

	Interest	Future Value	Present Value
Ordinary Annuity		$S = R \left(\frac{(1+i)^n - 1}{i} \right)$	$P = R \left(\frac{1 - (1+i)^{-n}}{i} \right)$

- Find the present value of the ordinary annuity with payments of \$10,000 semi-annually for 15 years at 10% compounded semi-annually.
- Find the present value of the ordinary annuity where payments of \$850 are made annually for 4 years at 5% compounded annually.
- Find the present value of the ordinary annuity where payments of \$4210 are made semiannually for 8 years at 8.6% compounded semiannually.
- A student has a loan of \$35,000, which is being charged 7.43% compounded monthly. The amount of each payment for repayment in 10 years is \$414.18. After 5 years the student decides to pay off the balance. How much is due?
 - If the student takes the 10 years to pay off the loan, what is the total repayment amount?
 - How much interest is paid?
 - If the loan was repaid over 20 years, what is the monthly payment?
 - For the 20 year repayment plan, what is the total amount paid?
 - For the 20 year repayment plan, what is the total amount of interest paid?
- Find the monthly payment necessary to amortize a loan of \$149,560 at 7.75% for 25 years.
 - Of the total paid, how much is interest?
 - Of the first payment, how much is applied to the principle?