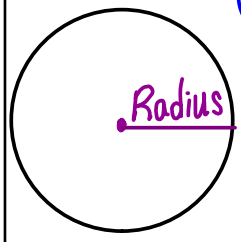
Circles- Diameter vs. Radius

3/4

Diameter- The distance across the entire circle. It cuts the circle completely in half.

Radius- Half the diameter - Starts at the center of a circle and extends to the outside.



Diameter = Double the radius (x2)
Radius = Half the diameter (÷2)

Find the radius given the diameter and vise versa

1. D= 12in.
   R= 6in

2. D= 13ft
   R= 6.5ft.

3. R= 7m
   D= 14m

4. 

   R= 8in
   D= 16in

Homework Answers:

Radius and Diameter

What is the radius and diameter of each circle?

a. 5 mm — radius = 5, diameter = 10

b. 12 cm — radius = 6, diameter = 12

c. 9 m — radius = 9, diameter = 18

d. 16 km — radius = 8, diameter = 16

e. 11 m — radius = 11, diameter = 22

f. 30 mm — radius = 15, diameter = 30

g. 26 km — radius = 13, diameter = 26

h. 7 cm — radius = 7, diameter = 14

i. 18 km — radius = 9, diameter = 18

j. 1 m — radius = 1, diameter = 2

k. 17 cm — radius = 17, diameter = 34

l. 50 mm — radius = 25, diameter = 50

m. John has a round swimming pool. The distance from the center of the pool to the edge is 3 meters. What is the diameter of John's pool?

answer: 6 meters

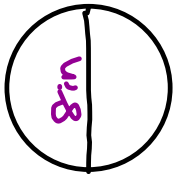
Circumference of Circles 3/5

Circumference- The distance around a circle (A circle's perimeter)

formulas: $C = \pi d$ (π x diameter) OR $C = 2\pi r$ (2 x π x radius)

π = pi (use π button on your calculator)

Find the circumference of each circle.

① 

$C = \pi \cdot d$

$C = \pi \cdot 8$

$C = 25.1in$

② 

$C = 2\pi r$

$C = 2 \cdot \pi \cdot 4$

$C = 25.1in$

ON OWN

③ $r = 5ft$

$C = 2\pi r$

$C = 2 \cdot \pi \cdot 5$

$C = 31.4ft$

④ $d = 15cm$

$C = \pi \cdot d$

$C = \pi \cdot 15$

$C = 47.1cm$

5. A pie has a diameter of 7.5 inches. What is the circumference of the pie crust?

$C = \pi d$

$C = \pi \cdot 7.5$

$C = 23.6in$