

1. An investment offers \$6125 per year for 15 years with the first payment occurring one year from now. If the required rate of return is 8%, what is the value of the investment? What would the value be if the payments occurred for 40 years? For 75 years? Forever?
 2. If you deposit \$5000 at the end of each year for the next 20 years into an account paying 10.1% interest how much money will you have in the account in 20 years? How much will you have if you make deposits for 40 years?
 3. First National Bank charges 14.3% compounded monthly on its business loans. First United Bank charges 14.7% compound semiannually (that's two times per year). As a potential borrower, which bank would you go to for a new loan?
 4. You want to buy a new sports coupe for \$78,500 and the finance office at the dealership has quoted you a loan with an APR of 4.9% for 60 months to buy the car? What would your monthly payments be? What is the effective annual rate on this loan?
 5. You just joined the investment banking firm of Dewey Cheatham and Howe. They've offered you two different salary arrangements. You can have \$6100 per month for the next two years or you can have \$5100 per month for the next two years along with the \$25,000 signing bonus today. If the interest rate is 7% compounded monthly. Which do you prefer?
 6. You're trying to choose between two different investments, both of which have up-front costs of \$30,000. Investment G returns \$65,000 in six years investment H returns \$98,000 in nine years period new sentence which of these investments has higher return?
 7. What is the relationship between the value of an annuity and the level of the interest rate? Suppose you just bought a 10 year annuity of \$5,200 per year at a current interest rate of 10% per year. What happens to the value of your investment if interest rates suddenly dropped to 5%? What is the what if interest rates suddenly rise to 15%?
- 8 Suppose you're going to receive \$7800 per year for five years. the appropriate discount rate is 7.5%.
- A. What is the present value of the payments if they are in the form of an ordinary annuity? What is the present value if the payments are an annuity due?
 - B. Suppose you plan to invest the payments for five years. What is the future value if the payments are an ordinary annuity? What if the payments are in annuity due?
 - C. Which has the higher present value, the ordinary annuity or the annuity due? Which has a higher future value? Will this always be true?
- 9 A 6 year annuity of twelve \$7,375 semiannual payments will begin nine years from now, with the first payment coming 9.5 years from now. If the discount rate is 9% compounded semiannually, what is the value of this annuity five years from now? What is the value three years from now? What is the current value of the annuity?
- 10 Given an interest rate of 6.35% per year, what is the value at year 7 of a perpetual stream of \$7,000 payments that will begin at year 20?
- 11 Prepare an amortization schedule for a three year loan of \$57,000. The interest rate is 8% per year, and the loan calls for equal annual payments. How much interest is paid in the third year? How much total interest is paid over the life of the loan?