Slope = $m = \dfrac{y_2 - y_1}{x_2 - x_1}$ and $y = m(x - x_1) + y_1$

Continuous growth/decay/compounding: $A(t) = A_0 e^{kt}$

Periodic Compounding: $A(t) = A_0\left(1 + \dfrac{r}{m}\right)^{mt}$ or $= P\left(1 + \dfrac{r}{m}\right)^{mt}$, depending on how much you like the letter '*P*.'

$$ax^2 + bx + c = 0 \Rightarrow x = \frac{-b \pm \sqrt{b^2 - 4ac}}{2a}$$

$ax^2 + bx + c = a(x - h)^2 + k$, where $(h,k) = \left(-\dfrac{b}{2a}, f\left(-\dfrac{b}{2a}\right)\right)$

Difference Quotient = $\dfrac{f(x+h) - f(x)}{h} = \dfrac{f(x_2) - f(x_1)}{x_2 - x_1} =$ average slope.

$$a + ar + ar^2 + \cdots + ar^{n-2} + ar^{n-1} = \sum_{k=1}^{n} ar^{k-1} = a\left(\frac{1 - r^n}{1 - r}\right) \text{ or } a\left(\frac{r^n - 1}{r - 1}\right)$$

If $|r| < 1$, then $a + ar + ar^2 + \cdots\cdots + ar^{n-2} + ar^{n-1} + \cdots\cdots = \sum_{k=1}^{\infty} ar^{k-1} = a\left(\dfrac{1}{1 - r}\right)$