Name: _____   Date: _____
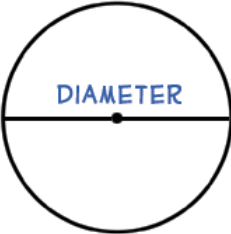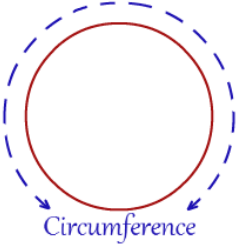
7R   Classwork 11.1

Parts of a Circle

| TERM	PICTURE	DEFINITION
CIRCLE		A set of points that are <u>equidistant</u> from another given point, called the <u>center.</u>
RADIUS		The distance from the <u>center</u> to the <u>outside</u> of the circle. **r = ½ d** ***The radius is equal to half the diameter.***
DIAMETER		The distance <u>around</u> the circle. It goes through the <u>center</u> of a circle connecting two points on the <u>outside.</u> **d = 2r** ***The diameter is equal to double (2x) the radius.***
CIRCUMFERENCE		The distance <u>around</u> the <u>outside</u> of the circle. Formula: $C = 2\pi r$ or $C = \pi d$
π	pi	The <u>ratio</u> of a circle's circumference to its diameter. The symbol for pi is **π** **π** is an <u>irrational</u> number. **π** is approximately <u>3.14</u>

1)   Calculate the following;

Given...	Find...	Answer
Radius (r) = 10 in	The diameter (d)	**d =** _____ in
Diameter (d) =6.4 in	The radius (r)	**r =** _____ in
Radius (r) = 12.3 in	The diameter (d)	**d =** _____ in
Diameter (d) = 1 in	The radius (r)	**r =** _____ in

2)   The radius RP is 6 inches.
      What is the length of AN?

      AN represents the _____.
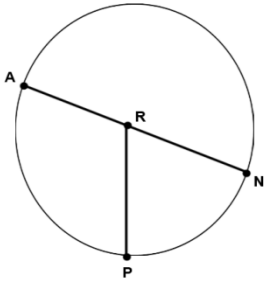
      AN = _____

3)   The diameter of OB is 14 cm.
      Find the length of XM.

      XM represents the _____.
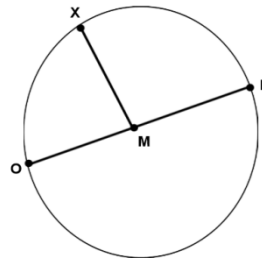
      XM = _____

Try It!
1)   *Calculate the following:*

    a.   Given: radius (r) = 8 inches, find the diameter (d)   d = _____ in.

    b.   Given: diameter (d) = 14.6 inches, find the radius (r)   r = _____ in.

    c.   Given: radius (r) = 6.5 inches, find the diameter (d)   d = _____ in.

    d.   Given: diameter (d) = 11 inches, find the radius (r)   r = _____ in.

    e.   Given: radius (r) = 9 inches, find the diameter (d)   d = _____ in.

2) The diameter of Lexa's hula hoop is 36 inches. What is the radius of Lexa's hula hoop?

A   6 in.   **B**   9 in.   **C**   18 in.   **D**   72 in.

3) A duck swims from the edge of a circular pond to a fountain in the center of the pond. What term describes the duck's path? **Draw it out**.

A   chord   **C**   diameter

B   radius   **D**   central angle

4) The radius KP is 3 inches. What is the length of NQ?

A   3 inches   **B**   4 inches

C   6 inches   **D**   9 inches

[not drawn to scale]

#5-9 Fill in the questions below using the word bank and Circle B.

> **DIAMETER**   **CIRUCMFERENCE**   **RADIUS**   **VERTEX**   **ANGLE**

5) The _____ is the distance around the outer edge of a circle, the perimeter.

6) $\overline{BF}$ is a _____ in circle B.

7) $\angle CBD$ is an _____ whose _____ is at Point B.

8) The distance across the circle through the center is the _____

9) $\overline{AG}$ is the diameter in circle B. **True** *or* **False**