## Chapter 1

## Introduction to Accounting and Business <br> Study Guide Solutions

## Fill-in-the-Blank Equations

1. Owner's equity
2. Net income or net loss
3. Net income (or subtract if a net loss)
4. Cash flows from investing activities
5. Ratio of liabilities to owner's equity

## Exercises

1. Determine if each of the following businesses is an example of a manufacturing, service, or merchandising business.
a. Service
b. Merchandising
c. Manufacturing
2. Are the following examples of a service, manufacturing, or merchandising business?
a. Merchandising
b. Service
c. Manufacturing
3. Determine if each of the following is an example of a manufacturing, service, or merchandising business.
a. Merchandising
b. Manufacturing
c. Service

Strategy: Merchandising businesses typically sell products produced by others for profit. Manufacturing businesses earn profit by selling products to others. Service businesses complete a task through a process for clients.
4. Are the following examples of managerial or financial accounting?
a. Financial accounting
b. Managerial accounting
c. Financial accounting
5. Are the following stakeholders internal or external users in a company? Would each use managerial or financial accounting?
a. External; financial accounting
b. Internal; managerial accounting
c. External; financial accounting
6. Would each of the following be an example of managerial or financial accounting?
a. Financial
b. Managerial
c. Managerial

Strategy: Managerial accounting is used by internal users of the company, such as managers. External users utilize financial accounting to base decisions on the financial information given.
7. Determine if each of the following is a characteristic of a proprietorship, partnership, corporation, or limited liability company.
a. Corporation
b. Proprietorship
c. Limited liability company
d. Partnership
8. Determine the type of business entity from the following independent characteristics.
a. Proprietorship
b. Corporation
c. Partnership
d. Limited liability company
9. Do the following separate qualities describe a proprietorship, partnership, corporation, or limited liability company?
a. Limited liability company
b. Corporation
c. Proprietorship
d. Partnership

Strategy: A sole proprietorship has only one owner, who has full liability for the company. A partnership has two or more partners, who combine resources for profit and usually have liability. A corporation acts as a separate entity, meaning it pays its own taxes and is liable for itself. A limited liability company gives owners limited liability but still has partnership taxation.
10. Determine the accounting concept that relates to each of the following descriptions.
a. Business entity concept
b. Cost concept
c. Objectivity concept
11. Which accounting concept do the following characteristics define?
a. Unit of measure concept
b. Matching concept
c. Business entity concept
12. Which accounting concept relates to the following examples?
a. Cost concept
b. Objectivity concept
c. Matching concept

Strategy: Using the basic accounting concepts ensures that the financial statements are fair and accurate.
13. If a business has the following balances, how much is total liabilities?
$\$ 18,975 ; \$ 21,575=\$ 18,975+\$ 2,600$
14. During the first year, Fox Supply has total assets of $\$ 15,000$ and liabilities of $\$ 10,875$. During the second year, assets increase by $\$ 1,375$, and owner's equity increases by $\$ 950$. How much is total liabilities at year-end?

Liabilities for the second year equaled $\$ 11,300(\$ 16,375-\$ 5,075)$.
During the first year, the account balances show:

| Assets | $\$ 15,000$ | Liabilities |
| :--- | :--- | ---: |
|  | Owner's Equity | $\$ 10,875$ |
|  |  | $\$ 4,125$ |

After the second year of operations, the account balances show:

| Assets | $\$ 16,375$ | Liabilities |
| :--- | :--- | :--- |
|  | Owner's Equity | $\$ 11,300$ |
|  |  | $\$ 5,075$ |

15. Shell Company's Year 5 balance sheet had the following balances: owner's equity of $\$ 4,600$ and liabilities of $\$ 3,800$. During the next year, assets increased by $\$ 300$, and liabilities decreased by $\$ 150$. What was the change in owner's equity?

The change in owner's equity is $\$ 450(\$ 5,050-\$ 4,600)$.
After Year 5, the balances show:

| Assets | $\$ 8,400$ | Liabilities |
| :--- | :--- | :--- |
|  | Owner's Equity | $\$ 3,800$ |
|  |  | $\$ 4,600$ |

At Year 6 year-end, the balances show:
Assets $\quad \$ 8,700$ Liabilities $\$ 3,650$

Strategy: Liabilities and owner's equity combine to equal assets, so begin by solving the unknown amount at the beginning of the period. Next, find the ending amounts by adding or subtracting the changes given. The amounts should still show that assets equal the sum of liabilities and owner's equity.
16. Determine the dollar effect on the accounting equation (increase or decrease assets, liabilities, or owner's equity) from the following separate transactions:
a. Increase assets and owner's equity by \$4,000
b. Increase assets and liabilities by $\$ 1,600$
c. Decrease assets and liabilities by $\$ 1,300$
17. What is the dollar effect on the accounting equation (increase or decrease assets, liabilities, or owner's equity) from the following independent transactions?
a. Decrease assets and owner's equity by $\$ 800$
b. Increase assets and owner's equity by $\$ 290$
c. Decrease assets and owner's equity by $\$ 1,400$
18. Apple Tree had the following balances when formed:

Assets Liabilities

| Cash | $\$ 2,400$ | Notes payable | $\$ 1,500$ |
| :--- | ---: | :--- | ---: |
| Equipment | $\underline{1,300}$ | Owner's Equity |  |
|  |  | Johnny, capital | $\underline{2,200}$ |
| Total assets | $\underline{\$ 3,700}$ | Total liabilities and owner's equity | $\underline{\$ 3,700}$ |

During the first year of operations, the following transactions occurred:

- Collected $\$ 12,000$ cash in rental revenue.
- Made a $\$ 2,000$ investment in equity securities using $\$ 1,000$ cash and a $\$ 1,000$ note payable.
- Incurred and paid \$2,000 in cash for utilities expense, \$3,500 in rent expense, and $\$ 2,200$ in wages expense.
- Johnny, Apple Tree's owner, withdrew $\$ 200$ in cash from the business and contributed \$1,500 in equipment.

Show the cumulative effect on the accounting equation from the transactions for the year.

|  | Assets | = | Liabilities | + | Rental Revenue | Owner's Equity |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Cash | Equipment | Investments | Notes Payable | Johnny, Capital |  | Utilities Exp. | Rent Exp. | Wages Exp. |
| 2,400 | 1,300 |  | 1,500 | 2,200 |  |  |  |  |
| 12,000 |  |  |  |  | 12,000 |  |  |  |
| $(1,000)$ |  | 2,000 | 1,000 |  |  |  |  |  |
| $(7,700)$ |  |  |  |  |  | $(2,000)$ | $(3,500)$ | $(2,200)$ |
| (200) |  |  |  | (200) |  |  |  |  |
|  | 1,500 |  |  | 1,500 |  |  |  |  |
| 5,500 | 2,800 | 2,000 | 2,500 | 3,500 | 12,000 | $(2,000)$ | $(3,500)$ | $(2,200)$ |

Strategy: First, determine which accounts the transaction affects and if the account is an asset, liability, or owner's equity account. Owner's equity contains net income, which means revenues and expenses transactions will be included. Next, determine if the amount will increase or decrease the account. The accounting equation should still balance after showing the increases and/or decreases.
19. Determine to which financial statement the following descriptions relate.
a. Balance sheet
b. Statement of cash flows
c. Income statement
d. Statement of owner's equity
20. Which financial statement is associated with each of the descriptions below?
a. Statement of cash flows
b. Balance sheet
c. Income statement
d. Statement of owner's equity
21. Which financial statement is associated with each of the descriptions below? Also, put the financial statements in order as they should be prepared.
a. Statement of cash flows (4th)
b. Balance sheet (3rd)
c. Statement of owner's equity (2nd)
d. Income statement (1st)

Strategy: To prepare financial statements in the correct order, it is important to know which amounts flow to the next financial statement to be prepared. The income statement will show net income or loss from the revenues and expenses. The statement of owner's equity details the changes in an owner's investment in the company. Because the owner's investment produces the income, net income should be included. The yearend owner's equity flows to the balance sheet. The statement of cash flows includes cash and all other activities to arrive at the year-end cash balance and to match the balance sheet.
22. Given the following transactions for the year, prepare the income statement for World Co. for the year ended December 31, $20 Y 5$.

- Rental revenue of $\$ 15,000$
- Wages expense of $\$ 3,500$
- Rental expense of $\$ 5,300$
- Miscellaneous expense of $\$ 1,200$

| World Co. <br> Income Statement |  |
| :--- | ---: | ---: |
| For the Year Ended December 31, 20Y5 |  |

23. Create World Co.'s statement of owner's equity using net income from Exercise 22. At the beginning of the year, John Green's owner capital account had a balance of $\$ 12,000$, with the following changes during the year:

- Additional cash contributions of $\$ 1,500$
- Cash withdrawals of $\$ 2,100$

> World Co.
> Statement of Owner's Equity
> For the Year Ended December 31, 20 Y 5

John Green, capital, January 1, 20Y5 \$12,000
Contributions
Net income for the year
\$ 1,500
Withdrawals
5,000

Increase in owner's equity
$(2,100)$

John Green, capital, December 31, 20Y5
4,400
\$16,400
24. Using the information from Exercise 23, prepare World Co.'s balance sheet if the company had the following balances:

- Accounts payable: $\$ 2,300$
- Inventory: \$5,000
- Accounts receivable: $\$ 1,400$
- Cash: $\$ 1,500$
- Property, plant, and equipment: $\$ 12,000$
- Notes payable: \$1,200


## World Co. <br> Balance Sheet <br> December 31, $20 Y 5$

Assets
Cash
Accounts receivable Inventory
PP\&E
Total assets

| $\$ 1,500$ | Accounts payable | $\$ 2,300$ |
| ---: | :--- | ---: |
| 1,400 | Notes payable | 1,200 |
| 5,000 |  |  |
| 12,000 | John Green, capital | $\underline{16,400}$ |
| $\mathbf{\$ 1 9 , 9 0 0}$ | Total liabilities and owner's equity | $\underline{\$ 19,900}$ |

25. Prepare World Co.'s statement of cash flows using the year-end amount from Exercise 24. During the first year of operations, the following activities occurred:

- Cash revenue of $\$ 13,600$
- Cash contribution from owner of \$1,500
- Cash payments for expenses of $\$ 10,000$
- Cash received from notes payable of $\$ 1,800$
- Purchase of new equipment for $\$ 3,300$
- Cash withdrawals by owner of \$2,100


## World Co.

## Statement of Cash Flows

For the Year Ended December 31, 20Y5
Cash flows from operating activities:
Cash received from customers $\$ 13,600$
Cash payments for expenses $\quad(10,000)$
Net cash flow from operating activities \$3,600
Cash flows from investing activities:
Cash payments for equipment
Cash flows from financing activities:

| Cash received from owner as investment | \$ 1,500 |  |
| :---: | :---: | :---: |
| Cash received from notes payable | 1,800 |  |
| Cash withdrawals by owner | $(2,100)$ |  |
| Net cash flow from financing activities |  | 1,200 |
| Net increase in cash during year |  | \$ 1,500 |
| Cash as of January 1, 20Y5 |  | 0 |
| Cash as of December 31, 20 Y |  |  |

26. If the following transactions occurred for the year June 30, 20Y5, what is Purple Sun's net income or net loss? Find the amount using an income statement.

- Earned fees of $\$ 21,700$
- Utilities expense of $\$ 2,300$
- Miscellaneous expense of \$4,300
- Interest expense of $\$ 1,200$
- Wages expense of $\$ 4,200$


## Purple Sun <br> Income Statement <br> For the Year Ended June 30, 20 Y5

| Fees earned |  | $\$ 21,700$ |
| :--- | ---: | ---: |
| Expenses: |  |  |
| $\quad$ Wages expense | 2,200 |  |
| $\quad$ Utilities expense | 1,200 |  |
| $\quad$ Interest expense | $\underline{4,300}$ |  |
| $\quad$ Miscellaneous expense |  | $\underline{12,000}$ |
| $\quad$ Total expenses | $\underline{\$ 9,700}$ |  |

27. Using the net income found in Exercise 26 and the information below, create Purple Sun's statement of owner's equity. The total owner's equity at the beginning of the year equaled $\$ 16,700$.

- Fred D. (owner) contributed cash of $\$ 2,300$.
- Fred D. made a $\$ 6,200$ withdrawal.


# Purple Sun <br> Statement of Owner's Equity <br> For the Year Ended June 30, 20Y5 

Fred D., capital, July 1, 20 Y4
\$16,700
Contributions $\$ 2,300$
Net income for the year 9,700
Withdrawals
$(6,200)$
Increase in owner's equity
Fred D., capital, June 30, 20 Y 5
28. Create Purple Sun's balance sheet using the amounts found in Exercise 27 and the following account balances:

- Property, plant, and equipment: $\$ 18,800$
- Cash: \$6,200
- Accounts payable: \$4,000
- Investments in securities: \$1,500


## Purple Sun

Balance Sheet
June 30, $20 Y 5$
Assets Liabilities

| Cash | $\$ 6,200$ | Accounts payable | $\$ 4,000$ |
| :--- | ---: | :--- | ---: |
| Investments in securities | 1,500 | Owner's Equity |  |
| PP\&E | $\underline{18,800}$ | Fred D., capital | $\underline{22,500}$ |
| Total assets | $\underline{\$ 26,500}$ | Total liabilities and owner's equity | $\underline{\$ 26,500}$ |

29. At the beginning of the year, Purple Sun had a cash balance of $\$ 3,100$. Prepare the statement of cash flows given the following information and the ending cash balance from Exercise 28.

- Purchased land for $\$ 12,000 ; \$ 6,000$ cash and issued $\$ 6,000$ long-term note payable to the seller
- Cash received from customers, $\$ 20,000$
- Cash received from owner, $\$ 2,300$
- Cash withdrawal made by owner, $\$ 6,200$
- Cash payments for expenses, \$7,000

Purple Sun
Statement of Cash Flows
For the Year Ended June 30, 20 Y5
Cash flows from operating activities:
Cash received from customers \$20,000
Cash payments for expenses $\quad(7,000)$
Net cash flow from operating activities
\$13,000
Cash flows from investing activities:
Cash payments for land $(6,000)$
Cash flows from financing activities:
Cash received from owner as investment
\$ 2,300
Cash withdrawal by owner $(6,200)$
Net cash flow from financing activities
Net increase in cash during year
Cash as of July $1,20 Y 4$
Cash as of June 30, 20 Y5
S 6,200
30. With the following transactions, create Polka Dot's income statement for the year ended September 30, 20 Y 5.

- Interest revenue of $\$ 23,000$
- Interest expense of $\$ 14,000$
- Rent expense of $\$ 4,000$
- Legal expense of $\$ 1,400$
- Wages expense of $\$ 3,200$
- Miscellaneous expense of $\$ 2,200$

| Polka Dot <br> Income Statement |  |  |
| :--- | ---: | ---: |
| For the Year Ended September 30, 20Y5 |  |  |$\quad \$ 23,000$

Strategy: The title should include the name of the company, the title of the financial statement (Income Statement), and the period of time that the financial statement covers (for the year ended, for the period ended). First, begin with revenue. Expenses come after the revenue to show that the expenses were incurred during the same time to produce the revenue. Subtract the total expenses from total revenue to find the net profit (positive amount) or net loss (negative amount).
31. Polka Dot's owner, Ellen Pink, had beginning capital in the company of $\$ 3,000$ for the year. During the year, she made a withdrawal of $\$ 1,000$. Prepare the statement of owner's equity for the year using the net income and information from Exercise 30.

## Polka Dot <br> Statement of Owner's Equity <br> For the Year Ended September 30, $20 Y 5$

| Ellen Pink, capital, October 1, 20Y4 |  | $\$ 3,000$ |
| :--- | ---: | ---: |
| Net loss | $\$(1,800)$ <br> $(1,000)$ |  |
| Withdrawal |  | $\underline{(2,800)}$ |
| Decrease in owner's equity |  | $\underline{\$ 1200}$ |
| Ellen Pink, capital, September 30, 20Y5 |  |  |

Strategy: The title should include the name of the company, the title of the financial statement (Statement of Owner's Equity), and the period of time that the financial statement covers (for the year ended, for the period ended). First, begin with the capital investment at the beginning of the year. Next, find the net increase or decrease for the year from the activity for the year. The net increase or decrease is added to the beginning capital amount to calculate the ending balance.
32. Using the ending capital balance from Exercise 31, create Polka Dot's balance sheet. The company had the following ending account balances:

- Cash: $\$ 1,900$
- Investment in securities: \$22,000
- Notes payable: $\$ 20,000$
- Property, plant, and equipment: \$5,000
- Interest payable: \$4,200
- Accounts payable: $\$ 4,500$

Polka Dot<br>Balance Sheet<br>September 30, $20 Y 5$

|  | Assets |  |  |
| :--- | ---: | :--- | ---: |
|  |  | Liabilities |  |
| Cash | 1,900 | Accounts payable | $\$ 4,500$ |
| Investments in securities | 22,000 | Interest payable | 4,200 |
| PP\&E | 5,000 | Notes payable | 20,000 |
|  |  | Owner's Equity |  |
|  |  | Ellen Pink, capital |  |
| Total assets | $\underline{\$ 28,900}$ | Total liabilities and owner's equity | $\underline{\$ 28,900}$ |
|  |  |  |  |

Strategy: The title should include the name of the company, the title of the financial statement (Balance Sheet), and the date that the account balances are measured. The balance sheet shows amounts as of a certain date. First, find the sum of the total assets. Next, calculate total liabilities. Last, add the total owner's equity, carrying over the capital measured for the year-end from the statement of owner's equity.
33. At the beginning of the year, Polka Dot's bank statement showed a balance of $\$ 5,200$ for cash. With the transactions below, reconcile the beginning to ending amount from Exercise 32 using a statement of cash flows.

- Cash received from interest, $\$ 20,000$
- Cash paid for interest, $\$ 12,000$
- Cash paid for expenses, $\$ 17,300$
- Withdrawal by owner, \$1,000
- Cash paid for new building, \$5,000
- Cash received from customers, \$12,000


## Polka Dot

## Statement of Cash Flows

For the Year Ended September 30, 20 Y5

| Cash flows from operating activities: |  |  |
| :---: | :---: | :---: |
| Cash received from customers | \$ 12,000 |  |
| Cash payments for expenses | $(17,300)$ |  |
| Net cash flow from operating activities |  | \$(5,300) |
| Cash flows from investing activities: |  |  |
| Purchase of building |  | $(5,000)$ |
| Cash flows from financing activities: |  |  |
| Interest received | \$ 20,000 |  |
| Interest paid | $(12,000)$ |  |
| Withdrawal by owner | $(1,000)$ |  |
| Net cash flow from financing activities |  | 7,000 |
| Net decrease in cash during year |  | \$(3,300) |
| Cash as of October 1, $20 Y 4$ |  | 5,200 |
| Cash as of September 30, $20 Y 5$ |  | \$ 1,900 |

Strategy: The title should include the name of the company, the title of the financial statement (Statement of Cash Flows), and the period of time that the financial statement covers (for the year ended, for the period ended). The first section should be Cash flows from operating activities, which are the main operations of the business. The second section is Cash flows from investing activities, which includes activities for longterm investments. The last section is Cash flows from financing activities, which includes activities used to finance the operations of the company.
34. Given the following company's balances for liabilities and owner's equity, calculate the ratio of liabilities to owner's equity. Round answers to two decimal places. Indicate the company with the lowest credit risk for creditors and the company with the highest risk.

| Company | Liabilities | Owner's Equity | Ratio |
| :--- | ---: | :---: | ---: |
| World Co. | $\$ 3,500$ | $\$ 16,400$ | 0.21 |
| Purple Sun | 4,000 | 22,500 | 0.18 |
| Polka Dot | 28,700 | 200 | 143.50 |

Purple Sun's creditors have the lowest risk, while Polka Dot's creditors have the highest risk.
35. Blue Company's account balances for liabilities and owner's equity for the past two years are shown below. Calculate the ratio of liabilities to owner's equity, rounding to two decimal places. Then, indicate if the company's creditors are more or less at risk.

|  | $\frac{\mathbf{1 2 / 3 1 / 2 0 Y 6}}{}$ | $\mathbf{1 2 / 3 1 / 2 0 Y 5}$ |
| :--- | ---: | ---: |
| Liabilities | $\$ 15,000$ | $\$ 14,750$ |
| Owner's equity | $\$ 14,800$ | $\$ 14,000$ |
| Ratio | 1.01 | 1.05 |

Because the ratio decreased from 20 Y 5 to 20Y6, the company's creditors are less at risk. The company's creditors are more likely to receive their investment after paying the liabilities.
36. Calculate the ratio of liabilities to owner's equity with the information given for Broom Co., rounding to two decimal places. Then, indicate if the company's creditors are more or less at risk than the previous year.

|  | $\frac{\mathbf{1 2 / 3 1 / 2 0 Y 6}}{}$ | $\frac{\mathbf{1 2 / 3 1 / 2 0 Y 5}}{}$ |  |
| :--- | ---: | ---: | ---: |
| Liabilities | $\$ 90,250$ |  | $\$ 87,000$ |
| Owner's equity | $\$ 60,000$ | $\$ 67,000$ |  |
| Ratio | 1.50 | 1.30 |  |

Because the company's ratio of liabilities to owner's equity increased, the company's creditors are more at risk. The creditors are less likely to receive the amount they invested after repayment of the company's liabilities.

Strategy: The ratio of liabilities to owner's equity indicates the amount of risk creditors may have to receive the amount of their investment. The higher the ratio, the less likely the owners will receive their repayment. The company will have more liabilities to repay before paying the owner investments because the owners are paid last.

