

CONSTANTS AND FORMULAS

Description	Value/Formula
Force and motion:	$g = 9.8 \text{ m/s}^2$ $PE = mgh$ $KE = \frac{1}{2}mv^2$ $W = fd$
Electric circuits:	$V = IR$ $P = IV$ $R_{series} = R_1 + R_2 + R_3 + \dots$ $R_{parallel} = \frac{1}{\frac{1}{R_1} + \frac{1}{R_2} + \frac{1}{R_3} + \dots}$
Gas law:	$PV = nRT$ $R = 8.31 \text{ J/mol}\cdot\text{K}$
Pressure:	$P = \frac{\text{force}}{\text{area}}$
Waves:	$f = 1/T$ $v = f\lambda$
Geometry:	$\pi = 3.1416$
Area:	circle: $A = \pi r^2$ triangle: $A = \frac{1}{2}ab$ rectangle: $A = ab$
Volume:	cube: $V = a^3$ cylinder: $V = \pi r^2 h$ sphere: $V = \frac{4}{3}\pi r^3$
Circumference:	circle: $C = 2\pi r$