## SOLUTIONS Learning Goal 29

## Multiple Choice

1. C
2. a By having to maintain some fixed amount of capital, an equal minimum amount of assets must be maintained on the balance sheet. Legal capital is a broader concept than par value; also, legal capital has no connection to retained earnings.
3. a Total paid-in capital minus paid-in capital in excess of par: $\$ 500,000 \quad \$ 450,000=\$ 50,000$
4. b Legal capital is defined differently in different states and may sometimes involve amounts other than par or stated value. The accounting presentation of legal capital is a simple presentation that does not include calculations other than par or stated value.
5. b
6. c It's all about getting the most money at the lowest cost.
7. d Retained earnings can be negative if cumulative net losses exceed net income; this is called a deficit. Retained earnings is not part of paid-in capital; retained earnings comes from the business operations. Legal capital normally only relates to designated paid-in capital items.
8. c Total cash received is $\$ 8 \cdot 20,000=\$ 160,000$. Common Stock account is $20,000 \cdot \$ .10=$ \$2,000.
9. d Total paid-in capital is: $(10,000 \cdot \$ 50)+(\$ .01 \cdot 100,000)+\$ 171,000=\$ 672,000$. Total stockholders' equity is retained earnings plus total paid-in capital: $\$ 720,000+\$ 672,000=$ \$1,392,000.
10. d
11. c The attorney's bill is $\$ 10,000$, and there is no information about the value of the stock. The complete journal entry is:

| Organization Expense | 10,000 |  |
| :--- | :--- | :--- |
| Common Stock |  | 2,000 |
| Paid-in Capital in Excess of Par | 8,000 |  |

12. c
13. a
14. b $20,000 \cdot \$ 100 \cdot .06=\$ 120,000$
15. b $\$ 200,000(5,000 \cdot \$ 5)=\$ 175,000$
16. a $\$ 250,000(7,000 \cdot \$ 100 \cdot .04 \cdot 3)=\$ 166,000$
17. c
18. $d$ Choice (a) is incorrect because an amount of no-par stock shown as a Common Stock or Preferred Stock balance can significantly exceed its designated legal capital. The calculation of legal capital varies by state and the exact amount is not shown in stockholders' equity.
19. a Amounts shown as Common Stock or Preferred Stock identify legal capital only as a rough approximation in the case of par value stock. For no-par stock, a balance in Common Stock or Preferred Stock usually exceeds its designated legal capital.
20. C
21. a
22. a
23. b
24. c
25. b Retained earnings are available for dividends.

## SOLUTIONS Learning Goal 29, continued

## Discussion Questions and Brief Exercises

1. Legal capital is a specified dollar amount from a stock issuance that is required by state law to be maintained in a corporation, and it cannot be reduced by dividends or other stockholder distributions. This is for the protection of creditors. Par value is one way that the amount of legal capital can be specified. Par valueis a minimum amount per share that the purchaser of the stock must pay for the stock, and it also establishes the maximum liability per share for each stockholder. For common stock, the par value is usually set at some very low amount and has no relation to market value of a share. (Remember: Par value is not the market value of stock!)
2. Paid-in capital is the part of stockholders' equity that has been invested in the business. Retained earnings is the part of the stockholders' equity claim that represents the cumulative amount of net incomethat is still retained in the business. If cumulative losses exceed cumulative profits, retained earnings will be a negative amount.
3. Generally, the most an investor can lose is the amount invested. There are some limited exceptions to this if an investor as an officer or employee of the corporation is involved in fraud, extreme negligence, or violation of laws related to corporate activities. An investor's personal liability to creditors is generally limited to the amount of the stock value that was designated as legal capital. Usually this is much less than the total amount that was invested.
4. a. $(10,000 \cdot \$ 100 \cdot .05)=\$ 50,000$
b. $(10,000 \cdot \$ 100 \cdot .05) / 4=\$ 12,500$
c. $(10,000 \cdot \$ 100 \cdot .05 \cdot 2)+(10,000 \cdot \$ 100 \cdot .05) / 4=\$ 112,500$
5. The cash dividend will be paid on April 20. To receive the dividend, an investor's name must be formally recorded as an owner no later than M arch 31. Generally an investor would have to purchase the stock more than two business days before the date of record before the date of record to allow enough time for recording the purchase. The two-day prior date is called the "ex-dividend" date. Here, it would be M arch 29.
6. a. $(5,000 \cdot \$ 104)=\$ 520,000$
b. $(5,000 \cdot \$ 104)+(5,000 \cdot \$ 4) / 4=\$ 525,000$
c. $(5,000 \cdot \$ 104)+(5,000 \cdot \$ 4 \cdot 2)+(5,000 \cdot \$ 4) / 4=\$ 565,000$
7. Stock is called "preferred" when it has preferences over common stock. Usually, preferred stock has a dividend preference and a liquidation preference over common stock. This means that preferred stock will be the first to receive dividends and also will receive corporate assets before common stock in the case of liquidation. Usually preferred stock is non-voting, whereas common stockholders have the right to vote. Also, preferred stock is often cumulative and may also be callable and convertible into common shares. Generally, preferred stock receives a fixed dividend amount, whereas common stock dividends fluctuate more and potentially can be much greater than preferred stock.
8. Preferred stock is issued to appeal to the interests of different types of shareholders-usually investors who are less speculative and who want fixed, predictable dividends. By appealing to different types of investors, a corporation is able to obtain more money from investors. This is the usual reason that all different classes of stock are created.
9.     - Par value, preferred stock: The minimum amount that must be invested (legal capital) for preferred stock.

- Par value, common stock: The minimum amount that must be invested (legal capital) for common stock.
- Paid-in capital in excess of par, common and preferred stock: Amounts invested that exceed par value.
- No par common stock: Common stock issued without a par value (no minimum amount).
- Common stock subscribed: The par value or portion of no-par value of common shares that have been subscribed but not yet fully paid for.


## SOLUTIONS

## Learning Goal 29, continued

10. 

| Preferred Stock | 300,000 |  |
| :--- | ---: | ---: |
| Paid-in Capital in Excess of Par, Preferred | 8,000 |  |
| Common Stock |  | 12,000 |
| Paid-in Capital in Excess of Par, Common |  | 296,000 |

Check the total: ( $\$ 924,000 \cdot 4,000 / 12,000)=\$ 308,000$ total preferred stock equity converted into common stock equity. There is no gain or loss and total stockholders' equity does not change.
11. Date of declaration: The date the board of directors approves a dividend. The dividend becomes a liability on this date.

- Date of record: The date by which stock ownership must be officially recorded for the owner to receive a dividend.
- Ex-dividend date: The datebeforewhich a stock must be purchased in order to allow enough time for the buyer's name to be officially recorded to receive a dividend; generally, two days before the date of record.
- Payment date: The date that checks are recorded to owners as of the date of record.

Journal entries are needed on the declaration date to record the liability and to decrease retained earnings, and on the payment date to record the payment.
12. - Cumulative: A feature of preferred stock that requires that preferred dividends in arrears plus current preferred dividends be paid before common stockholders can receive a dividend.

- Callable: A feature that allows the issuing corporation to purchase shares of stock at a fixed price from the owners.
- Convertible: A feature that permits owners of preferred stock to convert preferred shares into common shares.

13. The procedure is for the board of directors to use the most reliable value. When stock is regularly traded on a public stock exchange, this is usually the most reliable value. If the stock is not publicly traded and the asset has a reliably determined market value, such as a normal invoice price, then the asset value is used. If neither value is available, the board of directors can assign a value to the transaction.
14. a. Usually non-voting: preferred
b. Dividends with the greatest variability: common
c. Can be callable: preferred
d. Usually receives assets before other classes of stock in liquidation: preferred
e. Will be the most profitable if the business is very profitable: common
f. Can be convertible: preferred
g. Often has a claim on unpaid dividends from previous years: preferred
15. M arket value. Buyers and sellers determine value. Par value has no relationship to the true value of a stock.
16. 2015: \$0

- 2016: Preferred, (10,000 • \$100 • . $06 \cdot 2$ ) = \$120,000;
common, $\$ 125,000 \quad \$ 120,000=\$ 5,000$
- 2017: Preferred, $(10,000 \cdot \$ 100 \cdot .06)=\$ 60,000$; common, $\$ 150,000 \quad \$ 60,000=\$ 90,000$

Note: The preferred stock is cumulative, so two years of dividends is paid on preferred stock in 2016.
17. When stock is issued, legal capital imposes a minimum portion of the value received that must be permanently retained by a corporation. After a corporation begins to operate, additional state laws called "capital maintenance requirements" create restrictions on the amount of assets that can be distributed to stockholders.

## SOLUTIONS Learning Goal 29, continued

18. Most liquidations occur as the result of bankruptcy. In these situations, the stockholders usually receive nothing or very little because creditors always have priority over all stockholders. Therefore, the liquidation preference of preferred stock is worth nothing or very little.
19. The cash received at the time of subscription is (100,000 $\$ 12 \cdot .4$ ) $=\$ 480,000$. The cash received after the subscription is fully paid is $100,000 \cdot \$ 12=\$ 1,200,000$. At the time of the subscription, two accounts are credited, which increases paid-in capital. Common Stock Subscribed is credited for the amount of $(100,000 \cdot \$ .10)=\$ 10,000$. Paid-in Capital in Excess of Par is credited for $\$ 1,190,000$. The debit balance of $\$ 720,000$ in Subscriptions Receivable is shown as reduction in total stockholders' equity. When shares are fully paid, the Common Stock Subscribed amount becomes reclassified as Common Stock, and the Subscriptions Receivable is eliminated.
When the balance of subscriptions is received:

| Cash | 720,000 |  |
| :--- | ---: | ---: |
| Subscriptions Receivable <br> Common Stock Subscribed <br> Common Stock | 10,000 | 720,000 |
|  |  | 10,000 |

20. (1) The board of directors must declare the dividends. (2) The balance of retained earnings must equal or exceed the amount of dividends declared. (3) There must be sufficient cash to pay the dividend.
21. Dilution is the decrease in existing stockholders' percentage of total shares as the result of additional shares of the same stock being issued to other stockholders. N ote: Dilution also refers to the decrease in earnings per share (see Learning Goal 31) as the result of additional shares being issued.
22. Start-up costs are the costs incurred to begin a new business or a new operation. Start-up costs are recorded as an expense called organization expense or organization cost.
Stock issuance costs are those costs that are directly associated with issuing stock. These may occur as the result of receiving less cash (underwriting charge) or as direct payments of cash for other items. Stock issuance costs reduce paid-it capital.

LG 29-1.
a.

## Springfield Corporation Balance Sheet (partial) December 31, 20XX

Paid-in capital
Preferred stock, $\$ 50$ par, 4\%, 5,000 shares issued
\$ 250,000
Common stock, $\$ .10$ par, 100,000 shares issued . . . . . . . . . . . $\$ 10,000$
Paid-in capital in excess of par, common . . . . . . . . . . . . . . . . . 650,000
Total paid-in capital . . ..................................... . . . . . . .

Total stockholders' equity ............................. $\quad \underline{\underline{\$ 1,895,000}}$
b. The annual preferred stock dividend is: 5,000 shares $\quad \$ 50 \cdot .04=\$ 10,000$

## SOLUTIONS

LG 29-2.

## St. Louis, Incorporated Balance Sheet (partial) December 31, 20XX

Paid-in capital

| Preferred stock, \$100 par, \$6, 10,000 shares issued | \$1,000,000 |  |
| :---: | :---: | :---: |
| Paid-in capital in excess of par, preferred | 108,000 | \$1,108,000 |
| Common stock, \$. 05 par, 300,000 shares issued | 15,000 |  |
| Paid-in capital in excess of par, common | 3,150,000 | 3,165,000 |
| Total paid-in capital |  | 4,273,000 |
| Retained earnings (deficit) |  | $(785,000)$ |
| Total stockholders' equity |  | \$3,488,000 |

TheCommon Stock account balance is: 300,000 • $\$ .05=\$ 15,000$
The average selling price of the preferred stock is: $\$ 1,108,000 / 10,000=\$ 110.80$ per share The average selling price of the common stock is: $\$ 3,165,000 / 300,000=\$ 10.55$ per share The negative balance (deficit) in retained earnings is the company's accumulated loss. This tells us that profits less any dividends paid out are exceeded by losses by $\$ 785,000$. The business does not appear to be operating successfully to this point in time. Thetotal annual preferred dividend is: 10,000 shares • $\$ 6=\$ 60,000$

LG 29-3.
a.

| Date | Account | Post. <br> Ref. | Dr. | Cr. |
| :---: | :--- | :---: | :---: | :---: |
| Oct. 10 | Organization Expense |  | 500,000 |  |
|  | Cash |  | $5,500,000$ |  |
|  | Common Stock |  |  | 50,000 |
|  | Paid-in Capital in Excess of Par-Common |  |  | $5,950,000$ |
| 19 | Organization Expense |  | 125,000 |  |
|  | Common Stock |  |  | 1,500 |
|  | Paid-in Capital in Excess of Par, Common |  |  | 123,500 |
| 25 | Equipment |  |  | 175,000 |
|  | Common Stock |  |  | 1,200 |
|  | Paid-in Capital in Excess of Par, Common |  |  | 173,800 |
|  |  |  |  | 253,750 |
| Nov. 12 | Cash |  |  | 250,000 |
|  | Preferred Stock |  |  |  |
|  | Paid-in Capital in Excess of Par, Preferred |  |  |  |
|  |  |  |  |  |

## SOLUTIONS

LG 29-3, continued
b. The law and accounting firms are receiving 15,000 shares of stock in return for services valued at $\$ 125,000$. This is an average cost per share of $\$ 8.33$. The supplier is receiving 12,000 shares in return for merchandise with a value of $\$ 175,000$. This is an average cost per share of $\$ 14.58$. The law and accounting firms are clearly obtaining the stock at the best price per share, which is also below the underwriter's $\$ 12$ estimate of value. Should the supplier have waited until the stock began to trade on stock exchanges so a market value could be determined? Probably that would have been a better idea.

LG 29-4.

| Date | Account | Post. Ref. | Dr. | Cr. |
| :---: | :---: | :---: | :---: | :---: |
| 2016 |  |  |  |  |
| Jan. 3 | Retained Earnings |  | 100,000 |  |
|  | Dividends Payable, Preferred |  |  | 22,500 |
|  | Dividends Payable, Common |  |  | 77,500 |
|  |  |  |  |  |
| 17 | Dividends Payable, Preferred |  | 22,500 |  |
|  | Dividends Payable, Common |  | 77,500 |  |
|  | Cash |  |  | 100,000 |
|  |  |  |  |  |
| 30 | Cash |  | 510,000 |  |
|  | Preferred Stock, Class B |  |  | 510,000 |
|  |  |  |  |  |
| July 27 | Cash |  | 1,100,000 |  |
|  | Common Stock |  |  | 500 |
|  | Paid-in Capital in Excess of Par, Common |  |  | 1,099,500 |
|  |  |  |  |  |

## SOLUTIONS

## Learning Goal 29, continued

## LG 29-4, continued

| Date | Account | Post. <br> Ref. | Dr. | Cr. |
| :---: | :--- | ---: | ---: | ---: |
| 2009 |  |  |  | 50,000 |
| Jan. 12 | Retained Earnings |  |  | 22,500 |
|  | Dividends Payable, Class A Preferred |  |  | 25,000 |
|  | Dividends Payable, Class B Preferred |  |  | 2,500 |
|  | Dividends Payable, Common |  |  |  |
|  |  |  |  | 22,500 |
|  | Dividends Payable, ClassA Preferred |  | 25,000 |  |
|  | Dividends Payable, Class B Preferred |  | 2,500 |  |
|  | Dividends Payable, Common |  |  | 50,000 |
|  | Cash |  |  |  |
|  |  |  |  |  |

## Calculations:

Annual dividend on ClassA 3\% \$100 par preferred: 7,500 - $\$ 100 \cdot .03=\$ 22,500$
Annual dividend on Class $B \$ 2.50$ no par preferred: $10,000 \cdot \$ 2.50=\$ 25,000$
Annual dividend on common: Whatever is left over after paying the preferred dividends

## LG 29-5.

a.

| Date | Account | Post. Ref. | Dr. | Cr. |
| :---: | :---: | :---: | :---: | :---: |
| 2008 |  |  |  |  |
| July 8 | Retained Earnings |  | 250,000 |  |
|  | Dividends Payable, Preferred |  |  | 31,250 |
|  | Dividends Payable, Common |  |  | 218,750 |
|  |  |  |  |  |
| 30 | Dividends Payable, Preferred |  | 31,250 |  |
|  | Dividends Payable, Common |  | 218,750 |  |
|  | Cash |  |  | 250,000 |
|  |  |  |  |  |
| 30 | Cash |  | 1,395,000 |  |
|  | Common Stock |  |  | 1,395,000 |
|  |  |  |  |  |
|  | ( No Entry on July 30. Underwriter's sale does |  |  |  |
|  | not affect Akron, Inc.) |  |  |  |
|  |  |  |  |  |

## SOLUTIONS Learning Goal 29, continued

LG 29-5, continued

| Date | Account | Post. <br> Ref. | Dr. | Cr. |
| :---: | :---: | :---: | :---: | :---: |
| 2017 |  |  |  |  |
| Aug. 8 | Common stock |  | 39,000 |  |
|  | Cash |  |  | 39,000 |
|  |  |  | 406,000 |  |
| Sept. 27 | Land |  |  | 406,000 |
|  | Common Stock |  | 350,000 |  |
|  |  |  |  | 31,250 |
| Oct. 7 | Retained Earnings |  |  | 318,750 |
|  | Dividends Payable, Preferred |  | 318,750 |  |
|  | Dividends Payable, Common |  |  | 350,000 |
| 31 | Dividends Payable, Preferred |  |  |  |
|  | Dividends Payable, Common |  |  |  |
|  | Cash |  |  |  |
|  |  |  |  |  |
| Dec. 12 | Cash |  |  |  |
|  | Preferred Stock, Class B |  |  |  |
|  |  |  |  |  |

## Calculations:

- July 8 dividend to preferred stockholders: (25,000 - $\$ 100$. . 05 ) $/ 4=\$ 31,250$
- July 8 dividend to common stockholders: $\$ 250,000 \quad \$ 31,250=\$ 218,750$
- July 22 cash from issuing common shares: 50,000 • $\$ 30 \cdot .93=\$ 1,395,000$
- Aug. 8 stock issue expense: The cash paid is reduction of paid-in capital
- Sept. 27 land acquisition: 14,000 . $\$ 29=\$ 406,000$
- Oct. 7 dividend to preferred stockholders: (25,000 . $\$ 100 \cdot .05) / 4=\$ 31,250$. Dividends paid to common stockholders: $\$ 350,000 \quad \$ 31,250=\$ 318,750$
- Dec. 12 cash from issuing new preferred shares: 10,000 • \$52 • . $93=\$ 483,600$


## SOLUTIONS

## Learning Goal 29, continued

LG 29-5, continued
b.

## Akron, Inc. Balance Sheet (partial) December 31, 2017

Stockholders' Equity
Paid-in capital
Preferred stock Class A, \$100 par, 5\%, 25,000 shares issued. . . . . . . . . \$ 2,500,000
Preferred stock Class B, no par, \$3, 10,000 shares issued . . . . . . . . . . . 483,600
Common stock . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . $13,262,000$
Total paid-in capital. . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . 16 16,245,600
Retained Earnings. . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . 5 5,240,000
Total stockholders' equity . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . \$21,485,600

- Common Stock account: \$11,500,000 beginning balance+ \$1,395,000 July 22 new shares sold - \$39,000 Aug. 8 legal services + \$406,000 Sept. 27 shares issued for land.
- Retained Earnings account: \$5,800,000 beginning balance $\$ 250,000$ July 8 dividends $\$ 350,000$ Oct. 31 dividends + \$40,000 net income.

LG 29-6.
a.

| Date | Account | Post. <br> Ref. | Dr. | Cr. |
| :---: | :--- | :---: | :---: | :---: |
| 2017 |  |  |  | 125,000 |
| Jan. 12 | Cash |  | 375,000 |  |
|  | Subscriptions Receivable |  |  | 50,000 |
|  | Common Stock Subscribed |  |  | 450,000 |
|  | Paid-in Capital in Excess of Par, Common |  | 27,500 |  |
| Feb. 11 | Equipment |  |  | 2,500 |
|  | Common Stock |  |  | 25,000 |
|  | Paid-in Capital in Excess of Par, Common |  |  |  |
| 24 | Cash |  |  | 150,000 |
|  | Subscriptions Receivable |  | 20,000 |  |
|  | Common Stock Subscribed |  |  | 20,000 |
|  | Common Stock |  |  |  |

## SOLUTIONS

## Learning Goal 29, continued

LG 29-6, continued

| Date | Account | Post. <br> Ref. | Dr. | Cr. |
| :---: | :---: | :---: | :---: | :---: |
| 2017 |  |  |  |  |
| March 9 | Preferred Stock |  | 150,000 |  |
|  | Paid-in Capital in Excess of Par, Preferred |  | 4,000 |  |
|  | Common Stock |  |  | 5,000 |
|  | Paid-in Capital in Excess of Par, Common |  |  | 149,000 |
|  |  |  |  |  |
| 19 | Cash |  | 37,500 |  |
|  | Subscriptions Receivable |  |  | 37,500 |
|  |  |  |  |  |
|  | Common Stock Subscribed |  | 5,000 |  |
|  | Common Stock |  |  | 5,000 |
|  |  |  |  |  |
| April 3 | Cash |  | 187,500 |  |
|  | Subscriptions Receivable |  |  | 187,500 |
|  |  |  |  |  |
|  | Common Stock Subscribed |  | 25,000 |  |
|  | Common Stock |  |  | 25,000 |
|  |  |  |  |  |
| 7 | Retained Earnings |  | 50,000 |  |
|  | Dividends Payable, Preferred |  |  | 4,500 |
|  | Dividends Payable, Common |  |  | 45,500 |

- Jan. 12: 50,000 shares • $\$ 10=\$ 500,000 ; \$ 500,000 \cdot .25=\$ 125,000 ; 50,000$ shares $\quad \$ 1=\$ 50,000$
- Feb. 11: 2,500 shares • $\$ 11=\$ 27,500$
- Feb. 24: $(20,000 / 50,000)=.40 ;(.4 \cdot \$ 375,000)=\$ 150,000 ;(.4 \cdot \$ 50,000)=\$ 20,000$
- M arch 9: 2,000 shares . $2.5=5,000$ common shares; $2,000 / 10,000=20 \%$ of preferred stock converted to common; ( $.2 \cdot \$ 750,000=\$ 150,000)+(.2 \cdot \$ 20,000=\$ 4,000)$ of preferred stock paid-in capital becomes $\$ 154,000$ of common stock capital.
- March 19: $(5,000 / 50,000)=.10 ;(.1 \cdot \$ 375,000)=\$ 37,500 ;(.1 \cdot \$ 50,000)=\$ 5,000$
- April 3: $(25,000 / 50,000)=.50 ;(.5 \cdot \$ 375,000)=\$ 187,500 ;(.5 \cdot \$ 50,000)=\$ 25,000$
- April 7: Preferred dividend: (8,000 • \$75 • .03)/4 = \$4,500; common dividend:
$\$ 50,000 \quad \$ 4,500=\$ 45,500$


## SOLUTIONS Learning Goal 29, continued

LG 29-6, continued

## Account Balances as of March 31, 2017:

| Subscriptions Receivable |  | Common Stock | Common Stock Subscribed |  | Paid in Capital in Excess of Par, Common Stock |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 375,000 | 150,000 | 100,000 | 20,000 | 50,000 | 680,000 |
|  | 37,500 | 2,500 | 5,000 |  | 450,000 |
| $\overline{187,500}$ |  | 20,000 |  | $\overline{25,000}$ | 25,000 |
|  |  | 5,000 |  |  | 149,000 |
|  |  | 5,000 |  |  | 1,304,000 |
|  |  | $\overline{132,500}$ |  |  |  |


b.

## Toledo, Incorporated Balance Sheet (partial) March 31, 2017

Stockholders' Equity
Paid-in capital
Preferred stock, \$75 par, 3\%, convertible, 8,000 shares issued . . ... \$ 600,000
Paid-in capital in excess of par, preferred . . . . . . . . . . . . . . . . . . . . . . . . . . . 16,000
Common stock, \$1 par, 132,500 shares issued . . . . . . . . . . . . . . . . . . . . 132,500
Common stock subscribed. . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . 25 25,000
Paid-in capital in excess of par, common . . . . . . . . . . . . . . . . . . . . . . . . $1,304,000 \quad 1,461,500$
Total paid-in capital
2,077,500
Retained earnings . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . $2,020,000$
Less: Subscriptions receivable.
$(187,500)$
Total stockholders' equity.
\$3,910,000

## SOLUTIONS Learning Goal 29, continued

LG 29-6, continued
Account Balances as of April 30, 2017:


## SOLUTIONS <br> Learning Goal 29, continued

LG 29-6, continued
The changes between the M arch 31 and April 30 stockholders' equity are as follows:

- All the remaining subscribed shares were paid. Therefore, the number of common shares issued increased by 25,000 to a total of 157,500 shares. The Subscriptions Receivable and the Common Stock Subscribed account balances became zero, and the Common Stock account increased by $\$ 25,000$ to $\$ 157,500$. Eliminating Subscriptions Receivable increased stockholders' equity. Eliminating Common Stock subscribed has no effect on the total because it becomes Common Stock.
- Retained earnings increased by the April net income of $\$ 70,000$, and retained earnings decreased by the $\$ 50,000$ dividend declared.
- Net effect on the total stockholders' equity between M arch 31 and April 30: $\$ 187,500$ (Subscriptions Receivable eliminated) $+\$ 70,000 \quad \$ 50,000=\$ 207,500$.
d.

Common Shares:

| Date | Event | Shares | Total Shares |
| ---: | :--- | ---: | :---: |
| Jan. 1 | Beginning balance |  | 100,000 |
| Feb. 11 | Purchased equipment | 2,500 | 102,500 |
| Feb. 24 | Subscriptions paid in full | 20,000 | 122,500 |
| M arch 9 | Preferred shares converted to common | 5,000 | 127,500 |
| M arch 19 | Subscriptions paid in full | 5,000 | 132,500 |
| April 3 | Subscriptions paid in full | 25,000 | 157,500 |
|  |  |  |  |

Preferred Shares:

| Date | Event | Shares | Total Shares |
| :---: | :--- | :---: | :---: |
| Jan. 1 | Beginning balance |  | 10,000 |
| Mar. 9 | Preferred shares converted to common | $(2,000)$ | 8,000 |
|  |  |  |  |

S14 Section VI • Corporations

## SOLUTIONS

## Learning Goal 29, continued

LG 29-7.
a.

| Date | Account | Post. Ref. | Dr. | Cr. |
| :---: | :---: | :---: | :---: | :---: |
| 2017 |  |  |  |  |
| M ar. 12 | Retained Earnings |  | 100,000 |  |
|  | Dividends Payable, Preferred |  |  | 78,750 |
|  | Dividends Payable, Common |  |  | 21,250 |
|  |  |  |  |  |
| 25 | Cash |  | 387,500 |  |
|  | Common Stock |  |  | 2,500 |
|  | Paid-in Capital in Excess of Par, Common |  |  | 385,000 |
|  |  |  |  |  |
| 27 | Underwriting Expense |  | 31,000 |  |
|  | Common Stock |  |  | 200 |
|  | Paid-in Capital in Excess of Par, Common |  |  | 30,800 |
|  |  |  |  |  |
| April 12 | Dividends Payable, Preferred |  | 78,750 |  |
|  | Dividends Payable, Common |  | 21,250 |  |
|  | Cash |  |  | 100,000 |
|  |  |  |  |  |
| 15 | Preferred Stock |  | 150,000 |  |
|  | Paid-in Capital in Excess of Par, Preferred |  | 3,000 |  |
|  | Common Stock |  |  | 900 |
|  | Paid-in Capital in Excess of Par, Common |  |  | 152,100 |
|  |  |  |  |  |
| 19 | Underwriting Expense |  | 36,750 |  |
|  | Cash |  | 488,250 |  |
|  | Preferred Stock, Class B |  |  | 500,000 |
|  | Paid-in Capital in Excess of Par, Preferred B |  |  | 25,000 |
|  |  |  |  |  |
| May 7 | Organization Expense |  | 52,500 |  |
|  | Preferred Stock, Class B |  |  | 50,000 |
|  | Paid-in Capital in Excess of Par, Preferred B |  |  | 2,500 |
|  |  |  |  |  |
| June 14 | Retained Earnings |  | 100,000 |  |
|  | Dividends Payable, Preferred Class A |  |  | 6,125 |
|  | Dividends Payable, Preferred Class B |  |  | 10,000 |
|  | Dividends Payable, Common Stock |  |  | 83,875 |
|  |  |  |  |  |

## SOLUTIONS <br> Learning Goal 29, continued

## LG 29-7, continued

## Calculations:

M arch 12: Preferred stock: ( 10,000 shares $\quad \$ 50 \cdot .07$ ) $=\$ 35,000 \cdot 2=\$ 70,000$ dividends in arrears; plus current quarterly dividend: ( 10,000 shares $\$ 50 \cdot .07$ ) $4=\$ 8,750$. Total preferred dividend: $\$ 78,750$. Common stock: $\$ 100,000 \quad \$ 78,750=\$ 21,250$.
April 15: Preferred stock: ( $\$ 500,000 \cdot 3 / 10$ ) $=\$ 150,000$. Paid-in Capital in Excess of Par, Preferred: $(\$ 10,000 \cdot 3 / 10)=\$ 3,000$. Total: $(\$ 510,000 \cdot 3 / 10)=\$ 153,000$. Number of new common shares: ( 3,000 shares - 3 ) $=9,000$ shares (at $\$ .10$ par value). Therefore $\$ 900$ of $\$ 153,000$ becomes common stock (legal capital), with the balance going to paid in capital in excess of par.
June 14: Preferred Class A: ( 7,000 shares • $\$ 50 \cdot .07$ )/4 $=\$ 6,125$
Preferred Class B: ( 5,000 shares • $\$ 100$ - .08) $/ 4=\$ 10,000$
Common stock: $(\$ 100,000 \quad \$ 6,125 \quad \$ 10,000)=\$ 83,875$
b.

Account Balancesas of June30, 2017:

| $\begin{aligned} & \text { Common } \\ & \text { Stock } \end{aligned}$ | Paid-in Capital in Excess of Par, Common Stock |  | Preferred Stock Class A |  | Paid in Capital in Excess of Par, A |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 20,000 | 31,000 | 2,480,000 | 150,000 | 500,000 | 3,000 | 10,000 |
| 2,500 |  | 385,000 |  | 350,000 |  | 7,000 |
| 200 |  | 152,100 |  |  |  |  |
| 900 |  | 2,986,100 |  |  |  |  |
| 23,600 |  |  |  |  |  |  |


| Retained <br> Earnings |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 100,000 | 410,000 |  |  |  |  |
| 100,000 | $\underline{117,000}$ |  |  |  |  |
|  |  |  | Preferred Stock <br> Class B |  | Paid in Capital in <br> Excess of Par, B |
|  |  | $\frac{500,000}{500,000}$ |  |  | $\frac{11,500}{11,500}$ |

## SOLUTIONS

Learning Goal 29, continued
LG 29-7, continued
C.

| Hanover, Inc. Balance Sheet (partial) June 30, 2017 |  |  |
| :---: | :---: | :---: |
| Stockholders' Equity |  |  |
| Paid-in capital |  |  |
| Preferred stock Class A, \$50 par, 7\%, convertible, 7,000 shares issued. | \$350,000 |  |
| Paid-in capital in excess of par | 7,000 | \$ 357,000 |
| Preferred stock Class B, \$100 par, 8\%, 5,000 shares issued. | 500,000 |  |
| Paid-in capital in excess of par | 11,500 | 511,500 |
| Common stock, \$. 10 par, 234,000 shares issued | 23,400 |  |
| Paid-in Capital in Excess of Par. | 3,017,100 | 3,040,500 |
| Total Paid-in Capital |  | 3,909,000 |
| Retained Earnings. |  | 327,000 |
| Total stockholders' equity |  | \$4,236,000 |

d.

Common Shares:

| Date | Event | Shares | Total Shares |
| :---: | :--- | ---: | :---: |
| M ar. 1 | Beginning balance |  | 200,000 |
| Mar. 25 | Sold stock | 25,000 | 225,000 |
| April 15 | Preferred shares converted to common | 9,000 | 234,000 |
|  |  |  |  |

## Preferred Shares, Class A:

| Date | Event | Shares | Total Shares |
| :---: | :--- | :---: | :---: |
| M ar. 1 | Beginning balance |  | 10,000 |
| April 15 | Preferred shares converted to common | $(3,000)$ | 7,000 |
|  |  |  |  |

## Preferred Shares, Class B:

| Date | Event | Shares | Total Shares |
| :---: | :---: | :---: | :---: |
| April 19 | Sold stock |  |  |
|  |  |  | 5,000 |

## SOLUTIONS

Learning Goal 29, continued
LG 29-8.
a.

| Date | Account | Post. Ref. | Dr. | Cr . |
| :---: | :---: | :---: | :---: | :---: |
| 20017 |  |  |  |  |
| July 9 | Cash |  | 360,000 |  |
|  | Subscriptions Receivable |  | 540,000 |  |
|  | Common Stock Subscribed |  |  | 900,000 |
|  |  |  |  |  |
| 18 | Land |  | 144,000 |  |
|  | Common Stock |  |  | 144,000 |
|  |  |  |  |  |
| Aug. 24 | Cash |  | 216,000 |  |
|  | Subscriptions Receivable |  |  | 216,000 |
|  |  |  |  |  |
|  | Common Stock Subscribed |  | 360,000 |  |
|  | Common Stock |  |  | 360,000 |
|  |  |  |  |  |
| Sept. 5 | Preferred Stock |  | 150,000 |  |
|  | Paid-in Capital in Excess of Par, Preferred |  | 12,000 |  |
|  | Common Stock |  |  | 162,000 |
|  |  |  |  |  |
| 14 | Cash |  | 108,000 |  |
|  | Subscriptions Receivable |  |  | 108,000 |
|  |  |  |  |  |
|  | Common Stock Subscribed |  | 180,000 |  |
|  | Common Stock |  |  | 180,000 |
|  |  |  |  |  |
| 29 | Retained Earnings |  | 40,000 |  |
|  | Dividends Payable, Preferred |  |  | 30,000 |
|  | Dividends Payable, Common |  |  | 10,000 |
|  |  |  |  |  |
| Oct. 3 | Cash |  | 216,000 |  |
|  | Subscriptions Receivable |  |  | 216,000 |
|  |  |  |  |  |
|  | Common Stock Subscribed |  | 360,000 |  |
|  | Common Stock |  |  | 360,000 |
|  |  |  |  |  |
| 17 | Dividends Payable, Preferred |  | 30,000 |  |
|  | Dividends Payable, Common |  | 10,000 |  |
|  | Cash |  |  | 40,000 |
|  |  |  |  |  |
| 23 | Cash |  | 511,500 |  |
|  | Preferred Stock |  |  | 500,000 |
|  | Paid-in Capital in Excess of Par, Preferred |  |  | 11,500 |
|  |  |  |  |  |

## SOLUTIONS

LG 29-8, continued

## Calculations:

- July 9: ( 75,000 shares • $\$ 12$ ) $=\$ 900,000 ; \$ 900,000 \cdot .40=\$ 360,000$ (Note: Stock is no-par, so there is no paid-in capital in excess of par.)
- July 18: ( 12,000 shares • $\$ 12$ ) = \$144,000
- Aug. 24: $(30,000 / 75,000)=.40 ;(.4 \cdot \$ 540,000)=\$ 216,000 ;(.4 \cdot \$ 900,000)=\$ 360,000$
- Sept. 5: ( 3,000 shares - 4$)=12,000$ common shares; $3,000 / 15,000=20 \%$ of preferred stock converted to common stock; (.2 $\$ 750,000=\$ 150,000)+(.2 \cdot \$ 60,000=\$ 12,000)$ of preferred stock paid-in capital becomes $\$ 162,000$ of common stock capital
- Sept. 14: $(15,000 / 75,000)=.20 ;(.2 \cdot \$ 540,000)=\$ 108,000 ;(.2 \cdot \$ 900,000)=\$ 180,000$
- Sept. 29: Preferred dividends: ( 12,000 shares . $\$ 2$ ) $=\$ 24,000$ in arrears $+(12,000$ shares . $\$ 2) / 4=$ $\$ 30,000$ current quarter dividend. Common stock dividends: $\$ 40,000 \quad \$ 30,000$ to preferred = $\$ 10,000$. (N ote: Only common shares issued will receive dividends.)
- Oct. 3: $(30,000 / 75,000)=.40 ;(.4 \cdot \$ 540,000)=\$ 216,000 ;(.4 \cdot \$ 900,000)=\$ 360,000$ (To check this, subtract previous payments from total subscriptions receivable.)
- Oct. 23: ( 10,000 shares . $\$ 55$ ) $=\$ 550,000$. Cash received is $\$ 550,000$ • . $93=\$ 511,500$. Credit to Preferred Stock is ( 10,000 shares . $\$ 50$ par value) $=\$ 500,000$.
b.

Account Balances as of September 30, 2017:

| Subscriptions Receivable |  | Common Stock |  | Common Stock Subscribed |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 540,000 | 216,000 |  | 1,225,000 | 360,000 | 900,000 |
|  | 108,000 |  | 144,000 | 180,000 |  |
| $\overline{216,000}$ |  |  | 360,000 |  | $\overline{360,000}$ |
|  |  |  | 162,000 |  |  |
|  |  |  | 180,000 |  |  |
|  |  | 2,071,000 |  |  |  |
| Preferred Stock |  | Paid in Capital in Excess of Par, Preferred Stock |  | Retained Earnings |  |
|  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |
| 150,000 | 750,000 | 12,000 | 60,000 | 40,000 | 710,000 |
|  | 600,000 |  | 48,000 |  | 136,000 |
|  |  |  |  |  | 806,000 |
|  |  |  |  |  |  |

## SOLUTIONS <br> Learning Goal 29, continued

LG 29-8, continued
b.

## Middlebury Corporation Balance Sheet (partial) September 30, 2017

Stockholders' Equity
Paid-in capital
Preferred stock, \$50 par, \$2, 12,000 shares issued. . . . . . . . . . . . . . . \$ 600,000
Paid-in capital in excess of par, preferred . . . . . . . . . . . . . . . . . . . . . 48 48,000 \$ 648,000
Common stock, 194,000 shares issued . . . . . . . . . . . . . . . . . . . . . . . $\quad$ 2,071,000
Common stock subscribed . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . $\quad$ 360,000 2,431,000
Total paid-in capital 3,079,000
Retained earnings 806,000
Less: Subscriptions receivable $(216,000)$
Total stockholders' equity

## C.

Account Balances as of October 31, 2017:

| Subscriptions Receivable |  | Common Stock |  | Common Stock Subscribed |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 540,000 | 216,000 |  | 1,225,000 | 360,000 | 900,000 |
|  | 108,000 |  | 144,000 | 180,000 |  |
|  |  |  | 360,000 |  |  |
| 216,000 |  |  | 162,000 |  | 360,000 |
|  | 216,000 |  | 180,000 | 360,000 |  |
| -0- |  |  | 2,071,000 |  | -0- |
|  |  |  | 360,000 |  |  |
|  |  |  | 2,431,000 |  |  |
|  |  |  |  |  |  |
| Preferred |  | Paid in Capital in |  | Retained |  |
| Stock |  | Preferred Stock |  | Earnings |  |
| 150,000 |  |  |  |  |  |
|  | 750,000 | 12,000 | 60,000 | 40,000 | 710,000 |
|  | 600,000 |  | 48,000 |  | 136,000 |
|  | 500,000 |  | 11,500 |  | 806,000 |
|  | 1,100,000 |  | 59,500 |  | 52,000 |
|  |  |  |  |  | 858,000 |

## SOLUTIONS

LG 29-8, continued

## Middlebury Corporation BalanceSheet (partial) October 31, 2017

Stockholders' Equity
Paid-in capital
Preferred stock, $\$ 50$ par, $\$ 2,22,000$ shares issued. . . . . . . . . . . . . . $\$ 1,100,000$
Paid-in capital in excess of par, preferred. . . . . . . . . . . . . . . . . . . . . . 5 59,500 $\$ 1,159,500$
Common stock, 224,000 shares issued
Total paid-in capital.
Retained earnings . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . .
Total stockholders' equity . . . . . . . . . . . . . . . . . . . . . . . . . . . . . .

The changes between the September 30 and October 31 stockholders' equity are as follows:

- All the remaining subscribed shares were paid. Therefore, the number of common shares issued increased by 30,000 , to a total of 224,000 shares. The Subscriptions Receivable and the Common Stock Subscribed account balances became zero, and the Common Stock account increased by $\$ 360,000$ to $\$ 2,431,000$.
- Retained earnings increased by the October net income of \$52,000.
- The company sold 10,000 shares of preferred stock, which increased stockholders' equity by $\$ 511,500$ and increased the number of preferred shares from 12,000 to 22,000.
- The net effect on the total stockholders' equity between September 30 and October 31 is: $\$ 216,000+\$ 511,500+\$ 52,000=\$ 779,500$.
d.

Common Shares:

| Date | Event | Shares | Total Shares |
| ---: | :--- | :---: | :---: |
| June 30 | Beginning balance |  | 125,000 |
| July 18 | Purchase land | 12,000 | 137,000 |
| Aug. 24 | Subscriptions paid in full | 30,000 | 167,000 |
| Sept. 5 | Preferred shares converted to common | 12,000 | 179,000 |
| Sept. 14 | Subscriptions paid in full | 15,000 | 194,000 |
| Oct. 3 | Subscriptions paid in full | 30,000 | 224,000 |
|  |  |  |  |

Preferred Shares:

| Date | Event | Shares | Total Shares |
| :---: | :--- | :---: | :---: |
| June 30 | Beginning Balance |  | 15,000 |
| Sept. 5 | Preferred shares converted to common | $(3,000)$ | 12,000 |
| Oct. 23 | Sold stock | 10,000 | 22,000 |
|  |  |  |  |

