

## FORMULARIO DE Física I

$$K = ^\circ C + 273 \quad ^\circ C = K - 273 \quad ^\circ F = 1.8^\circ C + 32 \quad ^\circ C = \frac{^\circ F - 32}{1.8}$$

$$F_x = F \cdot \cos \theta \quad F_y = F \cdot \sin \theta \quad FR = \sqrt{F_x^2 + F_y^2} \quad \theta = \text{TAN}^{-1} \left( \frac{F_y}{F_x} \right)$$

$$FR = \sqrt{F_1^2 + F_2^2 - 2F_1F_2 \cos \theta} \quad \frac{SENA}{a} = \frac{SENB}{b} = \frac{SENC}{c}$$

$$\text{si } \vec{A} = ai + aj \text{ y } \vec{B} = bi + bj \quad \|\vec{A}\| = \sqrt{ai^2 + aj^2}$$

$$\vec{A} + \vec{B} = ai + bi + aj + bj \quad \vec{A} - \vec{B} = ai + bi - (aj + bj)$$

$$d = vt \quad v_m = \frac{v_f + v_0}{2} \quad v_m = \frac{d_2 - d_1}{t_2 - t_1} \quad v_{inst} = \frac{d_2 - d_1}{t_2 - t_1}$$

$$d = v_0 t + \frac{at^2}{2} \quad d = \frac{v_f^2 - v_0^2}{2a} \quad d = \frac{v_f + v_0}{2} t \quad v_f = v_0 + at \quad v_f^2 = v_0^2 + 2ad$$

Con notación referenciada al plano cartesiano:

$$x = x_0 + vt \quad v = v_0 + at \quad x = x_0 + v_0 t + \frac{1}{2} at^2 \quad v_f^2 = v_0^2 + 2a(x - x_0)$$

$$h = v_0 t + \frac{gt^2}{2} \quad d = \frac{v_f^2 - v_0^2}{2g} \quad h = \frac{v_f + v_0}{2} t \quad v_f = v_0 + gt \quad v_f^2 = v_0^2 + 2gh$$

$$v_{0v} = v_0 \sin \alpha \quad v_h = v_0 \cos \alpha \quad h_{max} = -\frac{v_{0v}^2}{2g}$$

$$t_{(subir)} = -\frac{v_{0v}}{g} \quad t_{(aire)} = -\frac{2v_{0v}}{g} \quad d_H = v_H t_{(aire)} \quad d_H = -\frac{v_0^2 \sin 2\theta}{g}$$

Con notación referenciada al plano cartesiano:

$$y = y_0 + vt \quad v = v_0 + gt \quad y = y_0 + v_0 t + \frac{1}{2} gt^2 \quad v_f^2 = v_0^2 + 2g(y - y_0)$$

$$v_x = v_0 \cdot \cos \theta \quad v_y = v_0 \cdot \sin \theta$$

$$T = \frac{1}{f} \quad f = \frac{1}{T} \quad \omega = \frac{2\pi}{T} \quad \omega = 2\pi f \quad \theta = \omega t \quad \pi \text{RAD} = 180^\circ$$

$$\omega_m = \frac{\omega_f - \omega_0}{2} \quad \alpha_m = \frac{\omega_f - \omega_0}{t_f - t_0} \quad \theta = \omega_0 t + \frac{1}{2} \alpha t^2 \quad \theta = \frac{\omega_f^2 - \omega_0^2}{2\alpha} \quad \theta = \frac{\omega_f + \omega_0}{2} t$$

$$\omega_f = \omega_0 + \alpha t \quad \omega_f^2 = \omega_0^2 + 2\alpha \theta \quad V_L = \frac{2\pi r}{T} \quad V_L = \omega r \quad a_L = \alpha r \quad a_r = \omega^2 r \quad a_r = \frac{v_L^2}{r}$$