1. If $3,000 is loaned for 4 months at a 4.5% annual rate, how much interest is earned?

2. A loan of $4,000 was repaid at the end of 10 months with a check for $4,270. What annual rate of interest was charged?

3. A newborn child receives a $20,000 gift toward a college education from her grandparents. How much will the $20,000 be worth in 17 years if it is invested at 7% compounded quarterly?

4. What will a $210,000 house cost 10 years from now if the inflation rate over that period averages 3% compounded annually?

5. Which is a better investment: 9% compounded monthly or 9.3% compounded annually?

6. If an investment company pays 6% compounded semiannually, how much should you deposit now to have $10,000 5 years from now?

7. If an investment company pays 9% compounded continuously, how much should you deposit now to have $25,000 9 years from now?

8. How long will it take $4,000 to grow to $9,000 if it is invested at 7% compounded monthly?

9. How long will it take $6,000 to grow to $8,600 if it is invested at 9.6% compounded continuously?

10. How long will it take money to double if it is invested at

    (a) 10% compounded quarterly?

    (b) 10% compounded continuously?