Summary of Financial Math Formulas:

Simple Interest:	
$I = Prt$	I = Interest Earned P = Principal/Present Value r = Annual Rate (decimal) t = Time (years)
$A = P(1 + rt)$	
Compound Interest:	
If your loan/investment is compounded m times per year: $A = P\left(1 + \frac{r}{m}\right)^{mt}$	A = Future Value/Maturity Value P = Principal/Present Value r = Annual Rate (decimal) m = Number of Compounding Periods per Year t = Time (years)
If your loan/investment is compounded continuously: $A = Pe^{rt}$	
Effective Rate:	
$r_e = \left(1 + \frac{r}{m}\right)^{m} - 1$	Use this to compute the effective rate if your loan/investment is compounded m times per year.
$r_e = e^{r} - 1$	Use this to compute the effective rate if your loan/investment is compounded continuously.
Future Value of Ordinary Annuities & Sinking Funds:	
$S = R\left(\frac{(1+i)^n - 1}{i}\right)$	The payment/deposit is at the END of the period. S = Future Value/Total amount accrued R = Payment/Deposit made in each period i = rate per period (usually $i = \frac{r}{m}$) n = total number of times compounded ($n = mt$)
$R = S\left(\frac{i}{(1+i)^n - 1}\right)$	
Annuities Due:	
$S = R\left(\frac{(1+i)^{n+1} - 1}{i}\right) - R$	The payment/deposit is at the BEGINNING of the period
Present Value of Ordinary Annuities & Amortization:	
$P = R\left(\frac{1 - (1+i)^{-n}}{i}\right)$	The payment is made at the END of the period. P = Present Value R = Payment made in each period i = rate per period (usually $i = \frac{r}{m}$) n = total number of times compounded ($n = mt$)
$R = P\left(\frac{i}{1 - (1+i)^{-n}}\right)$	