

- 1 $A = bh$ 2 $A = 1/2 bh$ 3 $A = \pi r^2$ 4 $C = 2\pi r$ 5 $V = lwh$ 6 $V = \pi r^2 h$ 7 $S = 2\pi rh + 2\pi r^2$ 8 $V = 4/3\pi r^3$ 9 $V = 4\pi r^2$ 10 $a^2 + b^2 = c^2$ 11 $\sin\theta = a/c$ 12 $\cos\theta = b/c$ 13 $\tan\theta = a/b$
- 14 $v_x = v_{x0} + a_x t$ 15 $x = x_0 + v_{x0} t + 1/2 a_x t^2$ 16 $v_x^2 = v_{x0}^2 + 2a_x(x - x_0)$ 17 $\Sigma \mathbf{F} = \mathbf{F}_{net} = m\mathbf{a}$ 18 $\mathbf{F} = \frac{d\mathbf{p}}{dt}$ 19 $\mathbf{J} = \int \mathbf{F} dt = \Delta \mathbf{p}$ 20 $\mathbf{p} = m\mathbf{v}$ 21 $F_{fric} \leq \mu N$ 22 $W = \int \mathbf{F} \cdot d\mathbf{r}$ 23 $K = 1/2 mv^2$ 24 $P = \frac{dW}{dt}$ 25 $P = \mathbf{F} \cdot \mathbf{v}$ 26 $\Delta U_g = mgh$
- 27 $a_c = \frac{v^2}{r} = \omega^2 r$ 28 $\boldsymbol{\tau} = \mathbf{r} \times \mathbf{F}$ 29 $\Sigma \tau = \tau_{net} = I\alpha$ 30 $I = \int r^2 dm = \Sigma mr^2$ 31 $\mathbf{r}_{cm} = \Sigma m\mathbf{r} / \Sigma m$ 32 $v = r\omega$ 33 $\mathbf{L} = \mathbf{r} \times \mathbf{p} = I\boldsymbol{\omega}$ 34 $K = 1/2 I\omega^2$ 35 $\omega = \omega_0 + at$ 36 $\theta = \theta_0 + \omega_0 t + 1/2 at^2$ 37 $\mathbf{F}_s = -k\mathbf{x}$ 38 $U_s = 1/2 kx^2$ 39 $T = 2\pi/\omega = 1/f$
- 40 $T_s = 2\pi\sqrt{\frac{m}{k}}$ 41 $T_p = 2\pi\sqrt{\frac{l}{g}}$ 42 $\mathbf{F}_G = -\frac{Gm_1 m_2}{r^2} \mathbf{r}$ 43 $U_G = -\frac{Gm_1 m_2}{r}$ 44 $\frac{df}{dx} = \frac{df}{du} \frac{du}{dx}$ 45 $\frac{d}{dx}(x^k) = nx^{k-1}$ 46 $\frac{d}{dx}(e^x) = e^x$ 47 $\frac{d}{dx}(\ln x) = \frac{1}{x}$ 48 $\frac{d}{dx}(\sin x) = \cos x$ 49 $\frac{d}{dx}(\cos x) = -\sin x$ 50 $\int x^R dx = \frac{1}{R+1} x^{R+1}$ 51 $\int e^x dx = e^x$ 52 $\int \frac{dx}{x} = \ln|x|$
- 53 $\int \cos x dx = \sin x$ 54 $\int \sin x dx = -\cos x$ 55 $F = \frac{1}{4\pi\epsilon_0} \frac{q_1 q_2}{r^2}$ 56 $\mathbf{E} = \mathbf{F}/q$ 57 $\oint \mathbf{E} \cdot d\mathbf{A} = Q/\epsilon_0$ 58 $E = -dV/dr$ 59 $V = \frac{1}{4\pi\epsilon_0} \sum \frac{q_i}{r_i}$ 60 $U_E = qV = \frac{1}{4\pi\epsilon_0} \frac{q_1 q_2}{r}$ 61 $C = Q/V$ 62 $C = k\epsilon_0 A$ 63 $C_p = \Sigma_i C_i$ 64 $\frac{1}{C} = \Sigma_i \frac{1}{C_i}$ 65 $I = dQ/dt$
- 66 $U_c = 1/2 QV = 1/2 CV^2$ 67 $R = \rho l/A$ 68 $\mathbf{E} = \rho \mathbf{j}$ 69 $I = Nev_d A$ 70 $V = \mathbf{I}R$ 71 $R_s = \Sigma_i R_i$ 72 $\frac{1}{R_p} = \Sigma_i \frac{1}{R_i}$ 73 $P = IV$ 74 $\mathbf{F}_M = q\mathbf{v} \times \mathbf{B}$ 75 $\oint \mathbf{B} \cdot d\mathbf{l} = \mu_0 I$ 76 $d\mathbf{B} = \frac{\mu_0}{4\pi} \frac{I d\mathbf{l} \times \mathbf{r}}{r^3}$ 77 $\mathbf{F} = \int I d\mathbf{l} \times \mathbf{B}$ 78 $\mathbf{B}_i = \mu_0 n\mathbf{I}$