Unit 3 Circles

Lesson 1: How Well Can You Measure?

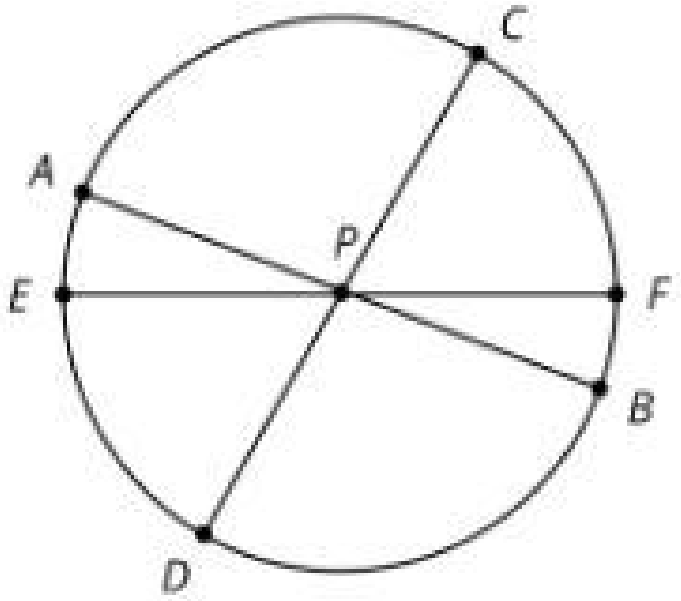
If your measurements aren't exact, your data may not look _____.

Consider using a _____ or _____ to help

determine if you have a _____ ___ _____.

Lesson 2: Exploring Circles

Define each term and list examples of each term from the circle below.



Definitions

Center:

Radius:

Diameter:

Circumference:

Lesson 3: Exploring Circumference

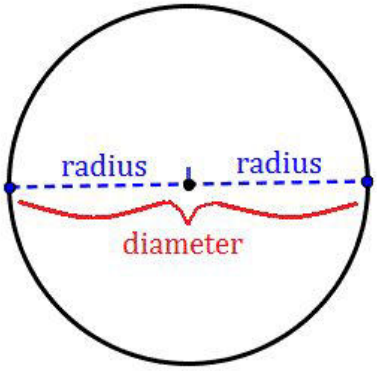
_____ and _____ are proportional to each other.

The k for the relationships is known as _____.

It can approximated by using _____, _____, or _____

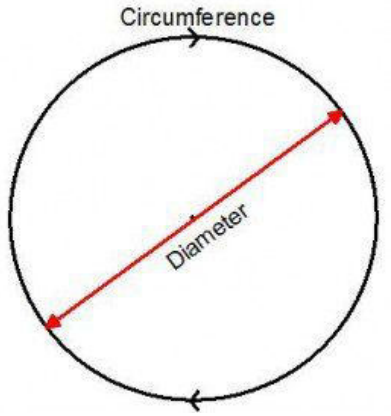
The equation y =kx can be written as _____ for circles

Lesson 4: Applying Circumference



Diameter is twice the radius, so an equation to represent this would be

_____ = ___ ___ or to find radius _____ = _____



_____ = ___ ___ _____ = ___ ___

If a circle has a circumference of 44mm, what would the diameter be? What would the radius be?

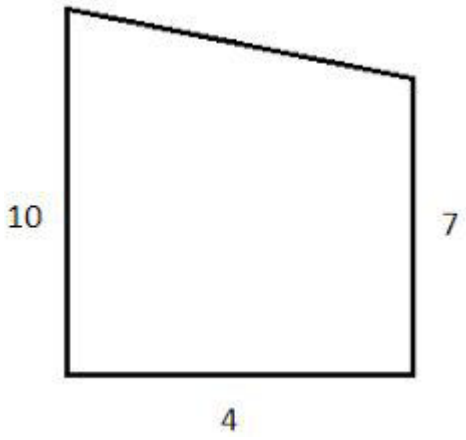
Lesson 5: Circumference and Wheels (optional)

The _____ is one full rotation around a circle.

The number of the rotations (x) times the Circumference (C) will be equivalent to the _____ traveled.

Lesson 6: Estimating Areas

Area of a triangle: A=½ bh Area of rectangle: A=ℓw



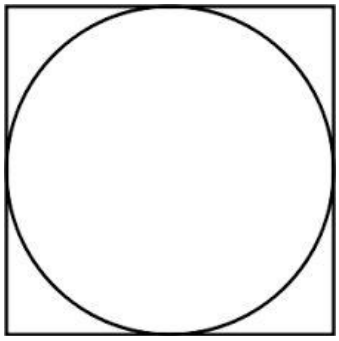
Lesson 7: Exploring the Area of a Circle

The circumference of a circle is _____ to its diameter.

The area of a circle is _____ _____ to its diameter.

This square has a side length of ***r***. We know that the approximate area of the circle is

r



Lesson 8: Relating Area to Circumference

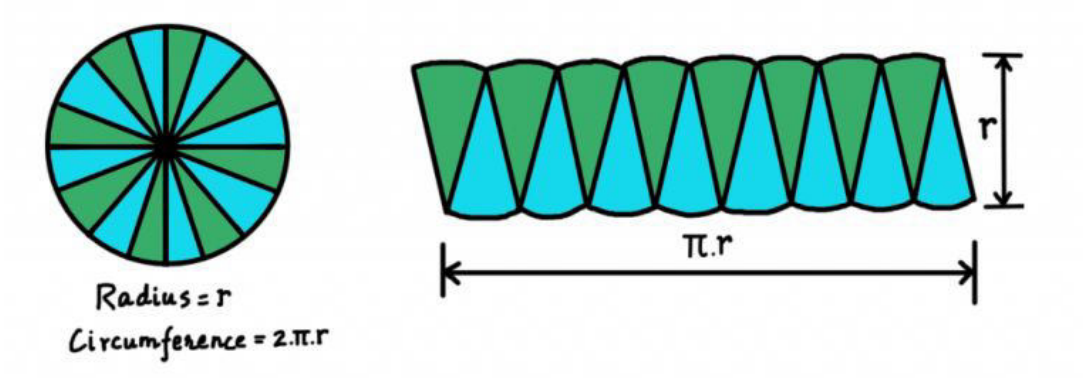


Figure 3: Visualizing area of circle using area of rectangle

Equation: _____ = _____

If a circle has a diameter of 30ft, what is the radius? What is the area?

Lesson 9: Applying Area of Circles

When it states, “in terms of pi” that means _____ _____ in the solution.

Example:

Find the area in terms of pi, when a is radius 5ft.

If we are given the area, how can you find the radius?

Lesson 10: Distinguishing Circumference and Area

Examples of Circumference	Examples of Area
● The distance a wheel travels after one full rotation. ● ●	● The amount of land growing crops on a circular field ● ●

What is needed for Circumference	What is needed for Area