construct the perpendicular bisector of segments *AB* and *CD* and construct two equilateral triangles for each:



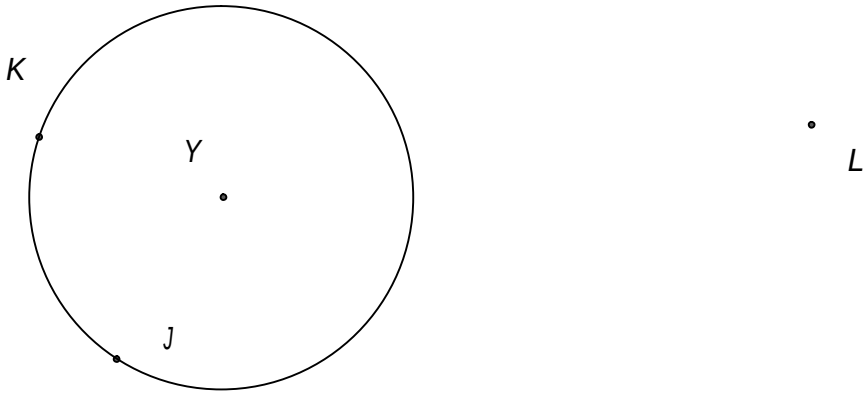
2. Construct the perpendicular line to the segment through the specified point:

a. Point *J* b. Point *K* c. Point *L*

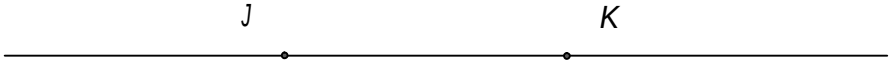


3. Construct the tangent line(s) to Circle Y through the specified point:

a. Point *J* b. Point *K* c. Point *L*

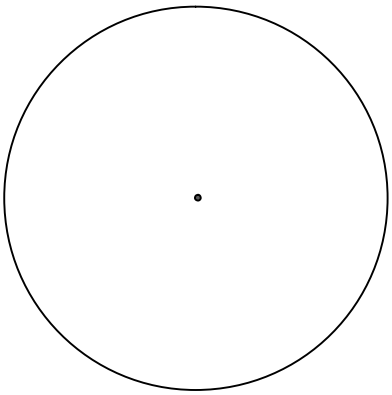


4. Construct a square with line segment *JK* and name the other vertices *M* and *N*. Construct a rectangle by extending sides $\overline{JK}$ and $\overline{MN}$ until the lengths are equal to the length of the square's diagonal.

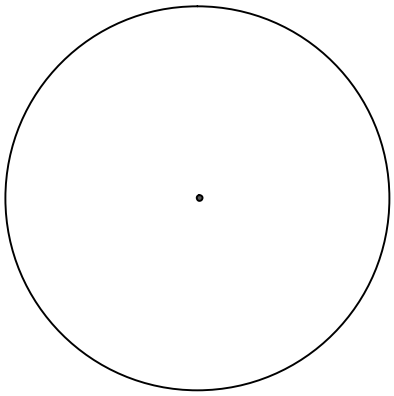


5. Construct each of the following inscribed polygons (all vertices on the circle) using a circle:

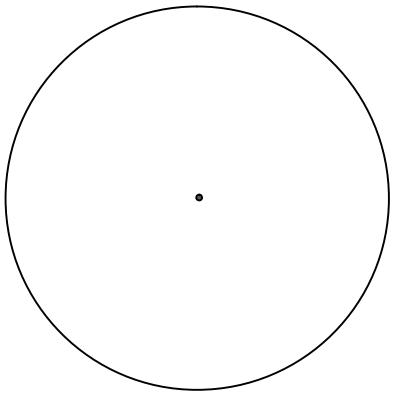
Equilateral Triangle



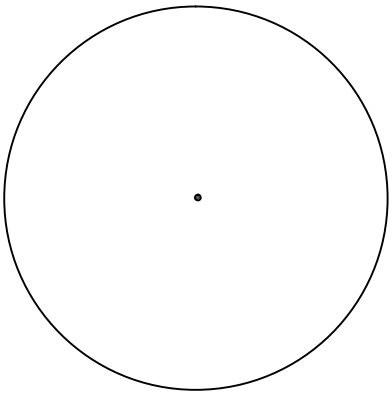
Right Triangle



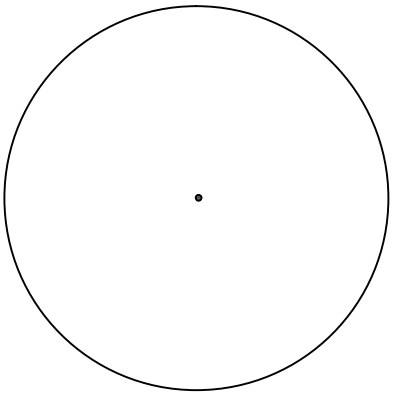
Rectangle



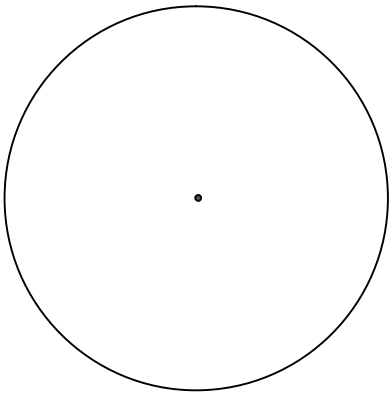
Six-Pointed Star



Regular Hexagon



Regular Octagon



6. ***Begin work on a project:*** Construct a stained-glass design using any of the constructions that we have used.