Possibly useful relations:

$T(K) = T(^\circ C) + 273.15$	$T(^\circ F) = \frac{9}{5}T(^\circ C) + 32^\circ$	$\Delta L = \alpha L \Delta T$
$\Delta V = \beta V \Delta T$	$PV = nRT$	$PV = NkT$
$n = N/N_A$	$v_{\text{rms}} = \sqrt{\frac{3kT}{m}}$	$\overline{\text{KE}} = \frac{1}{2}m\overline{v^2} = \frac{3}{2}kT$
$Q = mc\Delta T$	$Q = mL_V$	$Q = mL_f$
$Q = mL_s$	$\frac{Q}{t} = \frac{\kappa A(T_2 - T_1)}{d}$	$\frac{Q}{t} = \sigma\epsilon A(T_{\text{hot}}^4 - T_{\text{cold}}^4)$
$W = P\Delta V$	monoatomic: $\Delta U = \frac{3}{2}nR\Delta T$	diatomic: $\Delta U = \frac{5}{2}nR\Delta T$
	$\Delta U = Q - W$	
Isochoric: $\Delta V = 0$	Isothermal: $\Delta T = 0$	Isobaric: $\Delta P = 0$
Adiabatic: $\Delta Q = 0$	$\epsilon = \frac{W}{Q_H} = 1 - \frac{Q_C}{Q_H}$	$\epsilon_{\text{Carnot}} = 1 - \frac{T_C}{T_H}$
$\text{COP}_{\text{ref}} = \frac{Q_C}{W}$	$\text{COP}_{\text{hp}} = \frac{Q_H}{W}$	
$S = (\frac{Q}{T})_{\text{reversible}}$	$\Delta S_{\text{closed}} \geq 0$	$S = k \ln W$
W = (# microstates)/macrostate		
$F = \frac{k\lvert q_1\rvert\lvert q_2\rvert}{r^2}$	$\vec{F} = q\vec{E}$	$E = \frac{kQ}{r^2}$
$\vec{E} = \vec{E}_1 + \vec{E}_2 + \vec{E}_3 + ...$	$V = \frac{PE}{q}$	$V = Ed$
$V = \frac{kQ}{r}$	$Q = CV$	$C = \kappa\frac{\epsilon_0 A}{d}$
$E_{\text{cap}} = \frac{1}{2}QV = \frac{1}{2}CV^2 = \frac{Q^2}{2C}$		$C_p = C_1 + C_2 + C_3 + ...$
$\frac{1}{C_s} = \frac{1}{C_1} + \frac{1}{C_2} + \frac{1}{C_3} + ...$	$I = \frac{\Delta Q}{\Delta t}$	$I = nqAv_d$
$V = IR$	$R = \rho\frac{l}{A}$	$\rho = \rho_0(1 + \alpha\Delta T)$
$P = IV$	$P = I^2R$	$P = V^2/R$
$V = V_0 \sin(2\pi ft)$	$I = I_0 \sin(2\pi ft)$	$P = I_0V_0 \sin^2(2\pi ft)$
$P_{\text{av}} = \frac{1}{2}I_0V_0 = I_{\text{rms}}V_{\text{rms}}$	$I_{\text{rms}} = I_o/\sqrt{2}$	$V_{\text{rms}} = V_o/\sqrt{2}$
$R_S = R_1 + R_2 + R_3 + ...$	$\frac{1}{R_p} = \frac{1}{R_1} + \frac{1}{R_2} + \frac{1}{R_3} + ...$	$P = E/t$
$\tau = RC$	$V = V_0 \exp^{-t/\tau}$	$V = V_0(1 - \exp^{-t/\tau})$

$R = 8.314$ J/(mol · K)	$N_A = 6.02 \times 10^{23}$ mol^{-1}	$k = 1.38 \times 10^{-23}$ J/K
$\sigma = 5.69 \times 10^{-8}$ J/(s · m^2 · K^4)		
1 cal = 4.186 J	1 kcal = 10^3 cal	1 Liter = 10^{-3} m^3
1 atm = 10^5 Pa	$\lvert q_e\rvert = 1.60 \times 10^{-19}$ C	$k = 9.0 \times 10^9$ N · m^2/C^2
$\epsilon_0 = 8.85 \times 10^{-12}$ C^2/(N · m^2)		