

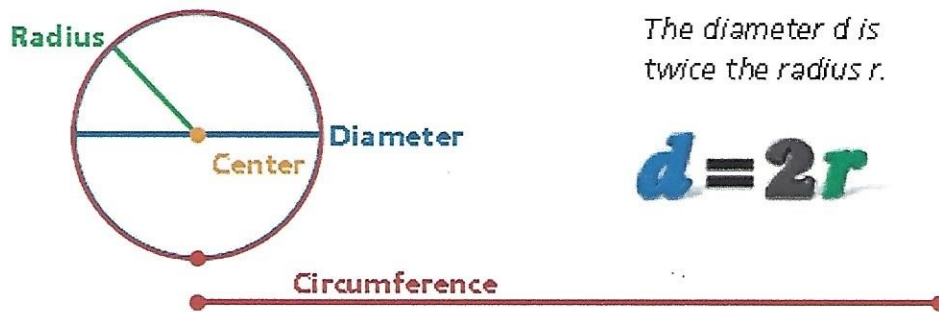
Name _____
Mrs. Roubos

Date _____
8R Period _____

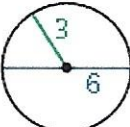
Circles Do Now

I. Definitions

- 1) Circle- A circle is the set of points in a plane that are a fixed distance from a given point, called the *center*.
- 2) Radius- A radius connects the center to any point on the circle
- 3) Diameter- A diameter connects two points on the circle and passes through the center.
- 4) Circumference- The circumference of a circle is the distance around the circle



II.

CIRCUMFERENCE OF A CIRCLE		
Words	Numbers	Formula
The circumference C of a circle is π times the diameter d , or 2π times the radius r .	 $\begin{aligned} C &= \pi(6) \\ &= 2\pi(3) \\ &\approx 18.8 \text{ units} \end{aligned}$	$\begin{aligned} C &= \pi d \\ \text{or} \\ C &= 2\pi r \end{aligned}$

Examples

For questions 1-2 find the circumference of each circle the nearest tenth. Use 3.14 for π .

1) Circle with radius 4 m

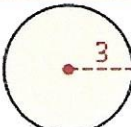
2) Circle with diameter 3.3 ft

For questions 3-4 find the circumference. Leave you answer in terms of π .

3) Circle with radius 8 cm

4) Circle with diameter 4.25 in

III.

AREA OF A CIRCLE		
Words	Numbers	Formula
The area A of a circle is π times the square of the radius r .	 $A = \pi(3^2)$ $= 9\pi$ $\approx 28.3 \text{ units}^2$	$A = \pi r^2$

Examples

For questions 1-2 find the area of each circle the nearest tenth.

1) Circle with radius 3 in

2) Circle with diameter 10 m

For questions 3-4 find the area. Leave you answer in terms of π .

3) Circle with radius 7 cm

4) Circle with diameter 12 ft