

Physics Honors Second Semester Equations

Electrostatics:

$$F = \frac{Kq_1q_2}{d^2}$$

$$K = 9.0 \times 10^9$$

Circuits:

$$V = I \cdot R$$

$$P = I \cdot V = \frac{V^2}{R} = I^2 \cdot R$$

$$\text{Power} = \frac{\text{Energy}}{\text{time}}$$

$$\frac{1}{R_{\parallel}} = \frac{1}{R_1} + \frac{1}{R_2} + \frac{1}{R_3} + \dots \quad R_{\parallel} = \frac{R_1 \cdot R_2}{R_1 + R_2}$$

$$R_s = R_1 + R_2 + R_3 + \dots$$

Waves and Sound

$$v = \lambda \cdot f$$

$$f = \frac{1}{T}$$

$$f_B = |f_1 - f_2|$$

$$T_{SHO} = 2\pi \sqrt{\frac{m}{K}}$$

$$T_P = 2\pi \sqrt{\frac{l}{g}}$$

$$f_n = n \cdot f_1$$