

$$v = \frac{\Delta x}{\Delta t} \qquad a = \frac{\Delta v}{\Delta t} \qquad g = 9.81 \text{ m/s}^2$$

$$x = x_0 + v_{0x}t + \frac{1}{2}a_x t^2 \qquad v_x = v_{0x} + a_x t \qquad v_x^2 = v_{0x}^2 + 2a_x(x - x_0)$$

$$y = y_0 + v_{0y}t + \frac{1}{2}a_y t^2 \qquad v_y = v_{0y} + a_y t \qquad v_y^2 = v_{0y}^2 + 2a_y(y - y_0)$$

$$R = \frac{2v_0^2 \cos \theta \sin \theta}{g} = \frac{v_0^2 \sin 2\theta}{g} \qquad H = \frac{v_0^2 \sin^2 \theta}{2g}$$

$$\mathbf{F} = m\mathbf{a}$$

$$\mathbf{W} = m\mathbf{g}$$

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