
Equation Sheet 1

$$g = 9.80 \text{ m/s}^2$$

$$1 \text{ in} = 2.54 \text{ cm}$$

$$1 \text{ mi} = 1.609 \text{ km}$$

$$1 \text{ mi/h} = 0.447 \text{ m/s}$$

$$2\pi \text{ radian} = 360^\circ$$

$$\sin \theta = \text{opp/hyp}$$

$$\cos \theta = \text{adj/hyp}$$

$$\tan \theta = \text{opp/adj}$$

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

$$\frac{-b \pm \sqrt{b^2 - 4ac}}{2a}$$

$$\Delta x = x_2 - x_1$$

$$\bar{v} = \Delta x / \Delta t$$

$$\bar{a} = \Delta v / \Delta t$$

$$v = v_o + at$$

$$\Delta x = v_o t + \frac{1}{2} at^2$$

$$v^2 = v_o^2 + 2a\Delta x$$

$$\Delta x = \frac{(v + v_o)}{2} t$$
