**EXERCISES**

|  |  |  |
| --- | --- | --- |
|  | **Characteristic** | Corporations |
| **1.** | Owner authority and control  | e. One vote per share |
| **2.** | **Ease of formation**  | **a. Requires government approval** |
| **3.** | **Transferability of ownership**  | **d. Readily transferred** |
| **4.** | Ability to raise large capital amounts  | **f. High ability** |
| **5.** | **Duration of life**  | **g. Unlimited** |
| **6.** | **Owner liability**  | **h. Limited** |
| **7.** | **Legal status**  | **c. Separate legal entity** |
| **8.** | **Tax status of income**  | **b. Corporate income is taxed** |

**Exercise 11-2 (15 minutes)**

**1.**

|  |  |  |  |
| --- | --- | --- | --- |
| **Feb. 20** | **Cash**  | **152,000** |  |
|  |  **Common Stock, $2 Par Value\***  |  | **38,000** |
|  |  **Paid-In Capital in Excess of Par Value,  Common Stock\*\***  |  | **114,000** |
|  |  ***Issued common stock for cash.*** ***\*19,000 shares x $2 per share = $38,000*** ***\*\*$152,000 - $38,000 = $114,000*** |  |  |

**2.**

|  |  |  |  |
| --- | --- | --- | --- |
| **Feb. 20** | **Cash**  | **152,000** |  |
|  |  **Common Stock, No-Par Value**  |  | **152,000** |
|  |  ***Issued common stock for cash.*** |  |  |

**3.**

|  |  |  |  |
| --- | --- | --- | --- |
| **Feb. 20** | **Cash**  | **152,000** |  |
|  |  **Common Stock, $5 Stated Value\***  |  | **95,000** |
|  |  **Paid-In Capital in Excess of Stated Value, Common Stock\*\***  |  | **57,000** |
|  |  ***Issued common stock for cash.*** ***\*19,000 shares x $5 per share = $95,000*** ***\*\*$152,000 - $95,000 = $57,000*** |  |  |

**Exercise 11-3 (15 minutes)**

|  |  |  |  |
| --- | --- | --- | --- |
| **1.** | Cash  | **35,000** |  |
|  |  **Common Stock, $5 Par Value\***  |  | **20,000** |
|  |  **Paid-In Capital in Excess of Par Value,**  **Common Stock\*\***  |  | **15,000** |
|  |  ***Issued common stock for cash.*** ***\*4,000 shares x $5 per share = $20,000*** ***\*\*$35,000 - $20,000 = $15,000*** |  |  |

|  |  |  |  |
| --- | --- | --- | --- |
| **2.** | Organization Expenses  | **40,000** |  |
|  |  **Common Stock, $1 Stated Value**  |  | **2,000** |
|  |  **Paid-In Capital in Excess of Stated Value,** **Common Stock**  |  | **38,000** |
|  |  ***Issued stock to promoters.*** |  |  |

|  |  |  |  |
| --- | --- | --- | --- |
| **3.** | Organization Expenses  | **40,000** |  |
|  |  **Common Stock, No-Par Value**  |  | **40,000** |
|  |  ***Issued stock to promoters.*** |  |  |

|  |  |  |  |
| --- | --- | --- | --- |
| **4.** | Cash  | **60,000** |  |
|  |  **Preferred Stock, $50 Par Value\***  |  | **50,000** |
|  |  **Paid-In Capital in Excess of Par Value,** **Preferred Stock\*\***  |  | **10,000** |
|  |  ***Issued preferred stock for cash.*** ***\*1,000 shares x $50 per share = $50,000*** ***\*\*$60,000 - $50,000 = $10,000*** |  |  |

**Exercise 11-4 (15 minutes)**

|  |  |  |
| --- | --- | --- |
| **Land**  | **45,000** |  |
| **Building**  | **85,000** |  |
|  **Common Stock, $7 Par Value\***  |  | **49,000** |
|  **Paid-In Capital in Excess of Par Value, Common Stock**  |  | **81,000** |
|  ***Issued stock for land and building.*** ***\*7,000 shares x $7 per share = $49,000*** ***\*\*($45,000 + $85,000) – $49,000 = $81,000*** |  |  |

**Exercise 11-5 (20 minutes)**

**1.**

 **a. Retained earnings**

|  |  |
| --- | --- |
| Before dividend  | **$ 660,000** |
| **$10 par value of 25,000 dividend shares**  |  **(250,000)** |
| **After dividend**  | **$ 410,000** |

 **b. Total stockholders’ equity**

|  |  |
| --- | --- |
| **Common stock⎯$10 par value, 120,000 shares**  **authorized, 75,000 shares issued and outstanding**  | **$ 750,000** |
| **Paid-in capital in excess of par value**  |  **200,000** |
| **Retained earnings**  |  **410,000** |
| **Total stockholders’ equity**  | **$1,360,000** |

 **c. Number of outstanding shares**

|  |  |
| --- | --- |
| Outstanding shares before the dividend  | **50,000** |
| **Dividend shares**  | **25,000** |
| **Outstanding shares after the dividend**  | **75,000** |

**2.**

 **a. Retained earnings (no change)**

|  |  |
| --- | --- |
| **Before and after stock split**  | **$ 660,000** |

 **b. Total stockholders’ equity**

|  |  |
| --- | --- |
| **Common stock⎯$6.67 (rounded) par value, 180,000 shares authorized, 75,000 shares issued and outstanding**  | **$ 500,000** |
| **Paid-in capital in excess of par value**  |  **200,000** |
| **Retained earnings**  |  **660,000** |
| **Total stockholders’ equity**  | **$1,360,000** |

 **c. Number of outstanding shares**

|  |  |
| --- | --- |
| Outstanding shares before the split  | **50,000** |
| **Additional split shares (3-for-2)**  | **25,000** |
| **Outstanding shares after the split**  | **75,000** |

**3. From a stockholder’s point of view, there is no practical difference between the stock dividend and the stock split. The number of shares will be increased equivalently under either approach, and the market value change, if any, should be approximately the same.**

**Exercise 11-6 (25 minutes)**

**1.**

|  |  |  |  |
| --- | --- | --- | --- |
|  **Feb. 5** | Retained Earnings\*  | **480,000** |  |
|  |  **Common Stock Dividend Distributable\*\***  |  | **120,000** |
|  |  **Paid-In Capital in Excess of Par Value,  Common Stock\*\*\***  |  | **360,000** |
|  |  ***Declared 20% common stock dividend***  ***Shares to be issued: 60,000 shares x 20% = 12,000 shares*** ***\*12,000 shares x $40 per share = $480,000*** ***\*\*12,000 shares x $10 per share = $120,000*** ***\*\*\*$480,000 - $120,000 = $360,000*** |  |  |
|  |  |  |  |
|  **Feb. 28** | **Common Stock Dividend Distributable**  | **120,000** |  |
|  |  **Common Stock, $10 Par Value**  |  | **120,000** |
|  |  ***Distributed common stock dividend.*** |  |  |

##### 2.

|  |  |  |
| --- | --- | --- |
|  | **Before** | **After** |
| Total stockholders’ equity  | **$1,575,000** | **$1,575,000** |
| **Issued and distributable shares**  |  **÷ 60,000** |  **÷ 72,000** |
| **Book value per share**  | **$ 26.250** | **$ 21.875** |
| **Shares owned**  |  **x 800** |  **x 960\*** |
| **Total book value of shares**  | **$ 21,000** | **$ 21,000** |

**\* 800 shares x 120% = 960 shares.**

**3.**

|  |  |  |
| --- | --- | --- |
|  | **February 5** | **February 28** |
| Market value per share  | **$ 40** | **$ 33.40** |
| **Shares owned**  |  **x 800** |  **x 960** |
| **Total market value of shares owned**  | **$ 32,000** | **$ 32,064** |

**Note: The total market value of investor’s holdings is approximately the same for February 5 and February 28. Assuming that the stock dividend is the only value-relevant information/event between February 5th and February 28th, these per share values highlight the lack of value distributed in a stock dividend.**

**Exercise 11-7 (10 minutes)**

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| **1.** | **A** | **2.** | **D** | **3.** | **C** | **4.** | **B** |

**Exercise 11-8 (30 minutes)**

|  |  |  |
| --- | --- | --- |
|  |  **Non-Cumulative****Preferred** | **Common** |
| **2016 ($20,000 paid)** |  |  |
| **Preferred\***  | **$ 20,000** |  |
| **Common⎯remainder**  | **\_\_\_\_\_\_\_** | **$ 0** |
| **Total for the year**  | **$ 20,000** | **$ 0** |
|  |  |  |
| **2017 ($28,000 paid)** |  |  |
| **Preferred\***  | **$ 28,000** |  |
| **Common⎯remainder**  | **\_\_\_\_\_\_\_** | **$ 0** |
| **Total for the year**  | **$ 28,000** | **$ 0** |
|  |  |  |
| **2018 ($200,000 paid)** |  |  |
| **Preferred\***  | **$ 30,000** |  |
| **Common⎯remainder**  | **\_\_\_\_\_\_\_** | **$170,000** |
| **Total for the year**  | **$ 30,000** | **$170,000** |
|  |  |  |
| **2019 ($350,000 paid)** |  |  |
| **Preferred\***  | **$ 30,000** |  |
| **Common⎯remainder**  | **\_\_\_\_\_\_\_** | **$320,000** |
| **Total for the year**  | **$ 30,000** | **$320,000** |
|  |  |  |
| **2016-2019 ($598,000 paid)** | **\_\_\_\_\_\_\_** | **\_\_\_\_\_\_\_** |
| **Total for four years**  | **$108,000** | **$490,000** |

\* The holders of the noncumulative preferred stock are entitled to no more than $30,000 of dividends in any one year (7.5% x $5 x 80,000 shares).

**Exercise 11-9 (25 minutes)**

|  |  |  |
| --- | --- | --- |
|  | **Cumulative Preferred** | **Common** |
| **2016 ($20,000 paid)** |  |  |
| **Preferred\***  | **$ 20,000** |  |
| **Common⎯remainder**  | **\_\_\_\_\_\_\_** | **$ 0** |
| **Total for the year**  | **$ 20,000** | **$ 0** |
|  **(Note: $10,000 in preferred stock dividends in arrears.)** |  |  |
| **2017 ($28,000 paid)** |  |  |
| **Preferred⎯arrears from 2016**  | **$ 10,000** |  |
| **Preferred\***  | **18,000** |  |
| **Common⎯remainder**  | **\_\_\_\_\_\_\_** | **$ 0** |
| **Total for the year**  | **$ 28,000** | **$ 0** |
|  **(Note: $12,000 in preferred stock dividends in arrears.)** |  |  |
| **2018 ($200,000 paid)** |  |  |
| **Preferred⎯arrears from 2017**  | **$ 12,000** |  |
| **Preferred\***  | **30,000** |  |
| **Common⎯remainder**  | **\_\_\_\_\_\_\_** | **$158,000** |
| **Total for the year**  | **$ 42,000** | **$158,000** |
|  **(Note: $0 in preferred stock dividends in arrears.)** |  |  |
| **2019 ($350,000 paid)** |  |  |
| **Preferred\***  | **$ 30,000** |  |
| **Common⎯remainder**  | **\_\_\_\_\_\_\_** | **$320,000** |
| **Total for the year**  | **$ 30,000** | **$320,000** |
|  **(Note: $0 in preferred stock dividends in arrears.)** |  |  |
| **2016-2019 ($598,000 paid)** | **­­\_\_\_\_\_\_\_** | **\_\_\_\_\_\_\_** |
| **Total for four years**  | **$120,000** | **$478,000** |

\* The holders of the cumulative preferred stock are entitled to no more than $30,000 of dividends declared in any year (7.5% x $5 x 80,000 shares) plus any dividends skipped in prior years.

**Exercise 11-10 (25 minutes)**

**1. (a)**

|  |  |  |  |
| --- | --- | --- | --- |
|  **Oct. 11** | **Treasury Stock (5,000 x $25)**  | **125,000** |  |
|  |  **Cash**  |  | **125,000** |
|  |  ***Purchased treasury stock.*** |  |  |
| **(b)** |  |  |  |
|  **Nov. 1** | **Cash (1,000 x $31)**  | **31,000** |  |
|  |  **Treasury Stock (1,000 x $25)**  |  | **25,000** |
|  |  **Paid-In Capital, Treasury Stock**  |  | **6,000** |
|  |  ***Reissued treasury stock at a price exceeding cost.*** |  |  |

 **(c)**

|  |  |  |  |
| --- | --- | --- | --- |
| **Nov. 25** | **Cash (4,000 x $20)**  | **80,000** |  |
|  | **Paid-In Capital, Treasury Stock**  | **6,000** |  |
|  | **Retained Earnings**  | **14,000** |  |
|  |  **Treasury Stock (4,000 x $25)**  |  | **100,000** |
|  |  ***Reissued treasury stock at a price less than cost.*** |  |  |

**2. Changes to the equity section include the following**

**(i) The common stock account description line will change. After the treasury stock purchase, it should read:**

|  |  |
| --- | --- |
| **Common stock⎯$10 par value; 72,000 shares authorized and issued; 5,000 shares in treasury**  | **$720,000** |

 **The dollar balance of this account does not change with a treasury stock purchase.**

(ii) The descriptions and dollar amounts for Paid-In Capital in Excess of Par Value, Common Stock will not change.

(iii) The retained earnings dollar balance will not change but its description should change to read:

|  |  |
| --- | --- |
| **Retained earnings ($125,000 restricted for treasury stock)**  | **$864,000** |

(iv) After the purchase, a deduction for the cost of treasury stock is reported immediately before the total line for stockholders’ equity as:

|  |  |
| --- | --- |
| **Less cost of treasury stock**  | **$(125,000)** |

(v) Total stockholders’ equity will change from $1,800,000 to $1,675,000.

**Exercise 11-10 (Concluded)**

 **Revised equity section appears as follows**

|  |
| --- |
|  |
| **Common stock⎯$10 par value; 72,000 shares authorized**  **and issued; 5,000 shares in treasury**  | **$ 720,000** |
| **Paid-in capital in excess of par value, Common stock**  |  **216,000** |
| **Retained earnings, $125,000 restricted by treasury stock**  |  **864,000** |
| **Total**  | **1,800,000** |
| **Less cost of treasury stock**  |  **(125,000)** |
| **Total stockholders’ equity**  | **$1,675,000** |
|  |  |

**Exercise 11-11 (15 minutes)**

|  |
| --- |
| **Amos Company****Statement of Retained Earnings****For Year Ended December 31, 2018** |
| **Retained earnings, December 31, 2017, as previously reported**  | **$1,375,000** |
| **Prior period adjustment** |  |
|  **Depreciation expense not recorded in 2016 (net of $4,500 in** **tax benefits)**  |  **($55,500)** |
| **Retained Earnings, December 31, 2017, as adjusted**  | **1,319,500** |
| **Plus net income**  |  **126,000** |
| **Less dividends**  |  **(43,000)** |
| **Retained earnings, December 31, 2018**  | **$1,402,500** |

**Exercise 11-12 (25 minutes)**

|  |  |
| --- | --- |
| **1. Net income**  | **$2,700,000** |
| **Less preferred dividends**  |  **(388,020)** |
| **Net income available to common stockholders**  | **$2,311,980** |

|  |  |
| --- | --- |
| **2. Net income available to common stockholders**  | **$2,311,980** |
| **Divided by weighted-average outstanding shares**  | **678,000** |
| Basic earnings per share  | **$3.41** |

**Exercise 11-13 (30 minutes)**

|  |  |
| --- | --- |
| **1. Net income**  | **$960,000** |
| **Less preferred dividends**  |  **(120,000)** |
| **Net income available to common stockholders**  | **$840,000** |

|  |  |
| --- | --- |
| **2. Net income available to common stockholders**  | **$840,000** |
| **Divided by weighted-average outstanding shares**  | **400,000** |
| **Basic earnings per share**  | **$ 2.10** |

**Exercise 11-14 (15 minutes)**

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **Stock** | **Market Value per Share** | **Divided by** | **Earnings per Share** |  | **Price-Earnings Ratio** |
| **1**  | **$176.40** | **÷** | **$12.00** | **=** | **14.7** |
| **2**  | **96.00** | **÷** | **10.00** | **=** | **9.6** |
| **3**  | **93.75** | **÷** | **7.50** | **=** | **12.5** |
| **4**  | **250.00** | **÷** | **50.00** | **=** | **5.0** |

**Analysis: Of the stocks above, the market has the lowest expectation of future performance for stock #4. This is because stock #4 has the lowest PE ratio of 5.0.**

**Exercise 11-15 (15 minutes)**

**Dividend yield**

 **1. $16.06 / $220.00 = 7.3%**

 **2. $13.86 / $132.00 = 10.5%**

 **3. $ 3.96 / $ 72.00 = 5.5%**

 **4. $ 0.48 / $ 80.00 = 0.6%**

**Analysis: The yield of 0.6% on stock #4 is sufficiently low that it probably would be classified as a growth stock, and not an income stock. Note that classification involves expectations (not necessarily realizations).**

**Exercise 11-16 (20 minutes)**

**1.**

|  |  |  |
| --- | --- | --- |
|  **Total stockholders’ equity**  |  | **$1,585,000** |
|  **Less equity applicable to preferred shares** |  |  |
|  **Preferred Stock ($25 x 10,000)**  | **$250,000** |  |
|  **Cumulative dividends in arrears (none)**  |  **0** |  **(250,000)** |
|  **Equity applicable to common shares**  |  | **$1,335,000** |
|  |  |  |
|  |  |  |
|  **Book value of common stock ($1,335,000/100,000)**  |  | **$ 13.35** |

**2.**

|  |  |  |
| --- | --- | --- |
|  **Total stockholders’ equity**  |  | **$1,585,000** |
|  **Less equity applicable to preferred shares** |  |  |
|  **Preferred Stock ($25 x 10,000)**  | **$250,000** |  |
|  **Cumulative dividends in arrears (3 x 6% x $250,000)**  |  **45,000** |  **(295,000)** |
|  **Equity applicable to common shares**  |  | **$1,290,000** |
|  |  |  |
|  |  |  |
|  **Book value of common stock ($1,290,000/100,000)**  |  | **$ 12.90** |

**Exercise 11-17 (20 minutes)**

**1. Share capital 🡪 Common stock**

 **Share premium 🡪 Paid-in capital in excess of par value**

 **Retained profit 🡪 Retained earnings**

|  |  |  |  |
| --- | --- | --- | --- |
| **2.** | **Cash**  | **636** |  |
|  |  **Share Capital (at Par Value)**  |  | **484** |
|  |  **Share Premium**  |  | **152** |
|  |  ***Issued common stock at premium for cash.*** |  |  |

**3. 2016 Retained profit = 2015 Retained profit + 2016 Income – 2016 Dividends**

 **€ 23,180 € 22,619 € 5,547 € 4,986Exercise 11-18 (40 minutes)**

**Part 1**

|  |  |  |  |
| --- | --- | --- | --- |
| **Jan. 2** | **Treasury Stock, Common**  | **75,000** |  |
|  |  **Cash**  |  | **75,000** |
|  |  ***Purchased treasury stock (3,000 x $25).*** |  |  |
|  |  |  |  |
| **Jan. 7** | Retained Earnings  | **40,500** |  |
|  |  **Common Dividend Payable**  |  | **40,500** |
|  |  ***Declared $1.50 dividend per share on 27,000 outstanding shares.*** |  |  |
|  |  |  |  |
| **Feb. 28** | **Common Dividend Payable**  | **40,500** |  |
|  |  **Cash**  |  | **40,500** |
|  |  ***Paid cash dividend.*** |  |  |
|  |  |  |  |
| **July 9** | **Cash\***  | **36,000** |  |
|  |  **Treasury Stock, Common\*\***  |  | **30,000** |
|  |  **Paid-In Capital, Treasury Stock\*\*\***  |  | **6,000** |
|  |  ***Reissued treasury stock.***  ***\*(1,200 x $30) \*\*(1,200 x $25) \*\*\*(1,200 x $5)*** |  |  |
|  |  |  |  |
| **Aug. 27** | **Cash\***  | **30,000** |  |
|  | **Paid-In Capital, Treasury Stock**  | **6,000** |  |
|  | **Retained Earnings**  | **1,500** |  |
|  |  **Treasury Stock, Common\*\***  |  | **37,500** |
|  |  ***Reissued treasury stock.*** ***\*(1,500 x $20) \*\*(1,500 x $25)*** |  |  |
|  |  |  |  |
| **Sept. 9** | Retained Earnings  | **59,400** |  |
|  |  **Common Dividend Payable**  |  | **59,400** |
|  |  ***Declared $2 dividend on 29,700 outstanding shares.*** |  |  |
|  |  |  |  |
| **Oct. 22** | **Common Dividend Payable**  | **59,400** |  |
|  |  **Cash**  |  | **59,400** |
|  |  ***Paid cash dividend.*** |  |  |
|  |  |  |  |
| **Dec. 31** | **Income Summary**  | **52,000** |  |
|  |  **Retained Earnings**  |  | **52,000** |
|  |  ***Closed Income Summary account.*** |  |  |

**Exercise 11-18 (*Concluded)***

##### Part 2

|  |
| --- |
| **ALEXANDER CORPORATION****Statement of Retained Earnings****For Year Ended December 31, 2018** |
| **Retained earnings, December 31, 2017**  | **$340,000** |
| **Plus net income**  |  **52,000** |
|  | **392,000** |
| **Less: Cash dividends declared**  | **(99,900)** |
|  **Treasury stock reissuances\***  |  **(1,500)\*** |
| **Retained earnings, December 31, 2018**  | **$290,600** |

**\*From August 27 transaction of reissuance of treasury shares.**

##### Part 3

|  |
| --- |
| **ALEXANDER CORPORATION****Stockholders’ Equity Section of the Balance Sheet****December 31, 2018** |
| **Common stock⎯$25 par value, 50,000 shares authorized, 30,000 shares issued and outstanding; 300 shares in treasury**  | **$ 750,000** |
| **Paid-in capital in excess of par value, common stock**  | **50,000** |
| **Retained earnings (from part 2)**  |  **290,600** |
| **Less cost of treasury stock**  |  **(7,500)** |
| **Total stockholders’ equity**  | **$1,083,100** |