Problem Set #11

1. Consider two bonds, A and B. Both bonds presently are selling at their par value of $1,000. Each pays interest of $120 annually. Bond A will mature in 5 years, while bond B will mature in 6 years. If the yields to maturity on the two bonds change from 12% to 14%, _________.

A. both bonds will increase in value but bond A will increase more than bond B
B. both bonds will increase in value but bond B will increase more than bond A
C. both bonds will decrease in value but bond A will decrease more than bond B
D. both bonds will decrease in value but bond B will decrease more than bond A

2. A callable bond pays annual interest of $60, has a par value of $1,000, matures in 20 years but is callable in 10 years at a price of $1,100, and has a value today of $1055.84. The yield to call on this bond is ________.

A. 6%
B. 6.58%
C. 7.2%
D. 8%

3. If you are holding a premium bond, you must expect a ________ each year until maturity. If you are holding a discount bond, you must expect a ________ each year until maturity. (In each case assume that the yield to maturity remains stable over time.)

A. capital gain; capital loss
B. capital gain; capital gain
C. capital loss; capital gain
D. capital loss; capital loss
4. A coupon bond that pays interest of 4% annually has a par value of $1,000, matures in 5 years, and is selling today at $785. The actual yield to maturity on this bond is _________.

   A. 7.2%
   B. 8.8%
   C. 9.1%
   D. 9.6%

5. You would typically find all but which one of the following in a bond contract?

   A. A dividend restriction clause
   B. A sinking fund clause
   C. A requirement to subordinate any new debt issued
   D. A price-earnings ratio

6. You buy a 10-year $1,000 par value zero-coupon bond priced to yield 6%. You do not sell the bond. If you are in a 28% tax bracket, you will owe taxes on this investment after the first year equal to ________.

   A. $0
   B. $4.27
   C. $9.38
   D. $33.51
7. You buy a bond with a $1,000 par value today for a price of $875. The bond has 6 years to maturity and makes annual coupon payments of $75 per year. You hold the bond to maturity, but you do not reinvest any of your coupons. What was your effective EAR over the holding period?

A. 10.4%
B. 9.57%
C. 7.45%
D. 8.78%

8. If the quote for a Treasury bond is listed in the newspaper as 99:08 bid, 99:11 ask, the actual price at which you can sell this bond given a $10,000 par value is _____________.

A. $9,828.12
B. $9,925
C. $9,934.37
D. $9,955.43