1. Dee Trader opens a brokerage account, and purchases 300 shares of Internet Dreams at $40 per share. She borrow $4,000 from the broker to help pay for the purchase. The interest rate on the loan is 8%.

1. What is the margin in Dee’s account when she first purchases the stock?
2. If the share price falls to $30 per share by the end of the year, what is remaining margin in her account? If the maintenance margin requirement is 30%, will she receive a margin call?
3. What is the rate of return on her investment?

2. Consider the following limit order book of a specialist. The last trade in the stock occurred at a price of $50.

|  |  |  |  |
| --- | --- | --- | --- |
| **Limit Buy Order** | | **Limit Sell order** | |
| ***Price*** | ***shares*** | ***Price*** | ***shares*** |
| $49.75 | 500 | $50.25 | 100 |
| 49.50 | 800 | 51.50 | 100 |
| 49.25 | 500 | 54.75 | 300 |
| 49.00 | 200 | 58.25 | 100 |
| 48.50 | 600 |  |  |

1. If a market buy order for 100 shares comes in, at what price will be filled?
2. At what price would the next market buy order be filled?
3. If you were the specialist, would you want to increase or decrease your inventory of this stock?

3. You are bullish on Telecom stock. The current market price is $50 per share, and you have $ 5,000 of your own to invest. You borrow an additional $ 5,000 from your broker at an interest rate of 8% per year and invest $ 10,000 in the stock.

a. What will be your rate of return if the price of Telecom stock goes up by 10% during the next year? (ignore the expected dividend.)

b. How far does price of Telecom stock have to fall for you to get a margin call if the maintenance margin is 30% ? Assume the price fall happens immediately.

4. Here is some price information on Fincorp stock. Suppose first that Fincorp trade in a dealer market.

|  |  |
| --- | --- |
| **Bid** | **Asked** |
| 55.25 | 55.50 |

1. Suppose you have submitted an order to your broker to buy at market.   
   At what price will your trade be executed?
2. Suppose you have submitted an order to your broker to sell at market. At what price will your trade be executed?
3. Suppose you have submitted a limit over to sell 55.62. What will happen?
4. Suppose you have submitted a limit over to buy 55.37. What will happen?