

Problem set 2

Write your answers in the indicated spaces.

1) Consider a zero-coupon bond that promises a payment of \$1,000,000 exactly one year from today.

a) If the current market yield for one-year, zero-coupon bonds is 6%, what is the current price of the bond?

b) Suppose that tomorrow the market yield for one-year, zero-coupon bonds rises to 10%. What will the price of the bond be tomorrow?

c) What is the percent change in the price of the bond from today to tomorrow? _____

2) Consider a zero-coupon bond that promises a payment of \$1,000,000 exactly five years from today.

a) If the current market yield for five-year, zero-coupon bonds is 6%, what is the current price of the bond?

b) Suppose that tomorrow the market yield for five-year, zero-coupon bonds rises to 10%. What will the price of the five-year bond be tomorrow?

c) What is the percent change in the price of the bond from today to tomorrow? _____

3) Compare your answers in parts one and two. Would you have lost more money if you bought one-year bonds and sold them tomorrow, or if you bought five-year bonds and sold them tomorrow?