## Chapter 10 - Secondary Markets - Stocks

## Problems

10-7. Suppose that ZX Inc. is currently selling at $\$ 50$ per share. You buy 200 shares, using $\$ 5,000$ of your own money and borrowing the remainder of the purchase price from your broker. The rate on the margin loan is $5 \%$.
a. What is the percentage increase in the net worth of your brokerage account if the price of ZX Inc. changes to (i) $\$ 54$, (ii) $\$ 50$, (iii) $\$ 46$ ?
b. If the maintenance margin is $25 \%$, how low can ZX Inc.'s price fall before you get a margin call?
c. How would your answer to (b) change if you had financed the initial purchase with only $\$ 2,000$ of your own money?
d. What is the rate of return on your margined position (assuming again that you invest $\$ 5,000$ of your own money) if ZX Inc. is selling after one year at (i) $\$ 54$, (ii) $\$ 50$, (iii) $\$ 46$ ?
e. Continue to assume that a year has passed. How low can ZX Inc.'s price fall before you get a margin call?
f. Suppose that you sell short 400 shares of ZX Inc., currently selling for $\$ 50$ per share, what will your rate of return be after one year if ZX Inc. stock is selling at (i) $\$ 54$, (ii) $\$ 50$, (iii) $\$ 46$ ? Assume that ZX Inc. pays no dividends.

