**Principles of Finance**

**Home Work: 2**

**Chapters 5, 6 and 7**

Following are 33 questions, each worth 3 points. On the multiple choice, indicate the answer you think most correct. In the problem sets, show your work to receive full credit. In the event your work is correct but the answer is incorrect, you will receive partial credit.

Chapter 5: Interest rates

1) If you take out a loan from a bank, you will be charged \_\_\_\_\_\_\_\_.

A) for principal but not interest

B) for interest but not principal

C) for both principal and interest

D) for interest only

2) A company selling a bond is \_\_\_\_\_\_\_\_ money.

A) borrowing

B) lending

C) taking

D) reinvesting

3) Suppose you deposit money in a certificate of deposit (CD) at a bank. Which of the following statements is TRUE?

A) The bank is borrowing money from you without a promise to repay that money with interest.

B) The bank is lending money to you with a promise to repay that money with interest.

C) The bank is technically renting money from you with a promise to repay that money with interest.

D) The bank is lending money to you, but not borrowing money from you.

4) Which of the following statements is FALSE?

A) The APR can be referred to as a promised annual percentage rate.

B) Although an APR is quoted on an annual basis, interest can be paid quarterly.

C) The period in which interest is applied or the frequency of times interest is added to an account each year is called the compounding period or compounding periods per year.

D) Although an APR is quoted on an annual basis, interest can be paid monthly,

5) To determine the interest paid each compounding period, we take the advertised annual percentage rate and simply divide it by the \_\_\_\_\_\_\_\_ to get the appropriate periodic interest rate.

A) number of compounding periods for the length of an investment

B) number of discounting periods for the length of an investment

C) number of compounding periods per year

D) number of compounding periods per month

6) To determine the interest paid each compounding period, we take the advertised annual percentage rate and simply divide it by the \_\_\_\_\_\_\_\_ to get the appropriate periodic interest rate.

A) number of compounding periods for the length of an investment

B) number of discounting periods for the length of an investment

C) number of compounding periods per year

D) number of compounding periods per month

7) Suppose you invest $1,000 today, compounded quarterly, with the annual interest rate of 5.00%. What is your investment worth in one year?

A) $1,025.00

B) $1,500.95

C) $1,025.27

D) $1,050.95

8) Suppose you invest $2,000 today, compounded monthly, with an annual interest rate of 7.50%. What is your investment worth in one year?

A) $2,150.00

B) $2,152.81

C) $2,155.27

D) $2,154.77

7) Suppose you invest $1,000 today, compounded quarterly, with the annual interest rate of 5.00%. What is your investment worth in one year?

A) $1,025.00

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D) $1,050.95

8) Suppose you invest $2,000 today, compounded monthly, with an annual interest rate of 7.50%. What is your investment worth in one year?

A) $2,150.00

B) $2,152.81

C) $2,155.27

D) $2,154.77

9) Suppose you invest $3,500 today, compounded semiannually, with an annual interest rate of 8.50%. What amount of interest will you earn in one year?

A) $303.82

B) $307.12

C) $309.13

D) $313.82

10) You invest $15,000 today, compounded monthly, with an annual interest rate of 8.25%. What amount of interest will you earn in one year?

A) $1,285.38

B) $1,295.38

C) $1,298.98

D) $1,723.23

11) What is the EAR if the APR is 5% and compounding is quarterly?

A) Slightly above 5.09%

B) Slightly below 5.09%

C) Under 5.00%

D) Over 5.25%

**Chapter 6: Bonds**

1) A bond may be issued by \_\_\_\_\_\_\_\_.

A) companies

B) state governments

C) the federal government

D) All of the above

2) A bond is a \_\_\_\_\_\_\_\_ instrument by which a borrower of funds agrees to pay back the funds with interest on specific dates in the future.

A) long-term equity

B) long-term debt

C) medium-term equity

D) short-term equity

3) Bonds are sometimes called \_\_\_\_\_\_\_\_ securities because they pay set amounts on specific future dates.

A) variable-income

B) fixed-income

C) bully

D) real

4) The \_\_\_\_\_\_\_\_ is the annual coupon payment divided by the current price of the bond, and is not always an accurate indicator.

A) current yield

B) yield to maturity

C) bond discount rate

D) coupon rate

5) The \_\_\_\_\_\_\_\_ is the yield an individual would receive if the individual purchased the bond today and held the bond to the end of its life.

A) current yield

B) yield to maturity

C) prime rate

D) coupon rate

6) The four steps to determining the price of a bond are:

A) determine the amount and timing of the present cash flows, determine the appropriate discount rate, find the present value of the lump-sum principal and the annuity stream of coupons, and add the PVs of the principal and coupons.

B) determine the amount and timing of the future cash flows, determine the appropriate discount rate, find the future value of the lump-sum principal and the annuity stream of coupons, and add the FVs of the principal and coupons.

C) determine the amount and timing of the future cash flows, determine the appropriate discount rate, find the present value of the lump-sum principal and the annuity stream of coupons, and multiply the PVs of the principal and coupons.

D) determine the amount and timing of the future cash flows, determine the appropriate discount rate, find the present value of the lump-sum principal and the annuity stream of coupons, and add the PVs of the principal and coupons.

7) Blackburn Inc. has issued 30-year $1,000 face value, 10% annual coupon bonds, with a yield to maturity of 9.0%. The annual interest payment for the bond is \_\_\_\_\_\_\_\_.

A) $100

B) $90

C) $50

D) $45

8) The \_\_\_\_\_\_\_\_ is the face value of the bond.

A) coupon rate

B) maturity date

C) par value

D) coupon rate

9) The \_\_\_\_\_\_\_\_ is the regular interest payment of the bond.

A) dividend

B) par

C) coupon rate

D) coupon

10) The \_\_\_\_\_\_\_\_ is the return the bondholder receives on the bond if held to maturity.

A) coupon

B) coupon rate

C) yield to maturity

D) par rate

11) The \_\_\_\_\_\_\_\_ is the expiration date of the bond.

A) future value

B) yield to maturity

C) maturity date

D) coupon

Chapter 7: Stocks

1) Stocks are different from bonds because \_\_\_\_\_\_\_\_.

A) stocks, unlike bonds, are major sources of funds

B) stocks, unlike bonds, represent residual ownership

C) stocks, unlike bonds, give owners legal claims to payments

D) bonds, unlike stocks, represent voting ownership

2) Stocks differ from bonds because:

A) bond cash flows are known while stock cash flows are uncertain.

B) firms pay bond cash flows prior to paying taxes while stock cash flows are after tax.

C) the ending par value of a bond is known at purchase while the ending value of a share of stock is unknown at purchase.

D) of all of the above.

3) Bonds are different from stocks because \_\_\_\_\_\_\_\_.

A) bonds promise fixed payments for the length of their maturity

B) bonds give payments only after other owners are paid

C) bonds do not have maturity dates

D) bonds promise growth in earnings

4) Which of the statements below is FALSE?

A) The profits for common stock owners come before payment to employees, suppliers, government, and creditors.

B) Shareholders elect the board of directors, which ultimately selects the management team that runs the day-to-day operations of the company.

C) Stock is a major financing source for public companies.

D) Common stock's ownership claim on the assets and cash flow of a company is often referred to as a residual claim.

5) Which of the statements below is FALSE?

A) For common stock, there is no maturity date and the promised cash flow is not stated on the asset, but is determined at a later date by the board of directors.

B) An equity claim is a claim to all the assets and cash flows of a company once debt claimants have been paid.

C) Like a bond, common stock entitles the owner to some of the cash flow of a company.

D) Bond ownership gives the right to participate in the management of the company.

6) Which of the statements below is TRUE?

A) The profits for common stock owners come after payment to the employees, suppliers, government, and creditors.

B) Shareholders elect the board of directors, which ultimately selects the bondholder team that runs the day-to-day operations of the company.

C) Stock is a minor financing source for public companies.

D) Stockholders are paid before debt holders (bond holders) if a company fails.

7) Which of the statements below is FALSE?

A) Common stock usually carries the right to participate in the management of the firm through the right to vote for the members of the Board of Directors and for changes to the charter and bylaws of the company.

B) Shareholders with super voting right shares have multiple votes per share — a fact that increases their influence and control over the company.

C) Some firms issue several classes of common stock, and these classes may have unequal voting rights.

D) The standard of one vote for each share cannot be altered.

8) The constant growth dividend model requires that \_\_\_\_\_\_\_\_.

A) the return rate r is greater than the growth rate g of the dividend stream

B) the return rate g is greater than the growth rate r of the dividend stream

C) the return rate r is lesser than the growth rate g of the dividend stream

D) we set g = 0 if the return rate r is greater than the growth rate g of the dividend stream

 Problems Sets

9. The Davidoff Corporation recently paid a dividend of $4 per share. Dividends have been growing at an annual rate of 8 percent and this growth rate is expected to continue in the foreseeable future. If the required rate of return for Davidoff stock is 14 percent, what is the value of its stock?

10. The Krehbiel Corporation’s risk adjusted cost of capital (required rate of return) is 10%. Krehbiel’s current cash dividens per share are $2.50 and have been growing at 3 percent per year. However, a technological breakthrough is expected to increase Krehbiel’s growth rate to 6 percent for the foreseeable future. Krehbiel’s common stock has been selling at a $35 to $38 range.

What is Krehbiel’s current stock price (before the breakthrough) and what do expect Krehbiel’s new stock price to be after the new technological breakthrough is announced publicly?

11. The Krehbiel Corporation’s cash dividend payout ratio is 60%, its risk adjusted cost of capital is 10 percent, and the current earnings per share is $4.04, and have been growing at 3 percent per year. A technological breakthrough is expected to increase Krehbiel’s growth rate to 6% for the foreseeable future. Krehbiel’s common stock has been selling at 8 to 9 times its earnings. What do you expect the price-earnings will be after the new technological breakthrough is publicly announced? (first solve for Krehbiel’s current P/E, then its new P/E).