

1. A year ago, you purchased 200 shares of Holland Enterprises, Inc. stock at a price of \$15.54 per share. The stock pays an annual dividend of \$.20 per share. Today, you sold all of your shares for \$17.70 per share. What is your total dollar return on this investment?

- a. \$140
- b. \$160
- c. \$216
- d. \$432
- e. \$472

2. A stock has a required return of 10 percent and pays a dividend growing at 4 percent. The firm just paid a dividend of \$1.80. If the market price is \$30.40, how is the stock under or over-valued?

- a. \$0.40 undervalued
- b. \$0.40 overvalued
- c. \$0.80 overvalued
- d. \$0.80 undervalued
- e. It is correctly valued

3. Individuals who continually monitor the financial markets seeking mispriced securities:

- a. earn excess profits over the long-term.
- b. make the markets increasingly more efficient.
- c. are never able to find a security that is temporarily mispriced.
- d. are overwhelmingly successful provided they trade within five minutes of their discovery.
- e. are always quite successful using only historical price information as their basis of evaluation.

4. What is the beta of a portfolio comprised of the following securities?

Stock	Amount Invested	Beta
A	\$3,500	1.12
B	\$1,000	1.81
C	\$9,500	0.84

- a. 0.98
- b. 1.04
- c. 1.09
- d. 1.15
- e. 1.32

5. The common stock of Abbott International has a required return of 15.6 percent. The return on the market is 12.7 percent and the risk-free rate of return is 3.9 percent. What is the beta of this stock?

- a. .92
- b. 1.23
- c. 1.33
- d. 1.67
- e. 1.77

6. Which one of the following stocks is correctly priced if the risk-free rate of return is 3.2 percent and the market risk premium is 8.4 percent?

<u>Stock</u>	<u>Beta</u>	<u>Expected Return</u>
A	.72	8.62%
B	1.46	15.79%
C	1.38	14.79%
D	1.01	12.02%
E	.95	11.40%

- a. A
- b. B
- c. C
- d. D
- e. E

7. Westover Ridge offers a 9 percent coupon bond with semiannual payments and a yield to maturity of 12 percent. The bonds mature in 16 years. What is the market price per bond if the face value is \$1,000?

- a. \$789
- b. \$863
- c. \$916
- d. \$1,453
- e. \$1,322

8. The common stock of Bob's Auto sells for \$38.25 a share. The stock is expected to pay \$1.90 per share when the annual dividend is distributed. Bob's Auto has been increasing their dividends by 2.5% annually and expects to continue doing so. What return would you expect from buying this stock?

- a. 4.41 percent
- b. 4.97 percent
- c. 7.38 percent
- d. 7.47 percent
- e. 7.59 percent

Sample problems from chapters 7, 8, 12 and 13 (8<sup>th</sup> ed.)

7.7 Calculate the YTM

given:

12 year bond issued two years ago

Coupon rate = 9.2%

Semi-annual payments

The bond is selling for 104% of par value

### 7.16 Interest rate risk

Two semi-annual coupon bonds with 8% coupons are issued at par value of \$1,000. Bond S has 2 years until maturity. Bond D has 15 years until maturity.

If interest rates suddenly rise by two percentage points, what is the percentage change in each BV?

Alternatively, if rates suddenly fall by two percentage points, what is the percentage change in each BV?

### 7.22 Find bond maturity

Given:

9% coupon

Annual payments

YTM = 6%

Current yield = 6.9%

### 12.13 Calculate the total real return

A 7% annual coupon bond was purchased for \$920 one year ago. The current YTM is 8%. The bond is sold today with six years remaining until maturity. Inflation was 4.2% over the past year.

### 13.26 Consider the following information, assuming $E(R)=R$ .

State of economy	probability	stock I returns	stock II returns
Recession	.25	.09	-.30
Normal	.5	.42	.12
Boom	.25	.26	.44

~~Market return~~—market risk premium = 8%      Risk-free rate = 4%

Which stock has more systematic risk?

Which stock has more unsystematic risk?

13.27 What is expected market return? What is the risk-free rate?

Assume that these securities are correctly priced:

Stock P:	beta = 1.4	$E(R) = 0.15$
Stock R:	beta = 0.9	$E(R) = 0.115$

8.4 Calculate the stock price

Next dividend paid = \$3.40  
Dividend growth rate = 4.5%  
The required return is 11%

8.9 Calculate the stock price

Last dividend paid = \$3.50  
Dividend growth rate = 5%  
The required return is 16% for the first three years; 14% for the next three years; and 11% thereafter

8.12 Calculate the stock price

A company is expected to pay dividends of \$8, \$7, \$5 and \$2 over the next four years.  
After the fourth year the company plans to increase dividends at a constant rate of 5%.  
The required return is 11%.