Test covers chapters 7 and 8, only.
100 points. Please allocate your time efficiently.
Please write answers in ink. For the present value problems, show your work.

1. Much advertising conveys little information beyond the name of the product. Is there any way that such advertising could benefit consumers, or do consumers just pay higher prices because of the advertising? Does the fact that the seller is willing to spend money publicizing the name of the product indicate anything about the seller’s confidence in the product’s quality? Explain.

2. New cars lose a significant amount of value in the first year. Why do cars lose so much value in the first year? Many new car dealers also sell used cars. How do these dealers give buyers confidence that they are getting a good quality car and not a lemon? Explain.

3. The right to graze cattle on federal government land is a valuable property right. The Bureau of Land Management (BLM) has always assigned to cattle ranchers the right (a long-term lease) to use federal land at a very low price (below market price). A rancher who receives the initial lease can expect to earn a higher than normal rate of return. If the rancher sells his ranch, his buyer gets both the ranch and the BLM grazing lease. Can the buyer also expect to make a big profit from grazing his cattle on federal land? Explain.

4. a. What would a maker of mousetraps be willing to pay for a patent that is expected to produce an addition to net revenue of $200,000 per year for the next 17 years? Since the prices of mousetraps can be expected to rise with inflation, it is appropriate to use a low discount rate of three percent.

   b. You invest $3300 today. At the end of one year your investment is worth $3465. What is the implied or effective rate of return on your investment?

c. How much will $1000 grow to in 10 years at 7% compounded annually?

d. What is the present value of $10,000 to be received 15 years from now, if the interest (discount) rate is 5%?

e. Suppose you are given a choice between the following:
   1. $5,000 five years from now
   2. $15,000 fifteen years from now.

Which would you pick at an interest rate of 10%?
Which would you pick at an interest rate of 12%?