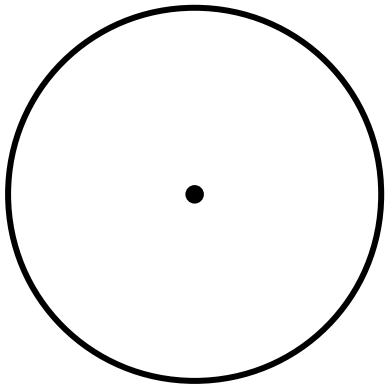
Geometry R – Mr. Bo
Unit 7 – Test Day HW

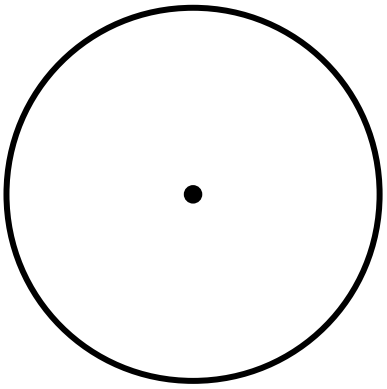
Name_____
Date_____

1. For each circle, construct the inscribed polygon named: *(See Unit 4 – Day 4 Notes for guidance)*

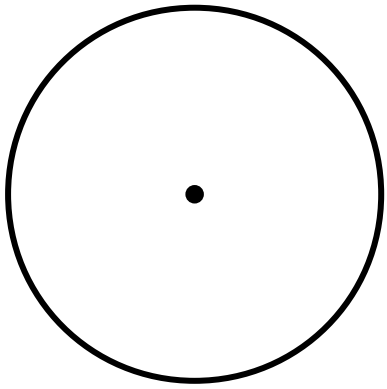
a. A square



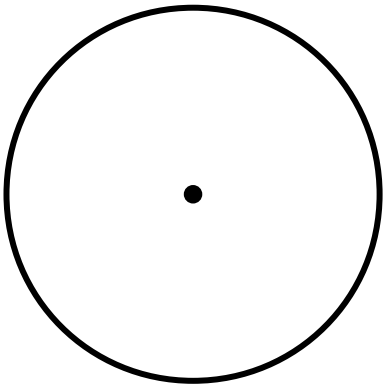
b. A Regular Hexagon



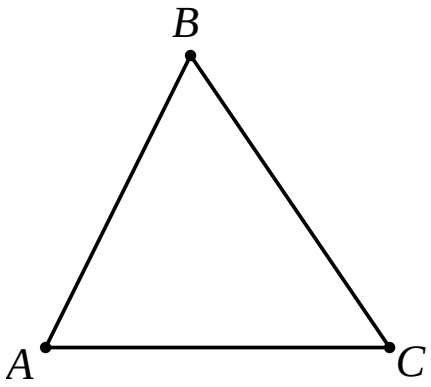
c. An Equilateral Triangle



d. A Regular Octagon



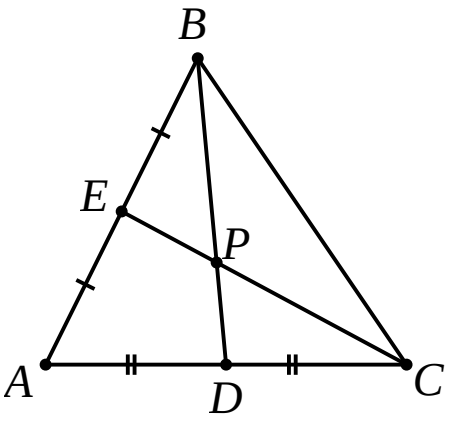
2. Construct a circle that circumscribes Triangle ABC.



3.

a. Based on the picture of Triangle ABC *(given to the right)*, which statement most accurately describes $\overline{BD}$ and $\overline{CE}$? Why?

- $\overline{BD}$ and $\overline{CE}$ are *Altitudes* of ΔABC
- $\overline{BD}$ and $\overline{CE}$ are *Midsegments* of ΔABC
- $\overline{BD}$ and $\overline{CE}$ are *Medians* of ΔABC



b. Based on the picture of Triangle ABC *(given to the right)*, which statement most accurately describes point P? Why?

- P is the *Incenter* of ΔABC
- P is the *Circumcenter* of ΔABC
- P is the *Centroid* of ΔABC
- P is the *Orthocenter* of ΔABC

c. Given: BD=36 and BP=5x+9, find the value of x and the lengths of BP and PD.