

FORMULARIO DE FÍSICA

MRU:

$$v = \frac{d}{t}$$

$$t = \frac{d}{v}$$

$$d = vt$$

MRUA y Caída Libre:

$$a = \frac{v_f - v_i}{t}$$

$$a = \frac{v_f^2 - v_i^2}{2d}$$

$$a = \frac{2d}{t^2}$$

$$d = \frac{v_f^2 - v_i^2}{2a}$$

$$d = v_i t + \frac{at^2}{2}$$

$$t = \frac{v_f - v_i}{a}$$

$$t = \sqrt{\frac{2d}{a}}$$

$$v_f = at + v_i$$

$$v_f = \sqrt{2ad + v_i^2}$$

$$v_i = v_f - at$$

$$v_i = \sqrt{v_f^2 - 2ad}$$

$$\text{Gravedad: } a = g = 9.81 \frac{m}{s^2}$$

Presión:

$$P = \frac{F}{A}$$

$$A = \frac{F}{P}$$

$$F = PA$$

Vectores:

$$F_x = F \cos \theta$$

$$F_y = F \sin \theta$$

$$F_R = \sqrt{\left(\sum F_x\right)^2 + \left(\sum F_y\right)^2}$$

$$\theta = \tan^{-1} \frac{\sum F_y}{\sum F_x}$$

Fuerzas:

$$\text{Peso} = mg$$

$$m = \frac{P}{g}$$

$$F = ma$$

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

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

$$Fr = \mu N$$

Áreas:

$$\text{Rectángulo: } A = bh$$

$$\text{Círculo: } A = \pi r^2$$

$$\text{Diámetro: } D = 2r$$

$$\text{Triángulo: } A = \frac{bh}{2}$$