Basic Finance An Introduction to Financial Institutions Investments and Management 11th edition Mayo Solutions Manual

SKU: 9781285425795-SOLUTIONS

Basic Finance An Introduction to Financial Institutions Investments and Management 11th edition Mayo Solutions Manual

ANSWERS TO THE PROBLEMS IN THE CHAPTERS

This part of the *Instructor's Manual* provides the answers to the problems in the chapters. Similar problems, which may be used for additional assignments or as test questions, are provided in the test bank.

Basic Finance An Introduction to Financial Institutions Investments and Management 11th edition Mayo Solutions Manual

Chapter 4
SECURITIES MARKETS

Teaching Guides for Problems in the Text

1. If the stock rises from $50 to $60, the gain is $1,000 on the purchase of 100 shares. The return on the individual's investment depends on the amount of margin.

a. If the margin requirement is 25 percent, the amount the investor must put up is $1,250 (0.25 x $5,000), so the return is $1,000/$1,250 = 80%.

b. If the margin requirement is 50 percent, the return is 40 percent ($1,000/$2,500).

c. If the margin requirement is 75 percent, the required margin is $3,750 and the return is 26.7 percent ($1,000/$3,750).

Be certain to point out the $1,000 capital gain is the same in all three cases but that the percentage return differs because the amount put up by the investor differs in each case.

2. If the stock declines from $50 to $40, the loss is $1,000 on the purchase of 100 shares. The return on the individual's investment once again depends on the amount of margin.

a. If the margin requirement is 25 percent, the amount the investor must put up is $1,250, and the return is ($1,000)/$1,250 = -80%.

b. If the margin requirement is 50 percent, the return is -40 percent [($1,000)/$2,500].

c. If the margin requirement is 75 percent, the percentage loss is -26.73 percent [($1,000)/$3,750].

The generalization from problems (1) and (2) is that the percentage return is affected by the amount of margin and that the lower the margin requirement, the greater is the potential swing in the return on the investor's funds.

Basic Finance An Introduction to Financial Institutions Investments and Management 11th edition Mayo Solutions Manual

3. a. $41.50 - $45 = ($3.50)
   b. $45 - $41.50 = $3.50
   c. $54 - $45 = $9
   d. $45 - $54 = ($9)

In each case, the sale price is subtracted from the purchase price to determine the profit or loss. Be certain to point out that the sale may occur before the purchase, which is the case in each of the short sales.

4. Unfortunately, investor Graham did not cover the short sale after the stock declined but waited until the price of the stock rose and thus sustained a loss of $7 per share for a total loss of $3,500.

5. Cost of the shares: 200 x $25.50 = $5,100
   Margin: $5,100 x 0.4 = $2,040
   Funds borrowed: $5,100 - $2,040 = $3,060
   Interest paid: $3,060 x 0.09 = $275.40

   Profit on the stock: $6,800 - $5,100 = $1,700

   Return on the investment: ($1,700 - $275.40)/$2,040 = 69.8%

6. 100 shares of DEM at $35 $3,500
   200 shares of GOP at $40 $8,000
   Total cost of securities $11,500

   a. Required margin: 0.55 x $11,500 = $6,325
      Amount borrowed: $11,500 - $6,325 = $5,175

   b. Interest expense: 0.1 x $5,175 = $517.50

   c. Loss on DEM stock: $2,900 - $3,500 = ($600)
      Loss on GOP stock: $8,000 - $6,400 = ($1,600)
      Net loss: ($2,200)

   d. Percentage loss including interest:
      -($2,200 + $517.50)/$6,325 = -43%

Basic Finance An Introduction to Financial Institutions Investments and Management 11th edition Mayo Solutions Manual

7. Since the stock is sold short, the price increase causes a loss of $2 ($5 - 7) per share. Since Mr. O'Grady put up 100 percent margin, the percentage loss is

-$2/$5 = -40.0%

If the price of the stock declined to $0, the percentage return is 100 percent.

Be certain to point out that the largest gain to the short seller occurs if the price of the stock declines to zero, while in a long position there is no limit to the possible price increase. Of course, in most cases the price of the stock does not decline to zero, nor does it rise indefinitely.

8. The initial investment is $18 x 400 x 0.50 = $3,600. To realize a 25 percent return, the value of the position in the stock must rise by $900 (0.25 x $3,600). The stock must increase by $2.25 a share ($900/400 shares = $2.25).

Basic Finance An Introduction to Financial Institutions Investments and Management 11th edition Mayo Solutions Manual