Brief Exercises chapter 11

Brief exercise: 01

Alpha Co. sold 10,000 shares of common stock, which has a par value of $10, for $13 per share. The company's balance in retained earnings is $75,000. Prepare the stockholders' equity section of the company's balance sheet.

Solution:

Common stock (10,000 shares @ $10)	**$100,000**
Additional paid-in capital (10,000 shares @ $3)	**30,000**
Retained earnings	**75,000**
Total stockholders' equity	**$205,000**

Brief exercise: 02

Beta Co. sold 10,000 shares of common stock, which has a par value of $25, for $27 per share. The company also sold 1,000 shares of $100 par value preferred stock for $110. Assume the balance in retained earnings is $100,000. Prepare the stockholders' equity section of Beta's balance sheet

Solution:

Preferred stock (1,000 shares @ $100)	**$100,000**
Common stock (10,000 shares @ $25)	**250,000**
Additional paid-in capital:	
Preferred stock (1,000 shares @ $10)	**10,000**
Common stock (10,000 shares @ $2)	**20,000**
Retained earnings	**100,000**
Total stockholders' equity	**$480,000**

Brief exercise: 03

Zeta Co. has outstanding 100,000 shares of $100 par value cumulative preferred stock which has a dividend rate of 6 percent. The company has not declared any cash dividends on the preferred stock for the last three years. Calculate the amount of dividends in arrears on Zeta's preferred stock and briefly explain how this amount will be known to investors and creditors who may use the company's financial statements.

Solution:

Amount of Dividend = **100,000 shares x $100 par value x 6% dividend rate x 3 years**

= 1800,000

How this amount will be known to investors

The amount of dividends in arrears must be disclosed in the financial statements, but they are not formally included as a liability in the balance sheet until declared by the Board of Directors of the company.

Brief exercise: 04

Mega, Inc., has common and 6 percent preferred stock outstanding as follows:

Preferred stock: 10,000 shares, $100 par value, cumulative

Common stock: 50,000 shares, $50 par value

The company declares a total dividend of $200,000. If the dividends on preferred stock are one year in arrears (in addition to the current year), how will the total dividend be divided between the common and preferred stock?

Solution:

Total dividend declared	**$200,000**
Minus: Dividend requirements for preferred stock:	
10,000 shares x $100 par x 6% x 2 years	**120,000**
Dividends available for common stock	**80,000**

Brief exercise: 05

Walla Company has common and preferred stock outstanding as follows:

Common stock: 100,000 shares, $30 par value

8 percent preferred stock: 10,000 shares, $100 par value

Dividends on preferred stock have not been paid for the last three years (in addition to the current year). If the company pays a total of $120,000 in dividends, how much will the common stockholders receive per share if the preferred stock is not cumulative? How will your answer differ if the preferred stock is cumulative?

Solution:

Total dividend declared	**$120,000**
Minus: Dividend requirements for preferred stock:	
10,000 shares x $100 par x 8% x 1 year	**80,000**
Dividends available for common stock	**$40,000**
Dividends per share on common stock:	
$40,000/100,000 shares	**$0.40**

What if preferred stock is cumulative?

In case cumulative preferred stock company is obliged to pay all previous outstanding dividends along with the dividend of current year: So

If the preferred stock is cumulative, the entire dividend goes to preferred stock and the common stockholders will receive none of the $120,000 dividends declared. In fact, satisfaction of the full claim of the preferred stockholders in this case will require $320,000, determined as follows: 10,000 x $100 par x 8% x 4 years = $320,000

Brief exercise: 06

Menza Company has stockholder's equity account as follows:

Common stock: 100,000 shares of $ 10 par value	$1,000,000
Additional paid in capital on common stock	750,000
Retained Earnings	600,000

Calculate the amount of book value per share for common stock and summarize briefly what that figure means in relation to the current market value of the stock.

Solution:

($1,000,000 + $750,000 + $600,000)/100,000 shares = $23.50

It is just book value per share means; net assets of $23.50 are financed by one share. It has nothing to do with market value.

Brief exercise: 07

Smalley, Inc., has preferred and common stock outstanding as follows:

$5 preferred stock, 40,000 shares @ $100 par value	$4,000,000
Common stock, 500,000 shares at $10 par value	5,000,000
Additional paid-in capital on common stock	800,000
Retained earnings	1,750,000

Calculate the book value on common stock, assuming preferred dividends are cumulative and are currently one year in arrears.

Solution:

Total equity = 4 m+5 m+0.8m+1.75 m = 11.55 million or	11,550,000

Less: preferred stock	4,000,000	
Less: dividends in arrears	200,000	4200,000
Amount attributable to common stock		73, 50,000

Book value per share of common stock

7350, 000/500,000 = $ 14.70

Brief exercise: 08

Smelling Company declared a 2-for-1 stock split on its common stock in order to intentionally reduce the market value of its stock so that it would be an attractive investment for a larger set of investors. The company's common stock is described as follows:

Common stock: 100,000 shares outstanding, $10 par value, originally sold at $12.50, current market price $50

Describe the likely impact, if any, that the 2-for-1 stock split will have on **(a)** the number of shares outstanding, **(b)** the market price of the stock, and **(c)** the total stockholders' equity attributable to common stock.

Solution

a) The number of shares will be double from 100,000 to 200,000
b) It will half the market price of common stock from 50 to 50/2 = 25
c) There will be no impact on total stock holder's equity and it will remain unchanged.

Brief exercise: 09

Melcher, Inc., originally sold 100,000 shares of its $10 par value common stock at $25 per share. Several years later the company repurchased 10,000 of these shares at $55 per share. Melcher currently holds those shares in treasury. Prepare the company's stockholders' equity section of the balance sheet to reflect this information.

Solution:

Common stock (100,000 shares @ $10)	**1,000,000**
Additional paid-in capital	
(100,000 shares @ $15)	**1500,000**
	2500,000
Less: Treasury stock (10,000 shares x $55)	**[550,000]**
Total stockholder's equity	**19, 50,000**

Brief exercise: 10

Reeves, Inc., sold 1,000,000 shares of $25 par value common stock at $30. It subsequently repurchased 100,000 of those shares at $50 per share and then sold 70,000 of those shares at $55. Calculate the total amount of stockholders' equity given the above transactions.

Solution:

Common stock (1,000,000 shares @ $25)	**25,000,000**
Additional paid-in capital on common stock	
(1,000,000 shares @ $5)	**5,000,000**
Additional paid-in capital on treasury stock	
[70,000 shares x ($55 - $50)]	**350,000**
	$30,350,000
Less: Treasury stock (30,000 shares x $50)	**1,500,000**
Total stockholders' equity	**28,850,000**

Reeves, Inc purchased treasury stock at $50 but sold it for $55, so the profit is $5 per share, and this profit $5 x 70,000 = $350,000 shall be add into the additional paid in capital