Ch 18:

18. **Dividends and Firm Value** The net income of Novis Corporation is $32,000. The company has 10,000 outstanding shares and a 100 percent payout policy. The expected value of the firm one year from now is $1,545,600. The appropriate discount rate for Novis is 12 percent, and the dividend tax rate is zero.

**a.** What is the current value of the firm assuming the current dividend has not yet been paid?

**b.** What is the ex-dividend price of Novis's stock if the board follows its current policy?

Ch 19:

**7.Calculating Flotation Costs** The Green Hills Co. has just gone public. Under a firm commitment agreement, Green Hills received $19.75 for each of the 5 million shares sold. The initial offering price was $21 per share, and the stock rose to $26 per share in the first few minutes of trading. Green Hills paid $800,000 in direct legal and other costs and $250,000 in indirect costs. What was the flotation cost as a percentage of funds raised?

Ch 20:

**3.** **Bond Refunding** KIC, Inc., plans to issue $5 million of bonds with a coupon rate of 12 percent and 30 years to maturity. The current market interest rates on these bonds is 11 percent. In one year, the interest rate on the bonds will be either 14 percent or 7 percent with equal probability. Assume investors are risk-neutral.

**a.** If the bonds are noncallable, what is the price of the bonds today?

**b.** If the bonds are callable one year from today at $1,450, will their price be greater than or less than the price you computed in (a)? Why?

**Ch 22:**

10. **Black-Scholes** What are the prices of a call option and a put option with the following characteristics?

Stock price = $38

Exercise price = $35

Risk-free rate = 6% per year, compounded continuously

Maturity = 3 months

Standard deviation = 54% per year

Ch 24:

**Convertible Bonds** Hannon Home Products, Inc., recently issued $430,000 worth of 8 percent convertible debentures. Each convertible bond has a face value of $1,000. Each convertible bond can be converted into 24.25 shares of common stock anytime before maturity. The stock price is $31.25, and the market value of each bond is $1,180.

**a.** What is the conversion ratio?

**b.** What is the conversion price?

**c.** What is the conversion premium?

**d.** What is the conversion value?

**e.** If the stock price increases by $2, what is the new conversion value?