

GEOMETRY FORMULAS

A = Area

A1 = Surface area of solids

V = Volume

C = Circumference π = Pi (3.14159)

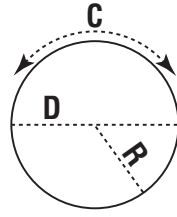
CIRCLE

$$A = \pi \cdot R \cdot R$$

$$C = \pi \cdot D$$

$$R = D / 2$$

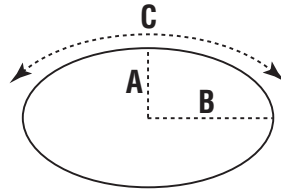
$$D = 2 \cdot R$$



ELLIPSE

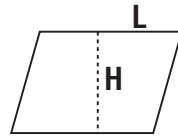
$$A = \pi \cdot A \cdot B$$

$$C = 2 \cdot \pi \cdot \sqrt{\frac{A^2 + B^2}{2}}$$



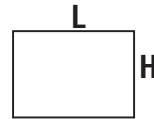
PARALLELOGRAM

$$A = H \cdot L$$



RECTANGLE

$$A = W \cdot L$$



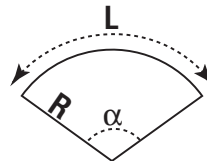
SECTOR OF CIRCLE

$$A = (\pi \cdot R^2 \cdot \alpha) / 360$$

$$L = (\pi \cdot R \cdot \alpha) / 180$$

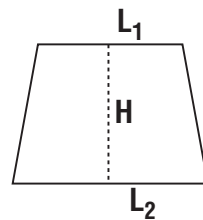
$$\alpha = (L \cdot 180) / (\pi \cdot R)$$

$$R = (L \cdot 180) / (\pi \cdot \alpha)$$



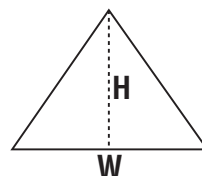
TRAPEZOID

$$A = H \cdot (L_1 + L_2) / 2$$



TRIANGLE

$$A = (W \cdot H) / 2$$



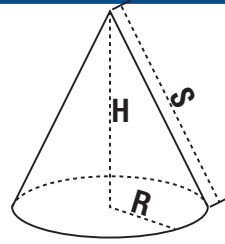
GEOMETRY FORMULAS

A = Area **A1** = Surface area of solids **V** = Volume
C = Circumference π = Pi (3.14159)

CONE

$$A1 = (\pi \cdot R \cdot S) + (\pi \cdot R^2)$$

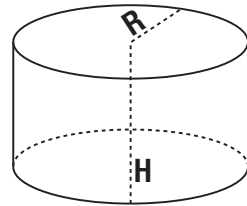
$$V = (\pi \cdot R^2 \cdot H) / 3$$



CYLINDER

$$A1 = (2 \cdot \pi \cdot R^2) + (2 \cdot \pi \cdot R \cdot H)$$

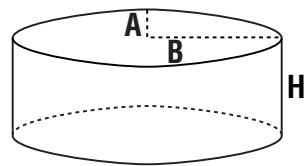
$$V = \pi \cdot R^2 \cdot H$$



ELLIPTICAL TANKS

$$A1 = 2 \cdot \pi \cdot \sqrt{\frac{A^2 + B^2}{2}} \cdot H = (2 \cdot \pi A \cdot B)$$

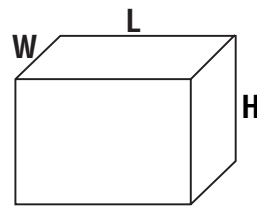
$$V = \pi \cdot A \cdot B \cdot H$$



RECTANGULAR SOLID

$$A1 = 2 \cdot [(W \cdot L) + (L \cdot H) + (H \cdot W)]$$

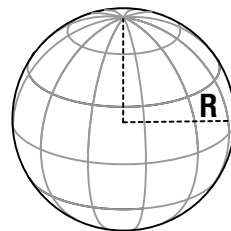
$$V = W \cdot L \cdot H$$



SPHERE

$$A1 = 6 \cdot \pi \cdot R^2$$

$$V = (4 \cdot \pi \cdot R^3) / 3$$



CAPACITY IN GALLONS

For the above contains, capacity in gallons (**G**) is:

$$G = (V / 231); \text{ when } V \text{ is in cubic inches}$$

$$G = (V \cdot 7.48); \text{ when } V \text{ is in cubic feet}$$