1- Wilt's has earnings per share of $2.98 and dividends per share of $.35. What is the firm's sustainable rate of growth if its return on assets is 14.6% and its return on equity is 18.2%?
Sustainable growth rate = ROE × plowback ratio
Sustainable growth rate = .182 × [($2.98 - .35)/$2.98]
Sustainable growth rate = .1606, or 16.06%

2- Dani's just paid an annual dividend of $6 per share. What is the dividend expected to be in five years if the growth rate is 4.2%?
$DIV_3 = \$6 \times 1.042^5 = \$7.37$

3- What should be the price for a common stock paying $3.50 annually in dividends if the growth rate is zero and the discount rate is 8%?
Price = $3.50/.08 = $43.75

4- What price would you pay today for a stock if you require a rate of return of 13%, the dividend growth rate is 3.6%, and the firm recently paid an annual dividend of $2.50?
Price = ($2.50 × 1.036)/(.13 - .036) = $27.55

5- What constant-growth rate in dividends is expected for a stock valued at $32.40 if next year's dividend is forecast at $2.20 and the appropriate discount rate is 13.6%?
$32.40 = $2.20/(.136 - *g*)
g = .0681, or 6.81%

6- What rate of return is expected from a stock that sells for $30 per share, pays $1.54 annually in dividends, and is expected to sell for $32.80 per share in one year?
Expected return = ($32.80 + 1.54 - 30)/$30 = .1447, or 14.47%

7- A company with a return on equity of 15% and a plowback ratio of 60%, what would be expected constant-growth rate?
*g* = .15 × .60 = .09, or 9%

8- What is the plowback ratio for a firm that has earnings per share of $2.68 and pays out $1.75 per share in dividends?
Plowback ratio = ($2.68 - 1.75)/$2.68 = .3470, or 34.70%

9- A stock is expected to pay dividends of $1.20 per share in Year 1 and $1.35 per share in Year 2. After that, the dividend is expected to increase by 2.5% annually. What is the current value of the stock at a discount rate of 14.5%?
Price = $1.20/1.145 + $1.35/$1.145^2$ + [($1.35 × 1.025)/(.145 - .025)]/$1.145^2$ = $10.87

10- Jefferson's recently paid an annual dividend of $1.31 per share. The dividend is expected to decrease by 4% each year. How much should you pay for this stock today if your required return is 16%?
Price = [$1.31 × (1 - .04)]/[.16 - (-.04)] = $6.29

11- What is the expected constant-growth rate of dividends for a stock with a current price of $87, an expected dividend payment of $5.40 per share, and a required return of 16%?

$87 = $5.40/(.16 - *g*)

*g* = .0979, or 9.79%

12- What is the value of the expected dividend per share for a stock that has a required return of 16%, a price of $45, and a constant-growth rate of 12%?

$45 = $DIV_1$/(.16 - .12)

$Div_1$ = $1.80

13- What is the required return for a stock that has a constant-growth rate of 3.3%, a price of $25, an expected dividend of $2.10, and a P/E ratio of 14.4?

$25 = $2.10/(*r* - .033)

r = 11.70%

14- What should be the price of a stock that offers a $4.32 annual dividend with no prospects of growth, and has a required return of 12.5%?

P = $4.32/.125 = $34.56

15- What should be the current price of a share of stock if a $5 dividend was just paid, the stock has a required return of 20%, and a constant dividend growth rate of 6%?

Price = ($5 × 1.06)/(.20 - .06) = $37.86

16- What should be the current price of a stock if the expected dividend is $5, the stock has a required return of 20%, and a constant dividend growth rate of 6%?

Price = $5.00/(.20 - .06) = $35.71

17- What proportion of earnings is being plowed back into the firm if the sustainable growth rate is 8% and the firm's ROE is 20%?

8% = 20% × plowback

Plowback = 40%

18- What is the expected constant-growth rate of dividends for a stock currently priced at $50, that just paid a dividend of $4, and has a required return of 18%?

$50 = $4(1 + *g*)/(.18 - *g*)

*g* = 9.26%