MA 115 Exam 2 Formula Sheet

$f(x) = a^x, a > 0, a \neq 0$

$f(x) = \log_a x, a > 0, a \neq 0$

$y = \log_a x \iff a^y = x$

$$\log_a(AB) = \log_a(A) + \log_a(B)$$
$$\log_a\left(\frac{A}{B}\right) = \log_a(A) - \log_a(B)$$
$$\log_a\left(A^C\right) = C\log_a(A)$$

$$\log_b x = \frac{\log_a x}{\log_a b}$$

$N(t) = N_0 2^{t/a}$

$N(t) = N_0 e^{rt}$

$R(t) = R_0 2^{-t/h}$