

# FORMULAS FOR THE CIRCLE

There are five major measurements for a circle. If we know some of them they can be used to find the others. The measurements are:

**Area (A)** The space that is inside a circle

**Circumference (C)** The distance around a circle

**Diameter (d)** The length of a straight line going through the center of a circle

**Radius (r)** Half the diameter

**Pi ( $\pi$ )** The ratio of the circle's circumference to its diameter. It is the same number for all circles. It is an irrational number, meaning the decimals go on infinitely. It can be rounded to 3.14.

The main formulas for finding a circle's measurements are:

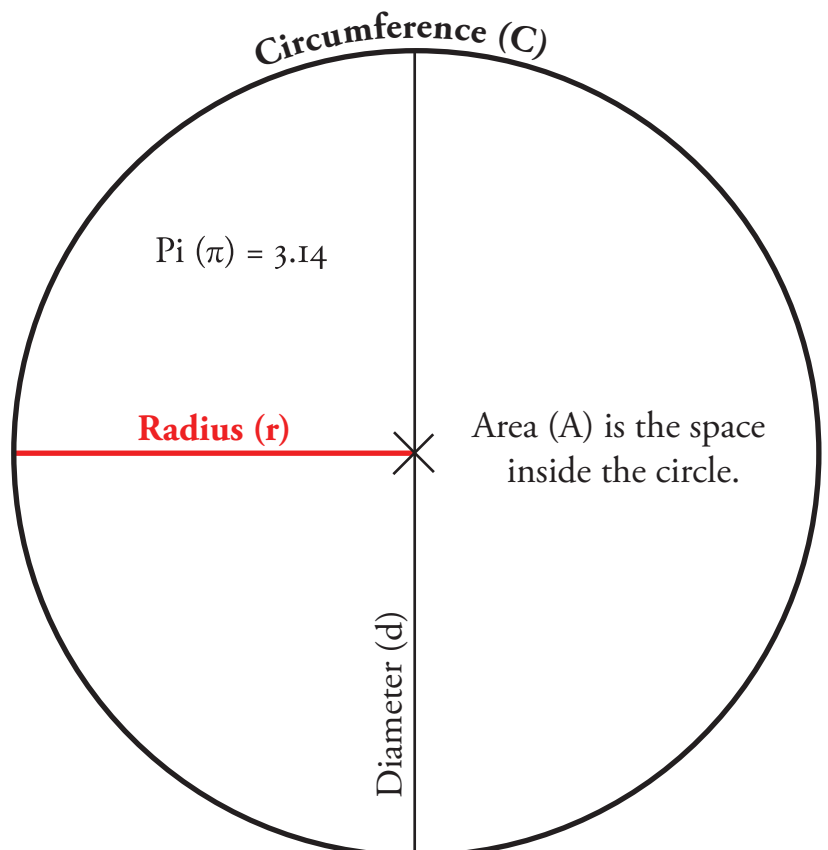
$$A = \pi r^2$$

$$C = \pi d \quad \text{or} \quad C = 2\pi r$$

$$d = 2r \quad \text{or} \quad d = C/\pi$$

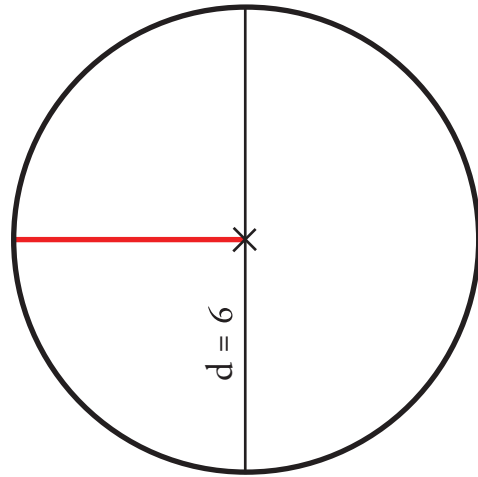
$$r = d/2 \quad \text{or} \quad r = \sqrt{A/\pi}$$

$$\pi = C/d = 3.14\dots$$

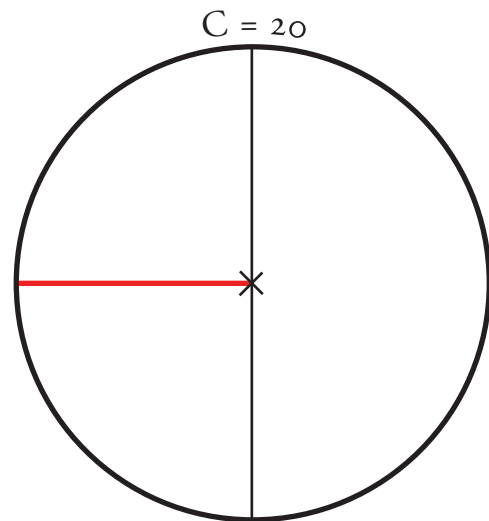


# PROBLEMS

Find the radius, circumference and area of this circle. Round your answers to the nearest hundredth.



Find the radius, diameter and area of this circle. Round your answers to the nearest hundredth.



Find the radius, diameter and circumference of this circle. Round your answers to the nearest hundredth.

