

Chapter 5 - Homework Questions

1. Present Value and Multiple Cash Flows. Eulis Co. has identified an investment project with the following cash flows. If the discount rate is 10 percent, what is the present value of these cash flows? What is the present value at 18 percent? At 24 percent?

Year	Cash Flow
1	\$ 680
2	490
3	975
4	1,160

3. Future Value and Multiple Cash Flows. Booker, Inc., has identified an investment project with the following cash flows. If the discount rate is 8 percent, what is the future value of these cash flows in Year 4? What is the future value at an interest rate of 11 percent? At 24 percent?

Year	Cash Flow
1	\$ 985
2	1,160
3	1,325
4	1,495

4. Calculating Annuity Present Values. **Calculating Annuity Present Values.** An investment offers \$5,450 per year for 15 years, with the first payment occurring one year from now. If the required return is 8 percent, what is the value of the investment? What would the value be if the payments occurred for 40 years? For 75 years? Forever?

6. Calculating Annuity Values. For each of the following annuities, calculate the present value.

Present Value	Years	Interest Rate
\$ 24,500	6	11%
19,700	8	7
136,400	15	8
285,650	20	6

14. Calculating EAR. First National Bank charges 10.1 percent compounded monthly on its business loans. First United Bank charges 10.3 percent compounded semiannually. As a potential borrower, which bank would you go to for a new loan?

15. Calculating APR. Vandermark Credit Corp. wants to earn an effective annual return on its consumer loans of 14.2 percent per year. The bank uses daily compounding on its loans. What interest rate is the bank required by law to report to potential borrowers? Explain why this rate is misleading to an uninformed borrower.