1. Suppose you can buy an investment that promises to pay you $2500 for 10 years with the first year's payment being made today. If your required interest rate is 10%, what is the most you would be willing to pay for the investment? (Answer: $16,897.56)

2. Suppose you can buy an investment that promises to pay you $2500 for 10 years with the first to be received five years from now. If your required interest rate is 10%, what is the most you would be willing to pay for the investment? (Answer: $10,490.05)

3. If you make 12 annual deposits of $3,000 in an account that pays 12% per year (annual compounding) with the first deposit being made today, what will be the value of the investment 12 years from now? (Answer: $81,087.32)

4. If you make 12 annual deposits of $3,000 in an account that pays 12% per year (annual compounding) with the first deposit being made today, what will be the value of the investment 20 years from now? (Answer: $200,796.24)

5. Suppose you can buy an investment that promises to pay you $1500 per year for 5 years and then pay you $1000 in the 6^{th} year. Your required rate of interest on this investment is 12%. What would you be willing to pay for this investment? (Answer: $5,913.79)

6. Consider the following loan conditions:

Amount borrowed:	$500,000
Time	5 years
Interest Rate	9.75% stated (nominal) annual rate
Balloon Payment	$300,000 (Maximum)

Answer the following questions:

a. What is the total dollar amount of interest you will pay on this loan if you carry it throughout the entire 20-year term? (Answer: $199,740.92)

b. Suppose you increase your monthly payment by $500 beginning with the first payment. What is the total dollar amount of interest under these conditions? (Answer: $691,277.14)

7. Consider the following loan:

Stated annual rate	7.5%
Loan amount	$25,000
Payment frequency	Monthly
Loan term	5 years
Balloon payment	0

For the 48th payment on this loan, what is the dollar amount of the interest portion of the payment? (Answer: $38.98)

8. Consider the following car loans:

Loan A: 6.5% annual rate on a 48-month loan with no down payment and $2500 cash rebate. If you take this loan you do not intend to use the rebate as a down payment.

Loan B: 0.0% annual rate on a 48-month loan with a $3000 down payment and no cash rebate.

You will be purchasing a car that requires $30,000 in financing prior to any down payments. You plan to keep the car for more than 4 years.

With a personal reinvestment (opportunity) rate of 12%, which loan is the best choice with respect to value and financial theory?

What is the net dollar difference in value to you between the two options?