



The formulas for both the **circumference** and the **area** of a circle make use of this ratio.

$$C \text{ (Circumference)} = \pi \text{ (pi: 3.14)} \times d \text{ (Diameter)}$$

$$C = \pi d$$

$$A \text{ (Area)} = \pi \text{ (pi: 3.14)} \times r^2 \text{ (Radius multiplied by itself)}$$

$$A = \pi r^2$$

Perimeter is the measurement of the distance around the outside of a plane shape. The perimeter of a rectangle is $P = 2 \times L$ (length) + $2 \times W$ (width).

Area is the measurement of the flat surface of a plane shape. The area of a rectangle is $A = L$ (length) \times W (width).

Volume is the measurement of the space that a solid shape occupies. The volume of a rectangle is $V = L$ (length) \times W (width) \times H (height).

Perimeter is expressed in linear measurement (feet).

Area is expressed in square measurement (square feet).

Volume is expressed in cubic measurement (cubic feet).

Look carefully at the 3-dimensional figure below .

Width = 12 inches (Distance from A to B)

Length = 15 inches (Distance from A to C)

Height = 18 inches (Distance from C to G)

