

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

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

$$A_1 v_1 = A_2 v_2$$

$$P_1 + \frac{1}{2} \rho v_1^2 + \rho g y_1 = P_2 + \frac{1}{2} \rho v_2^2 + \rho g y_2$$

$$v = \lambda f = \frac{\omega}{k}$$

$$I = \frac{P}{a}$$

$$v = (331 + 0.6T_C)$$

$$\beta = 10 \log_{10} \left(\frac{I}{I_0} \right)$$

$$I_0 = 1.00 \times 10^{-12} \text{ W/m}^2$$

$$f' = f \frac{(v \pm v_o)}{(v \mp v_s)}$$

$$\Delta r = m\lambda$$

$$\Delta r = \left(m + \frac{1}{2}\right)\lambda$$

$$m \in \{0, 1, 2, 3, \dots\}$$

$$f_{beat} = |f_1 - f_2|$$

$$n = \frac{c}{v}$$

$$\lambda_m = \frac{2L}{m}$$

$$f_m = \frac{mv}{2L}$$

$$m \in \{1, 2, 3, \dots\}$$

$$\lambda_m = \frac{4L}{m}$$

$$f_m = \frac{mv}{4L}$$

$$m \in \{1, 3, 5, \dots\}$$