## **Formulae**

$$s = ut + \frac{1}{2}at^2$$
$$v^2 = u^2 + 2as$$

$$W = p\Delta V$$

$$\phi = -\frac{Gm}{r}$$

$$p = \rho gh$$

$$p = \frac{1}{3} \frac{Nm}{V} < c^2 >$$

$$a = -\omega^2 x$$

$$v = v_0 \cos \omega t$$

$$v = \pm \omega \sqrt{x_0^2 - x^2}$$

$$V = \frac{Q}{4\pi\varepsilon_0 r}$$

$$1/C = 1/C_1 + 1/C_2 + \dots$$

$$C = C_1 + C_2 + \dots$$

$$W = \frac{1}{2}QV$$

$$R = R_1 + R_2 + \dots$$

$$1/R = 1/R_1 + 1/R_2 + \dots$$

$$x = x_0 \sin \omega t$$

$$x = x_0 \exp(-\lambda t)$$

$$\lambda = \frac{0.693}{t_{\frac{1}{2}}}$$