
P	Principal	
n	number of periods over which interest is earned	
r	interest rate per period	
Future Value		$S = P(1 + r)^n$
Present Value		$P = S(1 + r)^{-n}$

R	regular payment	
n	number of periods	
r	interest rate per period	
Present Value of an Ordinary Annuity		$A = R \left(\frac{1 - (1 + r)^{-n}}{r} \right)$
Present Value of an Annuity Due		$A = R \left(\frac{1 - (1 + r)^{-n}}{r} \right) (1 + r)$
Future Value of an Ordinary Annuity		$S = R \left(\frac{(1 + r)^n - 1}{r} \right)$
Future Value of an Annuity Due		$S = R \left(\frac{(1 + r)^n - 1}{r} \right) (1 + r)$
Periodic payment into Sinking Fund		$R = S \left(\frac{r}{(1 + r)^n - 1} \right)$
Periodic payment of an Amortized Loan		$R = A \left(\frac{r}{1 - (1 + r)^{-n}} \right)$

$$\log_b(xy) = \log_b x + \log_b y$$

$$\log_b \left(\frac{x}{y} \right) = \log_b x - \log_b y$$

$$\log_y x = \frac{\log_b x}{\log_b y}$$
