## Stock valuation

1. How much should you pay for the preferred stock of the Dakota Doorknob Company if it has $\$ 100$ par value, pays $\$ 8.50$ a share in annual dividends, and your required rate of return is 10 percent?
2. NDV Corp.'s common stock is expected to pay a $\$ 2$ dividend, which will grow at a compound rate of 4 percent indefinitely.
a. If the market requires a 14 percent return, what should be the current market price of the stock? b. If the current market price of the stock is \$40, what rate of return is the market requiring?
3. The stock of Macbeth Cleaning Corp. is currently selling for $\$ 25$ a share. The company is expected to pay a dividend of $\$ 0.75$ at the end of this year. If you bought Macbeth stock today and sold it for $\$ 29$ after receiving the dividend, what rate of return would you earn?
4. Sooty Iron Works, Inc. has had declining sales and increasing expenses over the last decade and expects this trend to continue. As a result, the company predicts that earnings and dividends will decline indefinitely at a rate of 4 percent per year. Sooty's last dividend (D0) was $\$ 2$ per share. If the market required rate of return is 12 percent, estimate the value of Sooty's common stock.
5. You are interested in purchasing the common stock of Azure Corporation. The firm paid recently a dividend of $\$ 3$ per share. It expects earnings to grow at a rate of 7\% for the foreseeable future. Currently, similar risk stocks have required returns of $10 \%$.

Required: A) Given the data above calculate the present value of this security B) One year later your stockbroker in the bank offers to sell you additional shares of Azure for $\$ 73$. The most recent dividend paid was $\$ 3$. 21 and that the expected growth in earnings is still 7\%. To determine the required rate of return, you decided to use the capital asset pricing model (CAPM). The risk free rate is currently $5.25 \%$ and the market return is 11 . $55 \%$ and this stock's beta is 1.07 . Determine the firm's required return C) Determine the new value of the stock
D) Would you buy additional shares from the broker at $\$ 73$ ? Why, why not?
E) Would you sell your old shares at \$73? Why, why not?

