Formules

MÉCANIQUE

$$\vec{v} = \frac{\overrightarrow{\Delta s}}{\Delta t}$$

$$\vec{a} = \frac{\overrightarrow{\Delta v}}{\Delta t}$$

$$\vec{a} = \frac{\overrightarrow{v_f} - \overrightarrow{v_i}}{\Delta t}$$

$$\overrightarrow{\Delta s} = \overrightarrow{v_i}\Delta t + \frac{1}{2}\vec{a}\Delta t^2$$

$$\overrightarrow{\Delta s} = \frac{(\overrightarrow{v_i} + \overrightarrow{v_f})\Delta t}{2}$$

$$\vec{v}_f{}^2 = \overrightarrow{v_i}^2 + 2\vec{a}\overrightarrow{\Delta s}$$

$$\overrightarrow{Fg} = m\vec{g}$$

$\vec{g} = 9{,}8\,m/s^2$

$$\overrightarrow{Fg} = \frac{Gm_1m_2}{d^2}$$

$G = 6{,}67\times10^{-11}\,N\cdot m^2/kg^2$

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

$$\vec{g} = \frac{Gm}{r^2}$$

$$F_{plan} = \overrightarrow{F_g}\sin\theta$$

OPTIQUE

$$n_1 \sin\theta_1 = n_2 \sin\theta_2$$

$$\frac{1}{lf} = \frac{1}{do} + \frac{1}{di}$$

$$Gr = \frac{Hi}{Ho} = \frac{li}{lf} = \frac{lf}{lo}$$

$$Gr = \frac{Hi}{Ho} = \frac{-di}{do}$$

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