

## Formula Sheet

$$I = Prt, \quad A = P(1 + rt), \quad P = \frac{A}{1 + rt},$$

$$A = P(1 + i)^n, \quad P = \frac{A}{(1 + i)^n},$$

$$i = \frac{r}{m}, \quad n = mt, \quad APY (r_e) = \left(1 + \frac{r}{m}\right)^m - 1$$

$$FV = PMT \left( \frac{(1 + i)^n - 1}{i} \right), \quad PMT = FV \left( \frac{i}{(1 + i)^n - 1} \right)$$

$$PV = PMT \left( \frac{1 - (1 + i)^{-n}}{i} \right), \quad PMT = PV \left( \frac{i}{1 - (1 + i)^{-n}} \right)$$

The Quadratic Formula  $x = \frac{-b \pm \sqrt{b^2 - 4ac}}{2a}$

$$\text{Vertex}=(h,k)=\left(\frac{-b}{2a}, f\left(\frac{-b}{2a}\right)\right)$$

$$m = \frac{y_2 - y_1}{x_2 - x_1}, \quad y - y_1 = m(x - x_1)$$