

QUESTION 1

In which of the following situations would benefit you most as a borrower? In which of the following situations would benefit you most as a lender?

- (1) The interest rate is 9 percent and the expected inflation rate is 7 percent.
- (2) The interest rate is 4 percent and the expected inflation rate is 1 percent.
- (3) The interest rate is 13 percent and the expected inflation rate is 15 percent.
- (4) The interest rate is 25 percent and the expected inflation rate is 50 percent.

QUESTION 2

Suppose that you want to take out a loan and that your local bank wants to charge you an annual real interest rate equal to 3%. Assuming that the annualized expected rate of inflation over the life of the bond is 1%, determine the nominal interest rate that the bank will charge you. What happens if, over the life of the loan, actual inflation is 0.5%?

QUESTION 3

Mortgages are loans to households to purchase houses. If mortgage rates rise from 5% to 10%, but the expected rate of increase in housing prices rises from 2% to 9%. Are people more or less likely to buy houses? Why?

QUESTION 4

Consider four coupon bonds with the same face value of \$100 and the same coupon rate of 10%. These bonds are held for one year. Assume interest rate **increase** from 10% to 12% in the next year. Complete the following table.

Bond No.	Initial Years to Maturity	Initial Yield	Current Yield	Price next year	Rate of Capital Gain	Rate of Return
#1	20	10%			-14.73%	
#2	10	10%				-0.66%
#3	5	10%				
#4	1	10%				

QUESTION 5

If the interest rates on all bonds rise from 5 to 6 percent over the course of the year, which bond would you prefer to have been holding?

- (a) a bond with ten years to maturity;
- (b) a bond with five years to maturity;
- (c) a bond with twenty years to maturity;
- (d) a bond with one year to maturity.

QUESTION 6

Indicate TRUE or FALSE for the following statement.

- (1) The longer a bond's maturity, the greater is the rate of return that occurs as a result of the increase in the interest rate.
- (2) Even though a bond has a substantial initial interest rate, its return can turn out to be negative if interest rates rise.
- (3) Prices and returns for short-term bonds are more volatile than those for longer term bonds.
- (4) A fall in interest rates results in capital losses for bonds whose terms to maturity are longer than the holding period.
- (5) The rate of return on a bond will not necessarily equal the interest rate on that bond.
- (6) The rate of return will be greater than the interest rate when the price of the bond falls during the holding period.
- (7) The return can be expressed as the difference between the current yield and the rate of capital gains.
- (8) With a zero-coupon bond, the return on the bond is equal to the rate of capital gain.