

## SOLUTIONS

## Learning Goal 17

## Multiple Choice

1. d
2. c
3. d Choice c is incorrect because it says: “. . . at a specific date.” Revenues and expenses are over a period of time.
4. c An expense either decreases an asset or increases a liability (see Learning Goal 6 on page 94).
5. b A revenue either increases an asset or decreases a liability (see Learning Goal 6 on page 94).
6. d Revenues and expenses are combined as the net income or net loss taken from the income statement.
7. b
8. d
9. d
10. c
11. c
12. c
13. d You could also find out the cash balance from the statement of cash flows.
14. c
15. a Because Revenues – Expenses = Net Income. So,  $R - 50,000 = (7,000)$ .  $R = 43,000$ .
16. a Because Beginning Balance +  $(-10,000 - 12,000 + 5,000) = 90,000$ . So, Beginning Balance = 107,000.
17. a Total owner’s equity increased by \$20,000. There are three possible changes on the statement of owner’s equity (net income/(loss), investments, and drawing), but there was no drawing. Therefore, net income is the \$20,000 increase minus the increase caused by the investment of \$5,000 = \$15,000.
18. c
19. c
20. a

## Discussion Questions and Brief Exercises for Learning Goals 12–17

1. The correct format is:

**Name of Company**  
**Name of Financial Statement**  
**Date (or Period, if a change statement)**

2. For change statements (income statement, statement of owner’s equity, and statement of cash flows), the date should identify the period of time and the date on which it ends. For example, “Month Ended December 31, 2008.” “Period Ended” is *not* acceptable because it does not identify the exact period of time. For a balance sheet, the exact date should be used. For example, “December 31, 2008.”
3.
  - Revenue: The dollar amount of sales of goods or services. This increases owner’s equity.
  - Expense: The dollar amount of goods or services used up in operations. This decreases owner’s equity.
4.
  - Assets: Business property, the wealth of the business
  - Liabilities: Debts owed, the first claim on the business wealth
  - Owner’s equity: The residual claim on the wealth left to the owner after all debts are paid
5. The purpose of the income statement is to explain the change in owner’s equity, for a specific period of time, that has resulted only from the business operations. This is accomplished by identifying revenues and expenses and subtracting the total expenses from the total revenues.

## SOLUTIONS

## Learning Goal 17, continued

6. The purpose of the statement of owner's equity is to explain, for a specific period of time, the entire change in owner's equity. This is accomplished by combining the net income or net loss (from the income statement) with the owner's investments and withdrawals.
7. The purpose of the balance sheet is to show the business wealth and the claims on that wealth. This is accomplished by listing all the assets with dollar amounts, the debts owed and their amounts, and then recording the difference between the two totals as owner's equity.
8. The purpose of the statement of cash flows is to explain, for a specific period of time, the change in the amount of cash shown on the balance sheet.
9. The statements are connected. This connection is called "articulation." Specifically:
  - The net income on the income statement is also included on the statement of owner's equity to explain the amount of the change in owner's equity that was caused by the business operations (compared to other changes in owner's equity caused by owner investments or withdrawals).
  - The statement of owner's equity explains all the changes in owner's equity during a period. The ending balance of owner's equity on the statement of owner's equity is also exactly the same amount of owner's equity that appears on the balance sheet.
  - The balance sheet and the income statement are also related. Every item of revenue or expense on the income statement will affect some asset or liability item on the balance sheet by the same amount.
10.
  - Income statement: Revenue increases, and therefore net income increases.
  - Statement of owner's equity: Net income increases, and therefore the ending balance of owner's equity increases.
  - Balance sheet: The asset Cash increases, and owner's equity increases.
11.
  - Income statement: An expense increases, and therefore net income decreases.
  - Statement of owner's equity: Net income decreases, and therefore the ending balance of owner's equity decreases.
  - Balance sheet: The asset Supplies decreases, and owner's equity decreases.
12. Change in owner's equity during September:  $\$259,000 - \$250,000 = \$9,000$  decrease.  
 $\$15,000$  withdrawals –  $\$9,000$  total decrease =  $\$6,000$  difference to account for. This is the net income from the income statement. The owner's withdrawal reduced the owner's equity by  $\$15,000$ , but this decrease of owner's equity was partially offset by  $\$6,000$  of net income, so the total decrease was only  $\$9,000$ . OR:  $259,000 + X - 15,000 = 250,000$ .  $x = 6,000$ .
13. The "change statements" are the income statement, the statement of owner's equity, and the statement of cash flows. The "condition statement" is the balance sheet, which shows wealth and claims on wealth (the financial condition) at a point in time.
14. Four important qualities are:
  - reliability
  - relevance
  - consistency
  - comparability

The qualities of reliability and relevance are most important. If information is not reliable and not relevant, it will never be useful, regardless of other qualities.

**SOLUTIONS****Learning Goal 17, continued****Reinforcement Problems****LG 17-1.**

<b>Item</b>	<b>Balance Sheet</b>	<b>Income Statement</b>	<b>Statement of Owner's Equity</b>	<b>Statement of Cash Flows</b>
Office Supplies	✓			
Service Revenue		✓		
Accounts Payable	✓			
Net Loss		✓	✓	
Withdrawals (Drawing)			✓	
Financing Activities				✓
Bill Jones, Capital—May 31	✓		✓	
Wages Expense		✓		
Net Income		✓	✓	depends on method
Accounts Receivable	✓			
Operating Activities				✓
Investing Activities				✓
Rent Expense		✓		
Bill Jones, Capital—May 1			✓	
Unearned Revenue	✓			
Wages Payable	✓			
Cash	✓			✓
Prepaid Rent Expense	✓			

**SOLUTIONS****Learning Goal 17, continued****LG 17-2.**

	Income Statement		Balance Sheet		
	Revenue	Expense	Asset	Liability	Capital
a. Cash			✓		
b. Accounts Payable				✓	
c. Interest Revenue	✓				
d. Interest Receivable			✓		
e. Fees Earned	✓				
f. Unearned Revenue				✓	
g. Notes Receivable			✓		
h. Wages Payable				✓	
i. Office Supplies			✓		
j. Office Equipment			✓		
k. Office Supplies Expense		✓			
l. Prepaid Insurance			✓		
m. Dee Markowitz, Capital					✓

**LG 17-3.**

Transaction	Effect
a. The owner invests \$7,500 in his business.	+
b. The business earns service revenue and receives \$500 cash.	+
c. The business buys \$100 of office supplies on account.	NE
d. The business buys \$2,000 of equipment for cash.	NE
e. The business pays rent expense of \$1,500.	-
f. The business earns service revenue for \$1,000 on account (accounts receivable).	+
g. The business pays the \$100 account payable for the purchases of supplies.	NE
h. The owner withdraws \$200 cash.	-
i. The business collects \$1,000 cash from the account receivable.	NE

## SOLUTIONS

## Learning Goal 17, continued

## LG 17-4.

	Balance Sheet			Income Statement		Statement of Owner's Equity		Statement of Cash Flows	
	Asset	Liability	Owner's Equity	Revenue	Expense	Net Income/ Investment	(Net Loss/ Withdrawal)	Source of Cash	(Use of Cash)
(1)	\$40,000					\$40,000		\$40,000	
(2)	1,800	\$1,800							
(3)	(1,100)								(\$1,100)
	1,100								
(4)	3,300			\$3,300					
(5)	2,850	2,850						2,850	
(6)	1,650			1,650				1,650	
(7)		700			\$700				
(8)	(200)				200				(200)
(9)	(820)				820				
(10)	(2,100)						(2,100)		(2,100)
(11)	(1,700)								
	1,700							1,700	
(12)		(1,140)		1,140					
(13)	(700)	(700)							(700)
(14)		3,100			3,100				
(15)						1,270			
(16)			\$39,170						
	<b>\$45,780</b>	<b>\$6,610</b>	<b>\$39,170</b>	<b>\$6,090</b>	<b>\$4,820</b>			<b>\$46,200</b>	<b>(\$4,100)</b>

- The owner's equity is  $\$45,780 - \$6,610 = \$39,170$
- The net income is  $\$6,090 - \$4,820 = \$1,270$
- The net change in the cash balance is  $\$46,200 - \$4,100 = \$42,100$

## SOLUTIONS

## Learning Goal 17, continued

## LG 17-5.

Balance Sheet Errors	Income Statement Errors	Statement of Owner's Equity Errors
<ul style="list-style-type: none"> <li>■ Assets are in the wrong order. Accounts receivable and supplies should come after cash.</li> <li>■ Addition error. Assets total \$27,125.</li> <li>■ The correct terminology to use for a financial statement is “liabilities,” not “debts.”</li> <li>■ “Total” is used instead of “Total Assets” and “Total Liabilities.”</li> <li>■ “Capital” is misspelled with an “o.”</li> <li>■ The owner’s equity cannot be \$24,485 if the balance sheet balances but the assets were added incorrectly.</li> <li>■ Dollar signs should only be used for the first number in a column and a final total in a column.</li> </ul>	<ul style="list-style-type: none"> <li>■ Date is incorrect. The income statement is for a period, and the date should read “For the Month Ending November 30, 2008.” (Making a mistake in the title does not look good!)</li> <li>■ Unearned revenues is a liability, not a revenue. The \$3,500 should be part of the liabilities on the balance sheet.</li> <li>■ Prepaid expenses are an asset, not an expense. The \$4,100 should be an asset on the balance sheet.</li> <li>■ “Profit” is not the correct terminology for an income statement. The correct term is “Net Income.” The correct net income is \$14,860.</li> </ul>	<ul style="list-style-type: none"> <li>■ The date is wrong again! The “period ending . . .” is not correct because a period can be any length of time, and this statement is for a month. It should read “For the month ending . . .”</li> <li>■ Net income of \$14,620 is not the same number as the net income on the income statement. The difference is \$360.</li> <li>■ The ending capital balance of \$24,945 is not the same balance as the amount of \$24,485 on the balance sheet. These numbers must be the same.</li> </ul>
<p><i>Why all these “detail” corrections?</i></p> <ul style="list-style-type: none"> <li>■ People must have total confidence in the complete reliability of financial statements.</li> <li>■ Financial statements must be useful and as easy as possible to read. This includes every detail, such as making sure that terminology and format are accurate, clear, and consistent. This takes practice, and now is a good time to begin with the basics.</li> </ul>		
<p><i>Final score? I count 14 mistakes! 30 possible – 14 wrong = a final score of 16.</i></p>		

**SOLUTIONS**

## Learning Goal 17, continued

## LG 17-6.

	Mheta Tarsal Medical School	Lynne Guinni Cooking College	Pop Flies Baseball Clinic	Manuel Dexterity Acting Academy
<b>JANUARY 1, 2008</b>				
Assets	\$ 75,000	\$100,000	<b>g. \$ 46,000</b>	\$120,000
Liabilities	\$ 15,000	\$ 20,000	\$ 15,000	<b>j. \$ 28,000</b>
Owner's Equity	<b>a. \$ 60,000</b>	<b>d. \$ 80,000</b>	<b>h. \$ 31,000</b>	<b>k. \$ 92,000</b>
<b>DECEMBER 31, 2008</b>				
Assets	\$120,000	\$112,000	\$ 51,000	<b>l. \$ 72,000</b>
Liabilities	\$ 40,000	<b>e. \$ 12,000</b>	\$ 1,000	\$ 50,000
Owner's Equity	<b>b. \$ 80,000</b>	<b>f. \$100,000</b>	<b>i. \$ 50,000</b>	\$ 22,000
<b>CHANGE IN OWNER'S EQUITY DURING 2008</b>				
Owner Investment	<b>c. \$ 8,000</b>	\$ 12,000	\$ -0-	\$ 10,000
Revenues	\$ 52,000	\$ 82,000	\$ 49,000	\$ 98,000
Expenses	\$ 35,000	\$ 71,000	\$ 22,000	\$178,000
Withdrawals	\$ 5,000	\$ 3,000	\$ 8,000	\$ -0-

## LG 17-7.

<b>Wendy Monahan Real Estate Company</b>		
<b>Income Statement</b>		
<b>For the Year Ended December 31, 200X</b>		
Service revenue		\$221,800
Expenses		
Wages expense	\$108,000	
Rent expense	24,000	
Telephone expense	2,450	
Interest expense	2,100	
Insurance expense	780	
Travel expense	<u>650</u>	
Total expenses		<u>137,980</u>
Net income		<u><u>\$83,820</u></u>

**SOLUTIONS****Learning Goal 17, continued****LG 17-7, continued**

**Wendy Monahan Real Estate Company**  
**Statement of Owner's Equity**  
**For the Year Ended December 31, 200X**

W. Monahan, Capital January 1	\$183,470
Add: Investments	18,000
Net income	<u>83,820</u>
	285,290
Less: Withdrawals	<u>55,000</u>
W. Monahan, Capital December 31	<u><u>\$230,290</u></u>

**Wendy Monahan Real Estate Company**  
**Balance Sheet**  
**December 31, 200X**

**Assets**

Cash	\$37,100
Accounts receivable	47,500
Office supplies	2,000
Prepaid insurance	3,660
Computer equipment	9,000
Office furniture	5,750
Land	<u>185,200</u>
Total assets	<u><u>\$290,210</u></u>

**Liabilities**

Wages payable	\$7,500
Accounts payable	24,220
Unearned revenue	3,200
Notes payable	<u>25,000</u>
Total liabilities	59,920

**Owner's equity**

Wendy Monahan, Capital	230,290
Total liabilities and Owner's Equity	<u><u>\$290,210</u></u>

*Note:* You may have the liabilities in a different order. Also you might have put furniture before equipment on the asset side.

**SOLUTIONS****Learning Goal 17, continued**

LG 17-8.

**Robert Jimenez Company**  
**Income Statement**  
**For the Year Ended December 31, 2008**

Revenue		
Fees earned		\$84,000
Expenses		
Rent expense	\$18,400	
Travel expense	2,050	
Utilities expense	1,000	
Insurance expense	<u>3,000</u>	
Total expenses		<u>24,450</u>
Net income		<u>\$59,550</u>

**Robert Jimenez Company**  
**Balance Sheet**  
**December 31, 2008**

<b>Assets</b>		<b>Liabilities</b>	
Cash	\$38,000	Accounts payable	\$ 1,150
Accounts receivable	12,000	Notes payable	10,000
Prepaid insurance expense	2,500	Unearned fees revenue	<u>3,800</u>
Equipment	15,000	Total liabilities	14,950
		<b>Owner's Equity</b>	
		Robert Jimenez, Capital	<u>52,550</u>
Total assets	<u>\$67,500</u>	Total liabilities and owner's equity	<u>\$67,500</u>

**Notes**

- Owner's equity is calculated as  $\$67,500 - \$14,950 = \$52,550$ .
- \$ signs are generally used at the top of a column and at the total of the column.
- Always double-check that the title is correctly written, and especially that the date is proper.

**SOLUTIONS****Learning Goal 17, continued****LG 17-8, continued**

<b>Robert Jimenez Company</b>		
<b>Statement of Owner's Equity</b>		
<b>For the Year Ended December 31, 2008</b>		
R. Jimenez, Capital, January 1, 2008		\$ -0-
Add: Initial investment by R. Jimenez	\$10,000	
Net income	<u>59,550</u>	
Subtotal		\$69,550
Less: Withdrawals		<u>(17,000)</u>
R. Jimenez, Capital, December 31, 2008		<u><u>\$52,550</u></u>

Robert could probably get a loan from a bank. The balance sheet shows about \$50,000 of cash or items that will quickly turn into cash (\$38,000 + \$12,000), while there is a need for cash of only about \$11,150 assuming that the note payable is due in the near future. Also, the business is very profitable (\$84,000 revenues and only \$24,450 of expense) which indicates a reliable, continuing business in the future. A bank would probably loan Robert something in the range of 50% to 70% of the capital minus non-cash assets such as equipment or land.

**LG 17-9.**

<b>Sanderson Ecology Services Company</b>		
<b>Income Statement</b>		
<b>For the Year Ended December 31, 2008</b>		
Revenue		
Fees earned		\$ 122,500
Expenses		
Wages expense	\$104,300	
Rent expense	16,500	
Travel expense	8,150	
Advertising expense	3,300	
Utilities expense	1,400	
Supplies expense	<u>750</u>	
Total expenses		<u>134,400</u>
(Net loss)		<u><u>\$(11,900)</u></u>

## SOLUTIONS

## Learning Goal 17, continued

## LG 17-9, continued

<b>Sanderson Ecology Services Company</b>			
<b>Balance Sheet</b>			
<b>December 31, 2008</b>			
<b>Assets</b>		<b>Liabilities</b>	
Cash	\$199,300	Accounts payable	\$23,750
Accounts receivable	43,080	Unearned fees revenue	12,300
Supplies	3,800	Total liabilities	<u>36,050</u>
Prepaid insurance	1,500		
Office equipment	25,600		
		<b>Owner's Equity</b>	
		Dave Sanderson, Capital	237,230
Total assets	<u>\$273,280</u>	Total liabilities and owner's equity	<u>\$273,280</u>

*Note:* Owner's equity has to be calculated as assets minus liabilities because no other information is available.

<b>Sanderson Ecology Services Company</b>			
<b>Statement of Owner's Equity</b>			
<b>For the Year Ended December 31, 2008</b>			
Dave Sanderson, Capital, January 1, 2008		(no prior balance)	\$ —0—
Add: Initial investment by Dave Sanderson		(fill in)	250,000
Less: Withdrawals		(calculate as last number)	(870)
Net (loss)		(fill in)	<u>(11,900)</u>
	Subtotal		(12,770)
Dave Sanderson, Capital, December 31, 2008		(calculate from b/s totals)	<u>\$237,230</u>

Withdrawals can be calculated by filling in the items on the statement of owner's equity and using the ending owner's equity on the balance sheet for the ending owner's equity on the statement of owner's equity. (Of course, you must remember that information is missing here—otherwise, the statements would be prepared independently and used to verify each other.)

The amount of the withdrawals can now be determined by calculating the difference between the \$250,000 and the ending owner's equity balance of \$237,230 less the loss of 11,900. Or, you can make the statement of owner's equity into the form of an equation:

$$\begin{aligned}
 \$0 + \$250,000 - X - \$11,900 &= \$237,230 \\
 - X &= -\$870 \\
 X &= \$870
 \end{aligned}$$

## SOLUTIONS

## Learning Goal 17, continued

## LG 17-10.

December 31, 2007	
Cash	\$25,000
Accounts Receivable	\$12,000
Supplies	\$4,000
Equipment	\$40,000
Accounts Payable	\$5,000
J. Dunfield, Capital	<u>\$76,000</u>

December 31, 2008	
Cash	\$39,000
Accounts Receivable	<u>\$28,000</u>
Supplies	\$5,000
Equipment	\$41,000
Accounts Payable	\$20,000
J. Dunfield, Capital	<u>\$93,000</u>

*2007 owner's equity:* Total assets of \$81,000 – total liabilities of \$5,000 = \$76,000 owner's equity.

*2008 owner's equity:* 2007 owner's equity of \$76,000 + year 2008 income of \$17,000 = \$93,000. 2007 income is not relevant, because it was already part of the December 31, 2007 owner's equity.

*2008 Accounts Receivable:* Total liabilities and owner's equity = \$20,000 + \$93,000 = \$113,000. Therefore, total assets must also be \$113,000. A/R = \$113,000 – \$39,000 – \$5,000 – \$41,000 = \$28,000.

## LG 17-11.

- a. (1) Correct classification was important because if any other items had been used for the \$1,000, both the balance sheet and income statement would show incorrect balances in some of the items. This in turn will mislead whoever uses the financial statements for making decisions.

Some examples of possible misclassifications:

- Some other asset could have been used instead of supplies. This would understate the other asset and overstate Supplies. This would also affect the income statement by showing the wrong type of expense item. Example: Cash or Accounts Receivable would be understated and Supplies overstated.
- A liability could have been used instead of supplies. To keep the equation in balance, this would cause liabilities to be overstated. Example: \$1,000 of expense is shown on the income statement and Unearned Revenue is increased. Of course, this would be a very misleading error to a user of the financial statements.
- The classification only involves assets. Therefore, the expense would be understated on the income statement, and the assets would be misstated on the balance sheet. Example: Supplies are decreased and Accounts Receivable are increased.
- The classification is between assets and liabilities. Again, the expense is understated on the income statement, and both the assets and liabilities on the balance sheet are incorrect. Example: Supplies decrease and Unearned Revenue decreases.
- The classification is between only income statement items. The effect would be to misstate the items on the income statement and the items on the balance sheet. Example: On the income statement Supplies expense is increased, and Fees Earned is increased by the same amount. This overstates both items and overstates the Supplies shown on the balance sheet.

**SOLUTIONS****Learning Goal 17, continued****LG 17-11, continued**

You can see that there are many possible misclassifications and that they can seriously affect the financial statements in many ways. Hopefully this emphasizes for you the importance of proper classification.

- (2) This valuation error would have a very serious result because it changes the amount of the expense and therefore net income or loss, and it also affects the assets. Specifically, the Supplies Expense would now become \$3,000 and the net loss would increase to \$2,500! As well, the balance sheet would now show only \$1,000 of Supplies. This is a big difference from what the proper amounts really are.
  - (3) This is a timing issue. Intentionally reporting the supplies being used in January instead of December is a way to overstate the December net income and overstate the total assets on the balance sheet. In fact, on the income statement instead of a net loss of \$500 there would be a net income of \$500! This is because the Supplies Expense would not have been recorded. Also, the total assets on the balance sheet would be overstated by \$1,000 because the Supplies would be overstated by \$1,000. *And* in January the effect would be reversed, thereby creating errors in the January balance sheet and income statement. Timing can seriously affect both the income statement and the balance sheet!
- b. This involves both classification and valuation. By recording the item as Fees Earned, the revenue becomes overstated and changes the net loss into net income of \$14,500. The valuation is also incorrect because we know that the correct value of the transaction was really \$5,000.