

Algebraic Formulas

Quadratic Functions:

$$x = \frac{-b \pm \sqrt{b^2 - 4ac}}{2a} \quad D = b^2 - 4ac \quad \left(\frac{-b}{2a}, f\left(\frac{-b}{2a}\right) \right)$$

Compound Interest:

$$A = P \left(1 + \frac{r}{n} \right)^{nt} \quad \text{Compounded } n \text{ times per years.}$$

$$P = P_0 e^{kt} \quad \text{Compounded continuously}$$

Doubling equation $kt = \ln 2$

Logarithms: $\log_a x = y \Leftrightarrow x = a^y$ $\log_b M = \frac{\log_a M}{\log_a b}$
