

FORMULA LIST (PURE PHYSICS)

1	$v = \frac{s}{t}$		
2	$a = \frac{v-u}{t}$	36	$n = \frac{\text{real depth}}{\text{apparent depth}}$
3	$v = u + at$	37	$n = \frac{1}{\sin c}$
4	$s = ut + \frac{1}{2}at^2$	38	$\frac{1}{f} = \frac{1}{u} + \frac{1}{v}$
5	$v^2 = u^2 + 2as$	39	$m = \frac{v}{u} = \frac{h_i}{h_o}$
6	$\rho = \frac{m}{V}$	40	$T = \frac{1}{f}$
7	$F = ma$	41	$v = f\lambda$
8	$F_N = F - f$	42	$n = \frac{\lambda_1}{\lambda_2}$
9	$W = mg$	43	$n = \frac{v_1}{v_2}$
10	$W = Fs$	44	Direct method, $v = \frac{s}{t}$
11	$E_p = mgh$	45	Echo method, $v = \frac{2d}{t}$
12	$E_k = \frac{1}{2}mv^2$	46	$I = \frac{Q}{t}$
13	$P = \frac{W}{t}$	47	$Q = ne$
14	$P = \frac{E}{t}$	48	$W = QV$
15	$P = Fv$	49	$R = \frac{kl}{A}$
16	$\text{Efficiency} = \frac{E_o}{E_i} \times 100\%$	50	$V = IR$
17	$\text{Efficiency} = \frac{P_o}{P_i} \times 100\%$	51	Series Circuit, $I = I_1 = I_2$
18	<b>Moment = Fd</b>	52	Series Circuit, $V = V_1 + V_2$
19	<b>Principle of moments, <math>F_1d_1 = F_2d_2</math></b>	53	Series Circuit, $R = R_1 + R_2$
20	$P = \frac{F}{A}$	54	Parallel Circuit, $I = I_1 + I_2$
21	$P = h\rho g$	55	Parallel Circuit, $V = V_1 = V_2$
22	$P_1V_1 = P_2V_2$	56	Parallel Circuit, $\frac{1}{R} = \frac{1}{R_1} + \frac{1}{R_2}$
23	$\frac{P_1}{T_1} = \frac{P_2}{T_2}$	57	$P = IV$
24	$\frac{V_1}{T_1} = \frac{V_2}{T_2}$	58	$P = I^2R$
25	$\frac{P_1V_1}{T_1} = \frac{P_2V_2}{T_2}$	59	$P = \frac{V^2}{R}$
26	$\theta = \frac{X_\theta - X_0}{X_{100} - X_0} \times 100^\circ\text{C}$	60	Turns ratio, $\frac{N_s}{N_p}$
27	$T = \theta + 273$	61	$\frac{N_s}{N_p} = \frac{V_s}{V_p} = \frac{I_p}{I_s}$
28	$Q = Pt$	62	Ideal transformer, $P_s = P_p, I_sV_s = I_pV_p$
29	$Q = C\Delta\theta$	63	$\text{Efficiency} = \frac{P_s}{P_p} \times 100\%$
30	$Q = mc\Delta\theta$		
31	$C = mc$		
32	$Q = ml_f$		
33	$Q = ml_v$		
34	$n = \frac{\sin i}{\sin r}$		
35	$n = \frac{c}{v}$		