$$\vec{a} = \frac{\vec{V_f} - \vec{V_0}}{\Delta t}$$

$$GPE = M \cdot g \cdot h$$

$$T = \frac{1}{2 \cdot \pi} \cdot \sqrt{\frac{m}{K}}$$

$$a = R \cdot \alpha$$

$$KE = \frac{1}{2} \cdot M v^2$$

$$v = R \cdot \omega$$

$$\left|\vec{a_c}\right| = \frac{V^2}{R}$$

$$P = P_{top} + \rho \cdot g \cdot h$$

$$V_F{}^2 = V_0{}^2 + 2 \cdot a \cdot s$$

$$|f| = \mu \cdot |F_n|$$

$$\vec{p} = m \cdot \vec{V}$$

$$\overrightarrow{V_{avg}} = \frac{\vec{V_f} + \vec{V_0}}{2}$$

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

$$\left|F_B\right| = \rho \cdot g \cdot V_{displaced}$$

$$V_{avg} = \frac{DISTANCE}{\Delta t}$$

$$p = \frac{W}{\Delta t}$$

$$\vec{W} = m \cdot \vec{g}$$

$$\left|F_e\right| = \frac{k \cdot q_1 \cdot q_2}{r^2}$$

$$p \cdot \Delta t = F$$

$$W = \left|\vec{F}\right| \cdot |s| \cdot \cos(\theta)$$

$$\left|F_g\right| = \frac{G \cdot m_1 \cdot m_2}{r^2}$$

$$\vec{S} = \left(\frac{1}{2} \cdot \vec{a} \cdot \Delta t^2\right) + \vec{V_0} \cdot \Delta t$$

$$W_{nc} = \Delta KE + \Delta PE$$

$$\overrightarrow{F_{hooke}} = -k \cdot \vec{x}$$

$$\vec{S} = \overrightarrow{V_{avg}} \cdot \Delta t$$

$$W_{net} = \Delta KE$$

$$\overrightarrow{F_{net}} = \frac{\overrightarrow{\Delta p}}{\Delta t}$$

$$s = R \cdot \theta$$

$$\vec{g} = 9.8 \frac{N}{kg} \quad ,down$$

$$\overrightarrow{F_{net}} = m \cdot \vec{a}$$

$$SPE = \frac{1}{2} \cdot k \cdot x^2$$

$$G := 6.67 \cdot 10^{-11} \frac{m^2 \cdot N}{kg^2}$$

$$\rho = \frac{m}{V}$$

$$T = r \cdot F$$

$$P_{atm} = 101\,kPa$$

$$\rho_{water} := 1000 \frac{kg}{m^3}$$