Test 1 Reference Page

$$(x - h)^2 + (y - k)^2 = r^2$$

$$A = P\left(1 + \frac{r}{n}\right)^{nt}$$	$$A = Pe^{rt}$$

Doubling Time

$$n(t) = n_0 2^{\frac{t}{a}}$$

Relative Growth Rate

$$n(t) = n_0 e^{rt}$$

Logistic Growth

$$n(t) = \frac{M}{1 + Ae^{-rt}}$$

where M = carrying capacity
$A = (M - n_0)/n_0$

Radioactive Decay

$$m(t) = m_0 e^{-rt}$$

where $r = \frac{\ln 2}{h}$

Newton's Law of Cooling

$$T(t) = T_s + D_0 e^{-kt}$$

$$pH = -\log[H^+]$$

$$M = \log\frac{I}{S}$$

where $S = 10^{-4}\ cm$

$$B = 10\log\frac{I}{I_0}$$

where $I_0 = 10^{-12}\ W/m^2$