Fórmulas de Física do Ensino Médio

$$v = \frac{\Delta d}{\Delta t} \tag{1}$$
$$a = \frac{\Delta v}{\Delta t} \tag{2}$$
$$d = v_0 t + \frac{at^2}{2} \tag{3}$$
$$v = v_0 + at \tag{4}$$
$$v^2 = v_0^2 + 2ad \tag{5}$$
$$T = \frac{1}{f} \tag{6}$$
$$\omega = \frac{\Delta \theta}{\Delta t} \tag{7}$$
$$a_c = \frac{v^2}{R} \tag{8}$$
$$f_e = F \tag{9}$$
$$f_{e_M} = \mu_e N \tag{10}$$
$$f_c = \mu_c N \tag{11}$$
$$M = Fd \tag{12}$$
$$R = ma \tag{13}$$
$$\frac{T^2}{r^3} = k \tag{14}$$
$$F = G\frac{m_1 m_2}{d^2} \tag{15}$$
$$p = \frac{F}{A} \tag{16}$$
$$\rho = \frac{m}{V} \tag{17}$$
$$p = p_a + \rho g h \tag{18}$$
$$E = P, \rho_c > \rho_L \Rightarrow P > E \tag{19}$$
$$\Delta p_2 = \Delta p_1 \tag{20}$$
$$T = Fd\cos\theta \tag{21}$$
$$P = \frac{T}{\Delta t} \tag{22}$$
$$T_{AB} = E_B - E_A, A < B \tag{23}$$
$$E_c = \frac{mv^2}{2} \tag{24}$$
$$E_{p_g} = mgh \tag{25}$$
$$F = kX \tag{26}$$
$$E_{p_\ell} = \frac{kX^2}{2} \tag{27}$$
$$q = mv \tag{28}$$
$$I = F\Delta t \tag{29}$$
$$I = \Delta q \tag{30}$$
$$Q = \Sigma q \tag{31}$$

$$\Delta L = \alpha L_0 \Delta t \tag{32}$$
$$\Delta A = \beta A_0 \Delta t \tag{33}$$
$$\Delta V = \gamma V_0 \Delta t \tag{34}$$
$$\beta = 2\alpha \tag{35}$$
$$\gamma = 3\alpha \tag{36}$$
$$m = nM \tag{37}$$
$$pV = nRT \tag{38}$$
$$p = \frac{1}{3} \cdot \frac{N}{V} m\bar{v}^2 \tag{39}$$
$$\bar{E_c} = \frac{3}{2}kT, k = \frac{R}{N_0} \tag{40}$$
$$C = \frac{\Delta Q}{\Delta t} = mc \tag{41}$$
$$\Delta Q = mc\Delta t \tag{42}$$
$$\Delta U = Q - T \tag{43}$$
$$T_{if} = \int_i^f p \, \mathrm{d}V \tag{44}$$
$$T = Q_1 - Q_2 \tag{45}$$
$$R_c = \frac{T_1 - T_2}{T_1} \tag{46}$$
$$R = \frac{T}{Q_1} = \frac{Q_1 - Q_2}{Q_1} \tag{47}$$
$$e_c = \frac{T_2}{T_1 - T_2} \tag{48}$$
$$e = \frac{Q_2}{T} = \frac{Q_2}{Q_1 - Q_2} \tag{49}$$
$$f = \frac{R}{2} \tag{50}$$
$$\frac{H_i}{H_o} = \frac{D_i}{D_o} \tag{51}$$
$$\frac{1}{f} = \frac{1}{D_o} + \frac{1}{D_i} \tag{52}$$
$$\frac{\sin\theta_1}{\sin\theta_2} = \frac{v_1}{v_2} \tag{53}$$
$$n = \frac{c}{v} \tag{54}$$
$$n_1 \sin\theta_1 = n_2 \sin\theta_2 \tag{55}$$
$$\sin L = \frac{n_2}{n_1} \tag{56}$$
$$C = \frac{Q}{V_{AB}} \tag{57}$$
$$C \propto A \tag{58}$$
$$C \propto \frac{1}{d} \tag{59}$$
$$C = kC_0 \tag{60}$$
$$\frac{1}{C_s} = \Sigma \frac{1}{C_n} \tag{61}$$
$$C_p = \Sigma C_n \tag{62}$$

$$T = \frac{1}{2}QV_{AB} \tag{63}$$

$$E = hf \tag{64}$$

$$E = E_0 + \frac{mv^2}{2} \tag{65}$$

$$\gamma = \sqrt{1 - \frac{v^2}{c^2}} \tag{66}$$

$$m = \frac{m_0}{\gamma} \tag{67}$$

$$E = \Delta m \cdot c^2 \tag{68}$$

$$L = L_0\gamma \tag{69}$$

$$\Delta t = \frac{\Delta t_0}{\gamma} \tag{70}$$

$$v_r = \frac{v_1 - v_2}{1 - \frac{v_1 v_2}{c^2}} \tag{71}$$

$$T = 2\pi\sqrt{\frac{m}{k}} \tag{72}$$

$$T = 2\pi\sqrt{\frac{L}{g}} \tag{73}$$

$$v = \frac{\lambda}{T} \tag{74}$$

$$\Delta x = \frac{L\lambda}{d} \tag{75}$$

$$\mu = \frac{m}{L} \tag{76}$$

$$v = \sqrt{\frac{T}{\mu}} \tag{77}$$

$$\lambda_1 = 2L \tag{78}$$

$$f_1 = \sqrt{\frac{T}{\mu}} \cdot \frac{1}{2L} \tag{79}$$

$$f_n = nf_1 \tag{80}$$

$$\lambda_n = \frac{2L}{n} \tag{81}$$

$$F = \frac{k_0}{k} \cdot \frac{Q_1 Q_2}{r^2} \tag{82}$$

$$E = \frac{F}{q} \tag{83}$$

$$V_{AB} = \frac{T_{AB}}{q} = V_A - V_B \tag{84}$$

$$E_{p_e} = qV \tag{85}$$

$$V_{AB} = \frac{Fd}{q} = Ed \tag{86}$$

$$V = k_0\frac{Q}{r} \tag{87}$$

$$i = \frac{\Delta Q}{\Delta t} \tag{88}$$

$$V = Ri \tag{89}$$
$$R = \rho\frac{L}{A} \tag{90}$$
$$R_s = \Sigma R_n \tag{91}$$
$$\frac{1}{R_p} = \Sigma\frac{1}{R_n} \tag{92}$$
$$P = Vi \tag{93}$$
$$R = R_0(1 + \alpha\Delta t) \tag{94}$$
$$\epsilon = \frac{\Delta T}{\Delta q} \tag{95}$$
$$P = \epsilon i \tag{96}$$
$$i = \frac{\Sigma\epsilon}{\Sigma R} \tag{97}$$
$$V_{AB} = \epsilon - Ri \tag{98}$$
$$F = Bqv\sin\theta \tag{99}$$
$$F = BiL\sin\theta \tag{100}$$
$$B \propto \frac{i}{R} \tag{101}$$
$$B \propto \frac{N}{L}i \tag{102}$$
$$\Phi = BA\cos\theta \tag{103}$$
$$\epsilon = \frac{\Delta\Phi}{\Delta t} \tag{104}$$
$$\frac{V_1}{N_1} = \frac{V_2}{N_2} \tag{105}$$
$$P_1 \geq P_2 \tag{106}$$