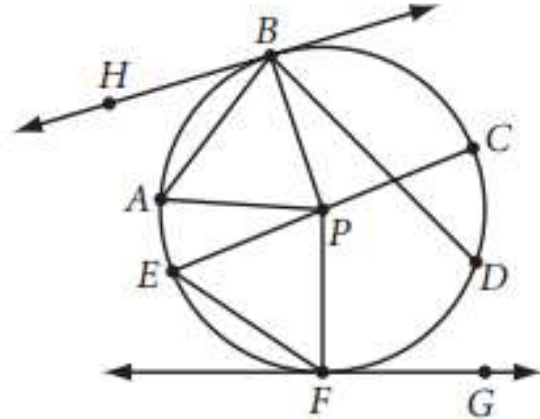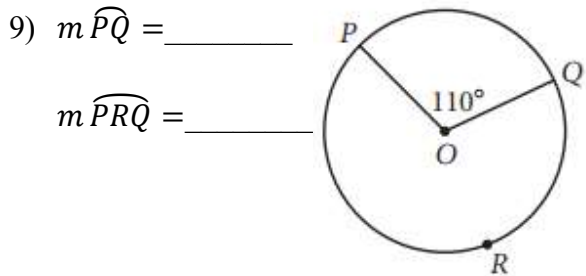Lesson 1.7 Assignment   Name:_____

Use the diagram. Points E, P, and C are collinear, and P is the center of the circle.

1) Name three chords.

2) Name one diameter.

3) Name five radii.

4) Name five minor arcs.

5) Name two semicircles.

6) Name two major arcs.

7) Name two tangents.

8) Name a point of tangency.

Use the figure to determine the measures.   **Complete.**
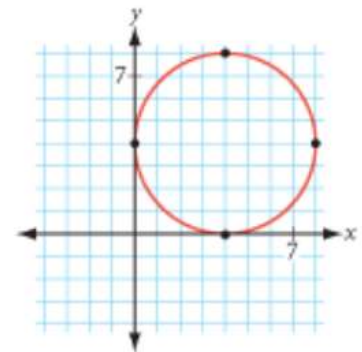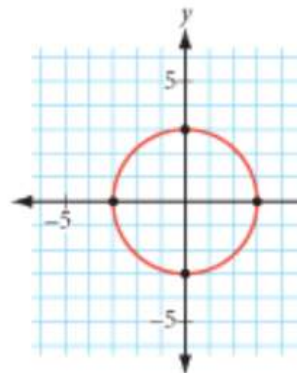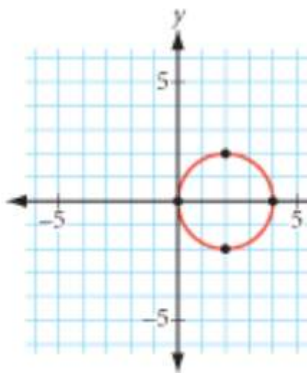
9) $m\widehat{PQ}$ =_____

   $m\widehat{PRQ}$ =_____

10) Use your compass and protractor to make an arc with measure 65°. Now make an arc with measure 215°. Label each arc with its measure.

Use the ordered pair rule shown to relocate the four points on the given circle. Can the four new points be connected to create a new circle? Does the new figure appear congruent to the original figure?

11) $(x, y) \rightarrow (x - 1, y + 2)$ 12) $(x, y) \rightarrow (2x, 2y)$ 13) $(x, y) \rightarrow (2x, y)$

Draw each kind of triangle or write "not possible" and explain why.

14) Isosceles right triangle

16) Scalene obtuse triangle

15) Scalene isosceles triangle

17) Isosceles obtuse triangle

Complete.

18) Earth takes 365.25 days to travel one full revolution around the Sun. By approximately how many degrees does the Earth travel each day in its orbit around the Sun?

19) Earth completes one full rotation each day, making the Sun appear to rise and set. If the Sun passes directly overhead, by how many degrees does its position in the sky change every hour?

Sketch, label, and mark the figure.

20) Obtuse scalene triangle FAT with $m\angle FAT = 100°$

24) An equilateral triangle with perimeter $12a + 6b$

21) Trapezoid $TRAP$ with $\overline{TR} \parallel \overline{AP}$ and $\angle TRA$ a right angle

25) Two triangle that are not congruent, each with angles measuring $50°$ and $70°$

22) Two different (noncongruent) quadrilaterals with angle of $60°, 60°, 120°,$ and $120°$

26) Rhombus $EQUI$ with perimeter $8p$ and $m\angle IEQ = 55°$

23) Right isosceles triangle RGT with $RT = GT$ and $m\angle RTG = 90°$

27) Kite $KITE$ with $TE = 2EK$ and $m\angle TEK = 120°$