$$v = v_0 + at$$

$$\Delta x = v_0 t + \tfrac{1}{2} a t^2$$

$$v^2 = v_0^2 + 2a\Delta x$$

$$t = \sqrt{\frac{2 \cdot h}{g}}$$

$$x = R \cdot \cos\theta$$

$$y = R \cdot \sin\theta$$

$$R = \sqrt{x^2 + y^2}$$

$$\tan^{-1}\theta = \frac{y}{x}$$

$$v_x = v_{x0}$$

$$\Delta x = v_{x0} t$$

$$v_y = v_{y0} - gt$$

$$\Delta y = v_{yo} t - \tfrac{1}{2} g t^2$$

$$v_y{}^2 = v_{yo}^2 - 2g\Delta y$$

$$v_{0x} = v_0 \cos\theta$$

$$v_{0y} = v_0 \sin\theta$$

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

$$F_{Fr} = \mu \cdot F_N$$

$$a_R = \frac{v^2}{r}$$

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