

- a. What is the yield to maturity at a current market price of (1) \$829 or (2) \$1,104?
 b. Would you pay \$829 for one of these bonds if you thought that the appropriate rate of interest was 12%—that is, if $r_d = 12\%$? Explain your answer.

(5-11)

Yield to Call and
Realized Rates of
Return

Seven years ago, Goodwynn & Wolf Incorporated sold a 20-year bond issue with a 14% annual coupon rate and a 9% call premium. Today, G&W called the bonds. The bonds originally were sold at their face value of \$1,000. Compute the realized rate of return for investors who purchased the bonds when they were issued and who surrender them today in exchange for the call price.

(5-12)

Bond Yields and Rates
of Return

A 10-year, 12% semiannual coupon bond with a par value of \$1,000 may be called in 4 years at a call price of \$1,060. The bond sells for \$1,100. (Assume that the bond has just been issued.)

- a. What is the bond's yield to maturity?
 b. What is the bond's current yield?
 c. What is the bond's capital gain or loss yield?
 d. What is the bond's yield to call?

(5-13)

Yield to Maturity and
Current Yield

You just purchased a bond that matures in 5 years. The bond has a face value of \$1,000 and has an 8% annual coupon. The bond has a current yield of 8.21%. What is the bond's yield to maturity?

(5-14)

Current Yield with
Semiannual Payments

A bond that matures in 7 years sells for \$1,020. The bond has a face value of \$1,000 and a yield to maturity of 10.5883%. The bond pays coupons semiannually. What is the bond's current yield?

(5-15)

Yield to Call, Yield to
Maturity, and Market
Rates

Absalom Motors's 14% coupon rate, semiannual payment, \$1,000 par value bonds that mature in 30 years are callable 5 years from now at a price of \$1,050. The bonds sell at a price of \$1,353.54, and the yield curve is flat. Assuming that interest rates in the economy are expected to remain at their current level, what is the best estimate of the nominal interest rate on new bonds?

(5-16)

Interest Rate Sensitivity

A bond trader purchased each of the following bonds at a yield to maturity of 8%. Immediately after she purchased the bonds, interest rates fell to 7%. What is the percentage change in the price of each bond after the decline in interest rates? Fill in the following table:

	Price @ 8%	Price @ 7%	Percentage Change
10-year, 10% annual coupon	_____	_____	_____
10-year zero	_____	_____	_____
5-year zero	_____	_____	_____
30-year zero	_____	_____	_____
\$100 perpetuity	_____	_____	_____

(5-17)

Bond Value as Maturity
Approaches

An investor has two bonds in his portfolio. Each bond matures in 4 years, has a face value of \$1,000, and has a yield to maturity equal to 9.6%. One bond, Bond C, pays an annual coupon of 10%; the other bond, Bond Z, is a zero coupon bond. Assuming that the yield to maturity of each bond remains at 9.6% over the next 4 years, what will be the price of each of the bonds at the following time periods? Fill in the following table: