Topic 17Area, Perimeter, and Circumference

**Area**

Area = Length x Width

Example: If your shed was 8 feet wide by 10 feet long, to find the area you would take 8 x 10 to get 80 feet squared.

What is the area of your shed?

\_\_\_\_\_\_\_\_\_\_\_ x \_\_\_\_\_\_\_\_\_\_ = \_\_\_\_\_\_\_\_\_\_

 Length Width Area

**\*Don’t forget your labels!**

 **Labels for Area and Perimeter are different!**

Width =
10 feet

Length = 8 feet

What is the total area of you home?

\_\_\_\_\_\_\_\_\_\_\_ + \_\_\_\_\_\_\_\_\_\_ = \_\_\_\_\_\_\_\_\_\_

 First Floor Second Floor Total

What is the area of your first floor? \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

What is the area of your second floor? \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Find the total area of all your master bedroom walls. What is it? \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Find the total area of all your living room walls. What is it? \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

**Perimeter**

Side Side

Perimeter = Side + Side + Side

Continue the pattern depending on how many sides the shape has.

Side

What is the perimeter of your fence? \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

What is the perimeter of the roof? \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

**Area of a Circle**

Area = πr2

π = Pi which is approximately equal to 3.14.

r is the radius. Radius is half the distance across the pool.

Find the area of the pool.

\_\_\_\_\_\_\_\_\_\_\_ x \_\_\_\_\_\_\_\_\_\_2 = \_\_\_\_\_\_\_\_\_\_ **\*Don’t forget your order of operations!**

 Pi Radius Area

**Circumference of a Circle**

Finding the circumference of a circle is like finding the circle’s perimeter.

Circumference = 2πr *OR* Circumference = dπ

d is the diameter. Diameter is the distance across the pool.

Find the circumference of the pool.

2 x \_\_\_\_\_\_\_\_\_\_\_ x \_\_\_\_\_\_\_\_\_\_ = \_\_\_\_\_\_\_\_\_\_ *OR* \_\_\_\_\_\_\_\_\_\_\_ x \_\_\_\_\_\_\_\_\_\_ = \_\_\_\_\_\_\_\_\_\_

 Pi Radius Circumference Diameter Pi Circumference

If you are given the radius, how can you find the diameter? \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

If you are given the diameter, how can you find the radius? \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

**You must have EXACT calculations in order to finish this part of your project.**