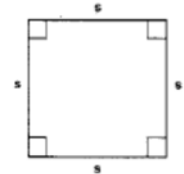


Square or Rectangle

$$\text{Area (Square Feet)(SF)} = A = L \times W$$

$$\text{Area (Square Yards)(SY)} = A = (\text{SF}) \div 9$$

$$\text{Area (Acres)(AC)} = A = (\text{SF}) \div 43,560 \quad (43,560 \text{ sf / acre})$$



SQUARE

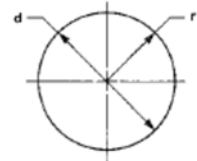
Circle

$$\text{Area of a Circle (Square Feet)(SF)} = A = \pi r^2$$

$$(\pi = 3.1416\dots)$$

$$\text{Circumference of a Circle (Square Feet)(SF)} = C = \pi d$$

$$\text{Circumference of a Circle (Square Feet)(SF)} = C = 2\pi r$$



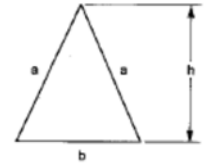
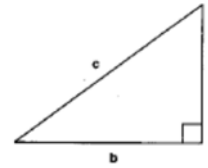
CIRCLE

Triangle
Right Angle

$$\text{Area} = A = \frac{L \times W}{2} \quad \text{or} \quad \frac{a \times b}{2}$$

Isosceles

$$\text{Area} = A = \frac{b \times h}{2}$$



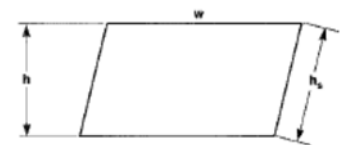
TRIANGLE

Parallelogram / Rhombus

Two equal sides and two equal sides, no right angles

 h_s = slant height

$$\text{Area} = A = w \times h_s$$



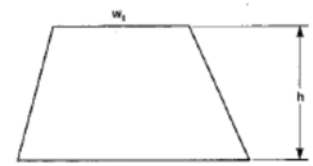
PARALLELOGRAM

Trapezoid

$$\text{Area} = A = \frac{1}{2} \times h \times (w_1 + w_2)$$

Or shown as

$$\text{Area} = A = h \times \frac{(w_1 + w_2)}{2}$$

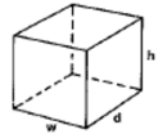


TRAPEZOID

Cube

Volume (Cubic Feet)(CF) = $V = L \times W \times H$ or D

Volume (Cubic Yards)(CY) = $V = CF \div 27$

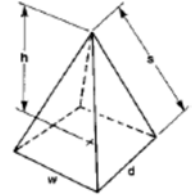


CUBE

Pyramid

Volume = $V = \frac{A_b \times h}{3}$

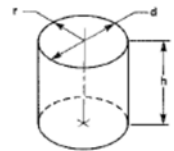
Where A_b is the area of the base



PYRAMID

Cylinder

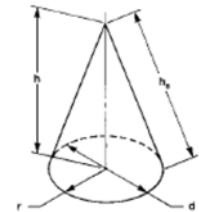
Volume = $V = \pi r^2 \times h$



CYLINDER

Cone

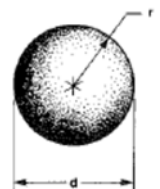
Volume = $V = \frac{\pi r^2 h}{3}$



CONE

Sphere

Volume = $V = \frac{4\pi r^3}{3}$



SPHERE

Pythagorean Theorem

Right angle triangle or imaginary triangle where C represents the slope of an excavation or embankment.

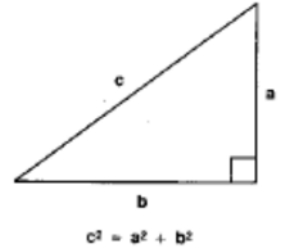
Slope Length = Length of Longest Side = c

$$c^2 = a^2 + b^2$$

Solve for c

$$\sqrt{c^2} = \sqrt{a^2 + b^2}$$

$$c = \sqrt{a^2 + b^2}$$



Temperature

Temperature Conversions = $^{\circ}\text{F} = (9/5 \times ^{\circ}\text{C}) + 32$

Temperature Conversions = $^{\circ}\text{C} = 5/9 \times (^{\circ}\text{F} - 32)$

