

# UNIT CONVERSION AND CALIBRATION FORMULAS

## Unit Conversion

One acre = 43,560 square feet.....	1/2 acre = 21,780 square feet
One mile = 5,280 feet .....	1/4 mile = 1,320 feet
One gallon = 128 fluid ounces .....	1/2 gallon = 64 fluid ounces
One quart = 2 pints = 4 cups = 32 fluid ounces.....	2 quarts = 64 fluid ounces
One pint = 2 cups = 16 fluid ounces .....	1/2 pint = 1 cup = 8 fluid ounces
One tablespoon = 3 teaspoons = 1/2 fluid ounces .....	2 tablespoons = 1 fluid ounce
One pound = 16 ounces .....	1/4 pound = 4 ounces
One gallon = 231 cubic inches .....	2 gallons = 462 cubic inches

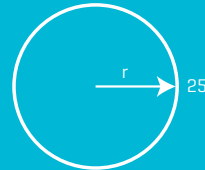
## Example

## Area and Volume Calculations

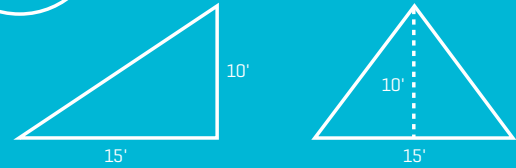
Area of Rectangular or Square Shape: [Length] x [Width] = Area  
 100 feet x 40 feet = 4,000 square feet



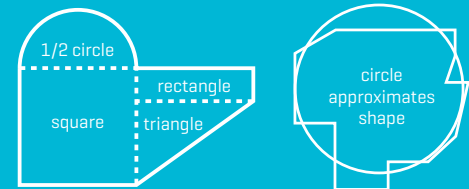
Area of Circle: [Radius] x [Radius] x [3.14] = Area  
 25 feet x 25 feet x 3.14 = 1,962.5 square feet



Area of Triangular Shape: [1/2] x [Base Width] x [Height] = Area  
 1/2 x 15 feet x 10 feet = 75 square feet

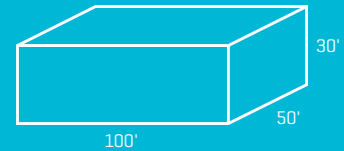


Area of Irregular Shape: Irregularly shaped sites can often be reduced to a combination of rectangles, circles and triangles. Calculate the area of each shape and add the values of the individual areas to obtain the total area.



Another method for calculating the area of an irregular shape is to convert the site into a circle. From a center point, measure the distance to the edge of the area in 10 or more increments. Average these measurements to find the radius, then calculate the area using the formula for a circle.

Volume of Cube or Box Shape: The volume of a cube or box is found by multiplying the length, times the width, times the height.  
 100 feet x 50 feet x 30 feet = 150,000 square feet



Volume of Cylindrical Shape: The volume of a cylinder is found by calculating the area of the round end [see formula for circle] and multiplying this area times the length or height.  
 [Radius] x [Radius] x [3.14] = Area of Circle  
 [Area of Circle] x [Length] = Volume of Cylinder  
 [2 feet] x [2 feet] x [3.14] x [6 feet] = 75.36 cubic feet

