Rectangle

Area of Rectangle

$$Area_{rectangle} = width * height$$
 (1)

Perimeter of a Rectangle Is the sum of the 4 sides

$$Perimeter_{Rectangle} = 2(width + height)$$
 (2)

Angles of a Four sided figure

Sum of Angles of any Four sided figure =
$$360^{\circ}$$
 (3)

Triangles

Angles of a Triangle

Sum of Angles of a
$$Triangle = 180^{\circ}$$
 (4)

Area of a Triangle

$$Area_{Triangle} = \frac{base}{2} * Perpindicular Height$$
 (5)

Pythagoras Theorem

$$h^2 = a^2 + b^2$$
 so $h = \sqrt{a^2 + b^2}$ (6)

Circles

Area of a Circle

$$Area_{Circle} = \pi r^2 \tag{7}$$

Circumference of a Circle

$$Circumference_{Circle} = 2\pi r$$
 (8)

Sectors of a Circle

Area of a Sector of a Circle

$$Area_{Sector\ of\ a\ Circle} = \left(\frac{Angle}{360}\right)\pi r^2 \tag{9}$$

Circumference of a Sector of a Circle

$$Circumference_{Sector\ of\ a\ Circle} = \left(\frac{Angle}{360}\right) 2\pi r$$
 (10)

Rectangular Box

$$Volume_{box} = width * height * depth$$
 (11)

$$Surface Area_{box} = 2(width * height) + 2(width * depth) + 2(height * depth)$$
(12)

Cylinder

$$Volume_{Culinder} = h\pi r^2 \tag{13}$$

$$Surface\ Area_{Culinder} = 2\pi rh + 2(\pi r^2) \tag{14}$$

Slope of a Line

Using the Equation

$$y = mx + B \tag{15}$$

Using Co-ordinates (x_1, y_1) and (x_2, y_2)

$$m = \frac{(y_2 - y_1)}{(x_2 - y_1)} \tag{16}$$

Length of a Line with co-ordinates (x_1, y_1) and (x_2, y_2)

$$h = \sqrt{(x_2 - x_1)^2 + (y_2 - y_1)^2}$$
(17)