Problem Set #3 <u>Solutions</u>

1. You sold short 300 shares of common stock at $30 per share. The initial margin is 50%. You must put up __________.
A. $4,500
B. $6,000
C. $9,000
D. $10,000

You must put up 300($30)(50%) = $4,500

2. You short-sell 200 shares of Tuckerton Trading Co., now selling for $50 per share. What is your maximum possible loss?
A. $50
B. $150
C. $10,000
D. unlimited

3. You short-sell 200 shares of Rock Creek Fly Fishing Co., now selling for $50 per share. If you wish to limit your loss to $2,500, you should place a stop-buy order at _____.
A. $37.50
B. $62.50
C. $56.25
D. $59.75

50 + (2500/200) = $62.50

4. You purchased 250 shares of common stock on margin for $25 per share. The initial margin is 65% and the stock pays no dividend. Your rate of return would be ___________ if you sell the stock at $32 per share. Ignore interest on margin.
A. 35%
B. 39%
C. 43%
D. 28%

Initial investment = 250($25)(0.65) = $4,062.50

Purchase price = 250($25) = $$6,250

Sale price = 250($32) = $8000

$$\text{Rate of Return} = \frac{\$8{,}000 - \$6{,}250}{\$4{,}062.50} = 0.43077$$

5. An investor puts up $5,000 but borrows an equal amount of money from their broker to double the amount invested to $10,000. The broker charges 7% on the loan. The stock was originally purchased at $25 per share and in one year the investor sells the stock for $28. The investor's rate of return was _____.

A. 17%

B. 12%

C. 14%

D. 19%

# of shares purchased = $10,000/$25 = 400

Initial investment = $5,000

Sale price = $28(400) = $11,200

Interest on the loan = $5000(7%) = $350

$$\text{Rate of Return} = \frac{\$11{,}200 - \$10{,}000 - \$350}{\$5{,}000} = 0.17$$