

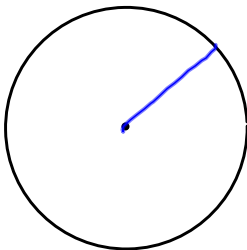
8th Grade Lesson 60

- I can identify parts of a circle.
- I can use circle formulas to find the circumference and area of a circle.

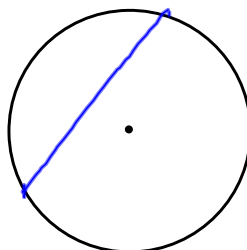


Circles

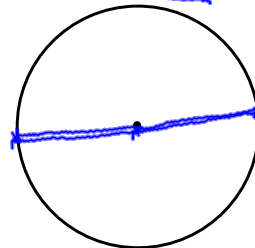
Radius



Chord



Diameter

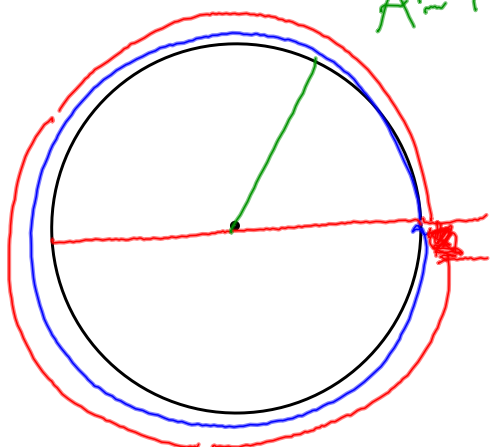


$$\text{diameter} = 2 \cdot \text{radius}$$

Circumference

$$C = d \cdot \pi$$

$$A = \pi \cdot r^2$$



$$\pi = 3.141592654\dots$$

$$\pi \approx 3.14$$

The radius of a circle is 5 centimeters (cm).

a) What is the circumference of the circle?

$$C = 3.14d$$

$$= (3.14)(10\text{cm})$$

$$C = 31.4\text{cm}$$

b) What is the area of the circle?

$$A = 3.14(r^2)$$

$$= 3.14(5\text{cm})^2$$

$$= 3.14(25\text{cm}^2)$$

$$A = 78.5\text{cm}^2$$

The radius of a circle is 100 meters.

a) What is the diameter of the circle?

$$200\text{m}$$

b) What is the circumference of the circle?

$$\begin{aligned} C &= 3.14(200\text{m}) \\ &= 628\text{m} \end{aligned}$$

c) What is the area of the circle?

$$\begin{aligned} A &= 3.14(100)^2 \\ A &= 3.14(10,000) \\ A &= 31,400\text{m}^2 \end{aligned}$$

Assignment

Problem Set 60 due Wednesday;
Test #14 tomorrow

P.S. 1-56

P.S. 56



Students who received an A or B on Test #13
Assignment 60 is optional

2nd hour

Jaiden Kelsey
Aly Erin
Kira Ben
Grace
Coltan

3rd hour

Gillian Kelli Eliza
Drew Kourtney *Sam
Katie Katarina Nate
Ryan David Tyler
Jonathan Jasmine *Marcus
Ronnie Stone