Applying the Principles (Stocks)

1. What are dividends?
   • DIVIDENDS ARE PAYMENTS MADE TO STOCKHOLDERS BASED ON A COMPANY’S PROFITS.

2. If you own 100 shares of company A and company A pays an annual dividend of $1.32 per share, how much would you receive in dividend payments for the year?
   • YOU WOULD RECEIVE $132 (100 x $1.32 = $132) FOR THE YEAR.
3. The dividend for a stock is listed as 1.43. What does this mean?

• IT MEANS THAT THE LAST ANNUAL DIVIDEND PER SHARE OF THE STOCK WAS $1.43. IT FOLLOWS THEN, THAT A PERSON WHO OWNS 100 SHares OF STOCK WOULD HAVE RECEIVED $143 IN DIVIDENDS.

4. If the closing price of a stock is $53.48 and its dividend is $1.22, what is the yield? (Yield should be written as a percentage rounded to the second decimal place)

• THE YIELD IS THE DIVIDEND PER SHARE DIVIDED BY THE CLOSING PRICE PER SHARE: $1.22 / $53.48 = 2.28%.
5. Which stock has the highest yield?
   • PEPSICO – 3.30%

6. If you bought 100 shares of Sirius Satellite Radio at the highest price for the year and sold it at the lowest price for the year, what was your capital loss? Explain.
   • THE HIGHEST PRICE FOR THE YEAR WAS $3.89 AND THE LOWEST PRICE FOR THE YEAR WAS $0.08.
   • THE CAPITAL LOSS WAS $381.
     • $0.08 - $3.89 = -$3.81
     • $-3.81 \times 100 = -$381
7. If you bought 100 shares of Best Buy at the lowest price for the year and sold it at the closing price on February 6, what was your capital gain? Explain.

- THE LOWEST PRICE FOR THE YEAR WAS $16.42 AND THE CLOSING PRICE WAS $29.84. THE CAPITAL GAIN WAS $1,342.
  - $29.84 - $16.42 = $13.42
  - $13.42 x 100 = $1,342
8. If you bought 100 shares of Google at the lowest price for the year and sold it at the highest price for the year, what was your capital gain/loss? Explain.

  - $602.45 - $247.30 = $355.15
  - $355.15 \times 100 = $35,515
9. How many shares of Microsoft traded on the day this table represents?

- **86,717,800 SHARES**

10. What was the closing price of Pepsico on the day before this table represents?

- **PEPSICO CLOSED $1.18 HIGHER ON FRIDAY THAN IT DID THE DAY BEFORE.** SO THE CLOSING PRICE OF PEPSICO ON THURSDAY WAS $53.53 - $1.18 = $52.35.
Applying the Principles (Stocks)

11. If you have owned 100 shares of Kellogg for a year, how much money did you receive in dividend payments last year?

$136 ($1.36 PER SHARE x 100 SHARES)

12. If you owned 200 shares of Wal-Mart, how much would you expect to receive in dividend payments this year?

$190 ($0.95 PER SHARE x 200 SHARES)
SECTION 2 : Bonds

What Is a Bond?

– A bond is an IOU, or a promise to pay, issued by companies, governments, or government agencies to borrow money.

The Components of a Bond

– The face value, or par value, of a bond is the dollar amount specified on a bond. It is the total amount the bond issuer will repay to the bond buyer.

– The maturity date is the day when the bond issuer must pay the bond buyer the face value of the bond.

– The coupon rate is the percentage of the face value that the bondholder receives each year until the bond matures.
Bond Ratings

- The more likely the bond issuer will pay the face value of the bond at maturity and will meet all scheduled coupon payments, the higher the bond’s rating.

- Two of the best-known rating agencies are Standard & Poor’s and Moody’s.

- A bond rating of AAA from Standard & Poor’s or a rating of Aaa from Moody’s is the highest rating possible.

  - Bonds rated in the B to D category are lower-quality bonds that may be in jeopardy of being in default (the issuer cannot pay off the bond)
Bond Prices and Yields

– The price that a person pays for a bond depends on market conditions.

– The **yield** on a bond is equal to the annual coupon payment divided by the price paid for the bond.

  • For example, if you pay $985 for a bond with a face value of $1,000, and the annual coupon payment is $40, the bond yield is 4.06 percent.

  • The yield on bonds can also be referred to as the “interest rate”

\[
\text{Bond yield} = \frac{\text{Annual coupon payment}}{\text{Price paid for the bond}}
\]

**Example:** Assuming an annual coupon payment of $40 and a $1,000 bond purchased for $985:

\[
\text{Bond yield} = \frac{$40}{$985} = 4.06\%
\]
Types of Bonds

- A *corporate bond* is issued by a private corporation. Corporate bonds typically have $10,000 face values. Corporate bonds may sell for a price above or below the face value depending on current supply and demand conditions for the bond. The interest that corporate bonds pay is fully taxable.

- *Municipal bonds* are issued by state and local governments. Municipal bond interest is not subject to federal taxes.

- *Treasury bills (T-bills), notes, and bonds* are issued by the federal government. The only difference between them is their time to maturity. Treasury bills mature in 13, 26, or 52 weeks. Treasury notes mature in 2 to 10 years, and Treasury bonds mature in 10 to 30 years. They are considered safe investments because the government is unlikely to default.

- A new issue for the federal government is *inflation-indexed bonds*. The government will increase the coupon payment to match inflation.
Risk and Return

– Stocks and bonds often come with different risk and return factors.
– Treasury bonds often pay relatively low returns because they carry the least risk.

What Would Life Be Like Without Financial Markets?

– In a world of financial markets, people with good ideas can be matched with people who have saved money that they would like to invest. The result is that society produces more goods and services than it would otherwise.
Applying the Principles (Bonds)

Elena pays $10,000 for a bond with a face value of $10,000 and a coupon rate of 6 percent. Scott buys a bond for $9,500. The face value of the bond is $10,000 and the coupon rate is 6 percent.

Elena will receive a coupon payment of $600 (10,000 x .06) each year.

When the bond matures, Elena will receive $10,000 (face value) from the issuer of the bond.

The yield that Elena will receive on the bond is 6.00% (coupon payment of $600 / the price she paid of $10,000 then move the decimal two places to the right to make a percentage).

If the maturity date is five years from the day Elena buys the bond, she will earn a total of $3,000 (coupon payment x 5 years) on her investment.
Elena pays $10,000 for a bond with a face value of $10,000 and a coupon rate of 6 percent. Scott buys a bond for $9,500. The face value of the bond is $10,000 and the coupon rate is 6 percent.

Scott will receive a coupon payment of $600 (10,000 x .06) each year.

The yield that Scott will receive on the bond is 6.31% ($600 / $9,500).

When the bond matures, Scott will receive $10,000 (face value) from the issuer of the bond.

If the maturity date is five years from the day Scott buys the bond, he will earn a total of $3,500 (coupon payment x 5 years + $500 because he paid less than the face value) on his investment.
Elena pays $10,000 for a bond with a face value of $10,000 and a coupon rate of 6 percent. Scott buys a bond for $9,500. The face value of the bond is $10,000 and the coupon rate is 6 percent.

Both Elena and Scott bought bonds with face values of $10,000, coupon rates of 6 percent, and maturity dates five years from the date of purchase. Scott will earn $500 MORE on his investment than Elena will earn on her investment because he paid $500 LESS than the face value of the bond.
Applying the Principles (Bonds)

What is the main difference among corporate bonds, municipal bonds, and treasury bills?

The main difference is that corporate bonds are issued by private corporations, municipal bonds are issued by states and local government, and treasury bills are issued by the federal government.
Applying the Principles (Bonds)

Which type of investment, stocks or bonds, is riskier? Why?

An investment in stocks is riskier than an investment in bonds because stocks can fall in value and bonds (especially government bonds) will likely be paid off.
Applying the Principles (Bonds)

What is the relationship between the returns and the risks of various investments?

**Higher returns come with higher risks and lower returns come with lower risks.**

If a person wants high returns from investments and is willing to take high risks, he or she would likely invest mainly in **stocks**.

If a person wants low risk investing, she or he would likely invest mainly in **bonds**.
Applying the Principles (Bonds)

If the yield on a 10-year Treasury bond is 4.60 percent and the yield on a 10-year corporate bond is 5.26 percent, which bond do you think would involve more risk? Why?

THE CORPORATE BOND WOULD LIKELY INVOLVE MORE RISK BECAUSE THE RETURN IS HIGHER ON THE CORPORATE BOND THAN IT IS ON THE TREASURY BOND.