

# 附錄三

## 大陸高中物理教科書公式一覽表

### 第一冊 (必修)

公 式	頁 數	公 式	頁 數
$f=kx$	(P. 16)	$P=Fv$	(P108)
$f=\mu N$	(P. 20)	$E_k=FS=\frac{1}{2}mv^2$	(P112)
$S=vt$	(P. 44)	$E_p=mgh$	(P114)
$V=S/t$	(P. 48)	$F=-kx$	(P125)
$a=\frac{v_t-v_0}{t}$	(P. 53)	$f=\frac{1}{T}$	(P128)
$v_t=v_0+at$	(P. 56)	$T=2\pi\sqrt{L/g}$	(P130)
$\bar{v}=\frac{v_t+v_0}{2}$	(P. 59)	$v=\frac{T}{\lambda}=\lambda f$	(P143)
$s=v_0t+\frac{1}{2}at^2$	(P. 60)	$v_0=332+0.6t$	(P152)
$v_t^2-v_0^2=2as$	(P. 61)	$P=P_0+P_h$	(P214)
$F_1=G\sin\theta$ $F_2=G\cos\theta$	(P. 69)	$P=P_0-P_h$	(P214)
$\omega=\frac{\phi}{t}$	(P. 70)	$P_1V_1=P_2V_2=\text{恆量}$	(P218)
$F=ma$	(P. 83)	$P_t=P_0\left(1+\frac{t}{273}\right)$	(P224)
$F_{\text{合}}=ma$	(P. 84)	$\frac{P_1}{T_1}=\frac{P_2}{T_2}$ ( $T=t+273$ )	(P227)
$P=mv$	(P. 87)	$\frac{P_1V_1}{T_1}=\frac{P_2V_2}{T_2}$	(P230)
$F=\frac{mv_t-mv_0}{t}=\frac{P_t-P_0}{t}$	(P. 87)	$\frac{V_1}{T_1}=\frac{V_2}{T_2}$	(P231)
$W=FS\cos\alpha$	(P106)	$B=\frac{P}{P}\times 100\%$	(P243)
$P=\frac{W}{t}$	(P108)		

## 第二册(必修)

公 式	頁 數	公 式	頁 數
$F = k \frac{Q_1 Q_2}{r^2}$	(P. 3)	$e = \epsilon_m \sin \omega t$	(P110)
$E = F/q$	(P. 6)	$i = I_m \sin \omega t$	(P110)
$U = W/q$	(P. 9)	$\epsilon = \frac{\epsilon_m}{\sqrt{2}}$	(P112)
$\Delta \epsilon = W = qU$	(P.10)	$U = \frac{U_m}{\sqrt{2}}$	(P112)
$I = q/t$	(P.23)	$\frac{U_1}{U_2} = \frac{n_1}{n_2} = \frac{I_2}{I_1}$	(P122)
$I = U/R$	(P.26)	$T = 2\pi\sqrt{LC}$	(P136)
$R = \rho \frac{L}{S}$	(P.29)	$f = \frac{1}{2\pi\sqrt{LC}}$	(P136)
$W = UI t$	(P.32)	$\lambda = C/f$	(P140)
$P = UI$	(P.32)	$\frac{\sin i}{\sin r} = n$	(P182)
$Q = I^2 R t$	(P.34)	$n = C/v$	(P183)
$W = I^2 R t = \frac{U^2}{R} t$	(P.34)	$\sin C = 1/n$	(P188)
$R = R_1 + R_2 + R_3 + \dots$	(P.37)	$\frac{1}{u} + \frac{1}{v} = \frac{1}{f}$	(P207)
$\frac{1}{R} = \frac{1}{R_1} + \frac{1}{R_2} + \frac{1}{R_3} + \dots$	(P.40)	$m = \frac{ v }{u}$	(P207)
$\epsilon = U + U'$	(P.51)	$E = h \nu$	(P242)
$\epsilon = IR = Ir$	(P.51)	$\frac{1}{2} m v^2 = h \nu - w$	(P243)
$I = \frac{\epsilon}{R+r}$	(P.51)	$v_0 = \bar{W}/h$	(P244)
$\epsilon_{串} = n \epsilon$	(P.56)	$h \nu = E_{初} - E_{末}$	(P258)
$r_{串} = nr$	(P.56)	$r_n = n^2 r_1$	(P258)
$\epsilon_{並} = \epsilon$	(P.57)	$E = m C^2$	(P283)
$r_{並} = r/n$	(P.58)	$\Delta E = \Delta m C^2$	(P283)
$\phi = BS$	(P.82)		
$\epsilon = Blv$	(P.92)		

## 第三册 (選修)

公 式	頁 數	公 式	頁 數
$G = mg$	(P. 41)	$\frac{1}{2}mv_2^2 + mgh_2 = \frac{1}{2}mv_1^2 + mgh_1$	(P147)
$v = gt$	(P. 41)	$v_1' = \frac{m_1 - m_2}{m_1 + m_2} v_1$	(P160)
$s = \frac{1}{2}gt^2$	(P. 41)	$v_2' = \frac{2m_2}{m_1 + m_2} v_1$	(P160)
$v = \frac{2\pi r}{T}$	(P. 69)	$E = kQ/r^2 \quad E = U/d$	(P179)
$\omega = 2\pi/T$	(P. 69)	$\frac{1}{2}mv^2 = qU$	(P202)
$v = r\omega$	(P. 69)	$C = Q/U$	(P208)
$F = mr\omega^2$	(P. 72)	$\frac{1}{C_{\text{串}}} = \frac{1}{C_1} + \frac{1}{C_2} + \frac{1}{C_3}$	(P212)
$a = r\omega^2$	(P. 72)	$C_{\text{並}} = C_1 + C_2 + C_3$	(P212)
$a = v^2/r$	(P. 72)	$B = \frac{F}{IL}$	(P220)
$F = \frac{Gm_1m_2}{r^2}$	(P. 85)	$F = ILB\sin\theta$	(P225)
$M = \frac{4\pi^2 r^3}{GT^2}$	(P. 89)	$f = qvB$	(P231)
$v = \sqrt{\frac{GM}{r}}$	(P. 93)	$r = \frac{mv}{qB}$	(P233)
$Ft = P' - P$	(P106)	$T = \frac{2\pi m}{qB}$	(P234)
$P_1 + P_2 = P_1' + P_2'$	(P112)	$\epsilon = \Delta\phi / \Delta t$	(P250)
$W = Ek_2 - Ek_1$	(P138)	$\epsilon = BLv\sin\theta$	(P252)
$WG = mgh_1 - mgh_2$	(P143)	$\epsilon = L\Delta I / \Delta t$	(P266)