These are the equations as they will appear on the last page of the final exam:

Assorted thermodynamics equations:

$\Delta L = L_i \alpha \Delta T$	$PV = nRT = NK_BT$	$Q = mc\Delta T$
$Q = L\Delta m$	$P = F/A$	$W = \int PdV$
$W = nRT \ln\left(\frac{V_f}{V_i}\right)$	$\Delta E_{int} = Q - W$	$\Delta E_{int} = nC_V\Delta T$
$Q = nC_V\Delta T$	$Q = nC_P\Delta T$	$\gamma = C_P/C_V$
$C_P - C_V = R$	$PV^\gamma = C$	$P = \frac{2}{3}(N/V)(\frac{1}{2}m_0\overline{v^2})$

Constants:

$R = 8.314$ J/mol·K	$K_B = 1.381 \times 10^{-23}$ J/K	1 cal = 4.186 J
$T_{triplept} = 273.16$ K, 0.01° C	$N_A = 6.0221 \times 10^{23}$	

Previous Assorted Equations

$W = F\Delta x \cos\theta$	$W = \vec{F} \cdot \Delta\vec{x}$	$F_s = -kx$
$W = \int_{r_i}^{r_f} \vec{F} \cdot d\vec{r}$	$W_{net} = \Delta K$	$U_g = mgy$
$U_s = \frac{1}{2}kx^2$	$W_{int} = -\Delta U$	$F_x = -\frac{dU}{dx}$, $F_y = -\frac{dU}{dy}$
$\Delta E_{mech} = \Delta K + \Delta U$	$\Delta E_{sys} = \sum T$	$\Delta K + \Delta U + f_kd = W + Q + \sum T$
$\Delta E_{mech} = \sum W_{otherforces} - f_kd$	$P = \frac{dE}{dt}$	$P = \vec{F} \cdot \vec{v}$
$\vec{p} = m\vec{v}$	$\vec{F} = \frac{d\vec{p}}{dt}$	$\sum \vec{p}_i = \sum \vec{p}_f$
$\vec{F} = \frac{\sum m_ix_i}{M_{tot}}$	$\vec{r}_{com} = \frac{1}{M}\int \vec{r}dm$	$\vec{p}_{tot} = M_{tot}\vec{v}_{CM}$
$\theta = s/r$	$\omega = d\theta/dt$	$\alpha = d\omega/dt$
$v = r\omega$	$a_t = r\alpha$	$a_c = r\omega^2$
$\omega_f = \omega_i + \alpha t$	$\theta_f = \theta_i + \omega_it + \frac{1}{2}\alpha t^2$	$\omega_f^2 = \omega_i^2 + 2\alpha(\theta_f - \theta_i)$
$\theta_f = \theta_i + \frac{1}{2}(\omega_i + \omega_f)t$	$K_{rot} = \frac{1}{2}I\omega^2$	$K_{tot} = K_{trans} + K_{rot}$
$I = \sum m_ir_i^2$	$I = \int r^2dm$	$I = I_{CM} + MD^2$
$I_{hoop} = MR^2$	$I_{disk} = \frac{1}{2}MR^2$	$I_{sphere} = \frac{2}{5}MR^2$
$\tau_{net} = I\alpha$	$\vec{\tau} = \vec{r} \times \vec{F}$	$\sum \vec{\tau} = d\vec{L}/dt$
$L = I\omega$	$\vec{L} = I\vec{\omega}$	$\frac{d\vec{L}}{dt} = 0$