1. Eugene Hissner of Canton, Ohio recently won the $1 million sweepstakes in the Ohio lottery. Mr. Hissner, a former forklift driver in Canton, won $50,000 each year for 20 years. Find the equivalent present value of his winnings at an $i$ of 10%, assuming the first payment occurs at the end of the first year. (Ans: $425,680)

2. The annual premium on a $10,000 ordinary life insurance policy for a 25-year-old male is about $150/yr. An ordinary life policy guarantees a death benefit ($10,000 in this case) in exchange for uniform annual premiums ($150) paid during the lifetime of the insured. Using the current life expectancy of 75 years for a male age 25, find the rate of return on the policy. Assume the payments are made at end-of-year. (Ans: 1.128% annually)

3. A fully equipped Chevrolet Citation® may be purchased for about $9,000. If the anticipated salvage value at the end of 10 years is $1,000, find the equivalent annual cost of the invested capital, if the owner's interest rate is 12%. (Ans: $1,535.87)

5. On the advice of his broker, Mr. Bornrich, a wealthy investor recently loaned $100,000 at 10%/month to a Cleveland bank in financial trouble. Find the nominal and effective annual interest on the loan. (Ans: 21.84%)

6. Recently, Beneficial Financial Corp. offered a 24-month, $3,000 personal loan for a monthly payment of $158.61. Find the interest rate per month and the approximate nominal and effective annual rates. (Ans: 26.824%)

7. A used car dealer offers you a "7% loan" for 12 months where the monthly payment on a $1,000 loan is $89.17 ($1,070/12). Find the nominal annual rate charged on the loan.