a. What is the terminal, or horizon, value of operations? (*Hint:* Find the value of all free cash flows beyond Year 2 discounted back to Year 2.)
b. Calculate the value of Kendra's operations.

(7-18) Free Cash Flow Valuation

Dozier Corporation is a fast-growing supplier of office products. Analysts project the following free cash flows (FCFs) during the next 3 years, after which FCF is expected to grow at a constant 7% rate. Dozier's weighted average cost of capital is WACC = 13%.

	Year		
	1	2	3
Free cash flow ($ millions)	–$20	$30	$40

a. What is Dozier's terminal, or horizon, value? (*Hint:* Find the value of all free cash flows beyond Year 3 discounted back to Year 3.)
b. What is the current value of operations for Dozier?
c. Suppose Dozier has $10 million in marketable securities, $100 million in debt, and 10 million shares of stock. What is the intrinsic price per share?

Challenging Problems 19–21

(7-19) Constant Growth Stock Valuation

You are analyzing Jillian's Jewlery (JJ) stock for a possible purchase. JJ just paid a dividend of $1.50 *yesterday*. You expect the dividend to grow at the rate of 6% per year for the next 3 years; if you buy the stock, you plan to hold it for 3 years and then sell it.

a. What dividends do you expect for JJ stock over the next 3 years? In other words, calculate D_1, D_2, and D_3. Note that $D_0 = \$1.50$.
b. JJ's stock has a required return of 13% and so this is the rate you'll use to discount dividends. Find the present value of the dividend stream; that is, calculate the PV of D_1, D_2, and D_3, and then sum these PVs.
c. JJ stock should trade for $27.05 3 years from now (i.e., you expect $\hat{P}_3 = \$27.05$). Discounted at a 13% rate, what is the present value of this expected future stock price? In other words, calculate the PV of $27.05.
d. If you plan to buy the stock, hold it for 3 years, and then sell it for $27.05, what is the most you should pay for it?
e. Use the constant growth model to calculate the present value of this stock. Assume that g = 6% and is constant.
f. Is the value of this stock dependent on how long you plan to hold it? In other words, if your planned holding period were 2 years or 5 years rather than 3 years, would this affect the value of the stock today, $\hat{P}_0$? Explain your answer.

(7-20) Nonconstant Growth Stock Valuation

Reizenstein Technologies (RT) has just developed a solar panel capable of generating 200% more electricity than any solar panel currently on the market. As a result, RT is expected to experience a 15% annual growth rate for the next 5 years. By the end of 5 years, other firms will have developed comparable technology, and RT's growth rate will slow to 5% per year indefinitely. Stockholders require a return of 12% on RT's stock. The most recent annual dividend (D_0), which was paid yesterday, was $1.75 per share.

a. Calculate RT's expected dividends for t = 1, t = 2, t = 3, t = 4, and t = 5.
b. Calculate the estimated intrinsic value of the stock today, $\hat{P}_0$. Proceed by finding the present value of the dividends expected at t = 1, t = 2, t = 3, t = 4, and t = 5 plus the present value of the stock price that should exist at t = 5, $\hat{P}_5$. The $\hat{P}_5$ stock price can