

Introduction to the financial Statements and Stephen's Sweet Shop Example

General Purpose Financial Statements

(required under GAAP)

- Balance Sheet or Statement of Financial Position
- Income Statement or Statement of Operations, Statement of Earnings, Statement of Profit and Loss, P&L Statement
- Statement of Cash Flows

An Optional Financial Statement

(not required under GAAP but typically provided)

- Statement of Retained Earnings/Owners' Equity or Statement of Changes in Retained Earnings/Owners' Equity

Supplemental and explanatory footnotes to the financial statements are also required under GAAP to provide additional information to statement users.

Balance Sheet

Basic Accounting Equation

Assets = **Liabilities** + **Owners' Equity**

Business = **Amount** + **Amount From**
Resources = **From Creditors** **Owners**

\$ 100,000 = **\$60,000** + **\$40,000**

Assets

Resources (property or rights) that are owned or controlled by a company and provide probable future economic benefit.

Examples: Cash

Inventory (merchandise purchased and held for resale)

Equipment

Accounts Receivable

(amounts receivable from customers due to sales made on account)

Office Supplies

Land, Buildings

Patents

Liabilities

Probable future obligations to pay assets (usually cash) or provide services to another entity. Liabilities are a company's debts.

Examples: Accounts Payable (obligation arising from the purchase of inventory on account)

Wages Payable

Utilities Payable

Notes Payable (typically arises from the borrowing of cash)

Warranty Obligations

Owners' Equity

1. Defined algebraically:

If **A** = **L** + **OE**
then **A** - **L** = **OE**

2. Defined from the perspective of the amount of assets provided by the owners.

A = **L** + **OE**
Amount of assets = Amount of Assets + Amount of Assets
or resources from Creditors from Owners
of the business (Debt financing) (Equity financing)

Owners Provide Assets In Two Possible Ways

1. Contributing cash or other assets to the business in exchange for ownership interests evidenced by shares of stock. This amount is referred to as Contributed Capital, or simply as Capital Stock.
2. Allowing any increase in assets arising from profitable operations to be retained in the business rather than distributed to owners as a dividend. This amount is referred to as Retained Earnings.

OE = **Capital** + **Retained**
Stock **Earnings**

Amount of assets contributed by owners for stock

Amount of net assets created through profits and retained in the business

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Stephen's Sweet Shop		A	=	L	+	OE
total assets	Steve contributes \$100 to start the business	↑ 100 cash	=	0	+	↑ 100 capital stock
	Business borrows \$200 from Dad	↑ 200 cash	=	↑ 200 note payable	+	0
		300 cash	=	200 note payable	+	100 capital stock
	Business buys \$225 of candy	↓ 225 cash	=	0	+	0
		225 inv. 300	=	200 note payable	+	100 capital stock
		75 cash	=	0	+	0
	Business sells all the candy for \$275 of cash	↑ 50 cash	=	0	+	↑ 50 Retained Earnings
		1275 inv. 350 cash	=	200 note payable	+	100 Capital Stock
			=	50 Retained Earnings		
	Steve withdraws \$10 of cash for personal use	↓ 10 cash	=	0	+	↓ 10 Dividends
		340 cash	=	200 note payable	+	100 Capital Stock
			=	40 Retained Earnings		
	Steve liquidates the business	↓ 200 cash	=	↓ 200 note payable	+	↓ 100 Capital Stock
		140 cash	=	0	+	40 Retained Earnings
		0	=	0	+	0

Another Way to Define Owners' Equity

Owners' equity is the amount of assets that owners have a right to, or interest in, in the event of termination.

The word "*equity*" means a right to or interest in something. Given this definition the basic equation may be re-characterized as follows:

$$A = L + OE$$

Creditors' Equity **Owners' Equity**
 (Amount due creditors in the event of termination) (Amount due owners in the event of termination)

$$\$340 = \$200 + \$140$$

Creditors have a legal priority to business assets in the event of business termination. Owners' get the total amount of assets remaining after payment of liabilities.

Therefore: $A - L = OE$

Problem: Defined Terms

Respond briefly to the following on a separate sheet of paper.

- Identify and describe the purpose of each of the required general purpose financial statements.
- What is the basic accounting equation?
- Define assets, liabilities and owner's equity.
- Given the following information calculate the amount of owner's equity:

Cash	\$ 5,000
Accounts Receivable	\$ 15,000
Accounts Payable	\$ 17,000
Notes Payable	\$ 50,000
Land	\$ 25,000
Building	\$100,000
Equipment	\$ 20,000
Wages Payable	\$ 4,000

Additional question:

What amount of the company's assets were financed through debt and what amount were financed through equity?

Answer: Defined Terms

- Identify and define each of the required general purpose financial statements.

The **Balance Sheet** is sometimes referred to as the Statement of Financial Position because it seeks to present a company's financial position (assets, liabilities and owners' equity) at various points in time.

The **Income Statement** is sometimes referred to as the Statement of Operations, Statement of Earnings, Statement of Profit and Loss or simply PL Statement because it seeks to present a company's results of operations or earnings for various periods of time.

The **Statement of Cash Flows** seeks to present the major inflows and outflows of cash for a company for various periods of time.

Answer: Defined Terms

- What is the basic accounting equation?

$$\text{Assets} = \text{Liabilities} + \text{Owners' Equity}$$

Answer: Defined Terms

- Define assets, liabilities and owners' equity.

Assets are property or rights that have probable future benefit.

Liabilities are probable future obligations to pay cash or other assets or to provide services.

Owners' equity is the amount of assets provided by owners or the amount of owners' rights to, or claims upon, assets in the event of business termination.

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Answer: Defined Terms

D. Given the following information calculate the amount of owner's equity:

Cash	\$ 5,000		
Accounts Receivable	\$ 15,000		
Accounts Payable	\$ 17,000		
Notes Payable	\$ 50,000		
Land	\$ 25,000		
Building	\$100,000		
Equipment	\$ 20,000		
Wages Payable	\$ 4,000		
A		-	L
Cash	5,000		Accounts Payable 17,000
Accounts Receivable	15,000		Notes Payable 50,000
Land	25,000		Wages Payable 4,000
Building	100,000		
Equipment	20,000		
	165,000	-	71,000
			=
			OE
			?
			94,000

Answer: Defined Terms

Additional questions:

-What amount of the company's assets were financed through debt?

\$71,000

-What amount of assets were financed through equity?

\$94,000

The Income Statement

Income Statement

Revenues	\$100,000,000
- Expenses	(99,980,000)
Net Income	\$ 20,000

Revenues

Revenues are the amount of inflowing assets from the sale or providing of goods or services to customers. This amount is usually reflected as the sale price charged to the customer.

Note: Revenues are not the asset received but simply a description of why we received the asset. Sales revenues of \$100 means that \$100 worth of assets were received from a customer upon the sale of our product rather than from borrowing or an owner's contribution.

Examples: Sales Revenues
Consulting Fee Revenues
Interest Revenues

Expenses

Expenses are the amount of outflowing assets representing a cost of providing goods or services for sale.

Note: Expense is a term which describes why an asset is given up (or will be given up in the future). Wage expense of \$500 means that \$500 worth of assets were paid out or will be paid out to employees and represents a cost incurred in operating the business.

Examples: Wage Expense
Cost of Goods Sold (an expense representing the cost of inventory sold to customers)

Problem: Definitions

Respond briefly to the following:

- A. How are a company's profits calculated?
- B. Define revenues, expenses and dividends.
- C. What are the two ways that owners may provide capital to a business?

Problem: Definitions

- D. Given the following information for the year 20X1 calculate the company's net income for the year.

Cash	\$10,000
Accounts Receivable	\$15,000
Wages Payable	\$14,000
Sales Revenues	\$75,000
Wage Expense	\$35,000
Rent Expense	\$25,000
Dividends	\$ 2,000
Capital Stock	\$15,000

Answer: Definitions

- A. How are a company's profits calculated?

The term **profit** is synonymous with earnings or net income.

$$\text{Revenues} - \text{Expenses} = \text{Net Income}$$

The Income Statement

Answer: Definitions

B. Define revenues, expenses and dividends.

Revenues describe the amount of asset inflows from the sale of goods or services to customers. It is typically the sales price or service fee charged to customers.

Expenses describe the amount of asset outflows (or the amount of obligations incurred requiring the future outflow of assets) that result from costs incurred in operating the business.

Dividends describe the amount of assets distributed to owners (stockholders) from current or previous profits.

Answer: Definitions

C. What are the two ways that owners may provide capital to a business?

- 1. Capital Contributions
- 2. Retained Earnings

Answer: Definitions

D. Given the following information for the year ended 20X1 calculate the company's net income for the year.

Net Income = Revenues - Expenses

Cash	\$10,000	
Accounts Receivable	\$15,000	
Wages Payable	\$14,000	
Sales Revenues	\$75,000	} 15,000 Net Income
Wage Expense	\$35,000	
Rent Expense	\$25,000	
Dividends	2,000	
Capital Stock	\$15,000	

Expanded Accounting Equation

The Basic Accounting Equation Expanded to Reflect Changes Over Time

The basic accounting equation of $A = L + OE$ is embodied in a company's balance sheet.

At any point in time, the amount of assets, liabilities and owners' equity represents the cumulative effect of all the company's transactions from the inception of the business up to that point in time.

Comparative Balance Sheet					
	<u>A</u>	=	<u>L</u>	+	<u>OE</u>
12/31/X1	100,000	=	75,000	+	25,000 (Capital Stock + R/E) 20,000 + 5,000
12/31/X2	130,000	=	85,000	+	45,000 (Capital Stock + R/E) 25,000 + 20,000
" Δ" The change during the year	↑ 30,000 " Δ" A	=	↑ 10,000 " Δ" L	+	↑ 20,000 " Δ" OE { " Δ" Capital Stock + " Δ" Retained Earnings ↑ 5,000 + ↑ 15,000 { Net Income for the year - Dividends for the year 35,000 - 20,000 { Revenues for the year - Expenses for the year 220,000 - 185,000

Comparisons of balance sheet amounts from year to year highlight changes in a company's assets, liabilities and owners' equity as a result of business activities during a particular year.

These annual comparisons can be very useful to investors and creditors in identifying past performance trends and can facilitate projections for the future.

Problem: Expanded Equation 1

8. Given the following information for XYZ Corporation...

	12/31/X1	12/31/X2
Assets	\$100,000	\$130,000
Liabilities	\$?	\$?
Owners' Equity	\$ 40,000	\$?

Other information:

Revenues for the year 'X2	\$250,000
Dividends for the year 'X2	\$ 35,000
Expenses for the year 'X2	\$225,000
Capital contributions made by owners during the year 'X2	\$ 10,000

...calculate the following:

- Net income for the year 'X2
- The increase or decrease in retained earnings during the year 'X2
- Total owners' equity at 'X2
- The increase in liabilities the year 'X2

Answer: Expanded Equation 1

	<u>A</u>	=	<u>L</u>	+	<u>OE</u>
12/31/X1	\$100,000	=	60,000	+	40,000
12/31/X2	\$130,000	=	90,000	+	40,000
"Δ" The change during the year	↑ 30,000	=	↑ 30,000	+	0
					<div> <div> "Δ" Capital Stock + "Δ" Retained Earnings ↑ 10,000 + ↓ 10,000 </div> <div> Net Income for the year 25,000 </div> <div> Dividends for the year 35,000 </div> </div> <div> <div> Revenues for the year 250,000 </div> <div> Expenses for the year 225,000 </div> </div>

- Net income for the year 'X2 = \$25,000
- The increase or decrease in retained earnings during the year 'X2 = \$10,000 ↓
- Total owners' equity at 'X2 = \$40,000
- The increase in liabilities the year 'X2 = \$30,000

Problem: Expanded Equation 2

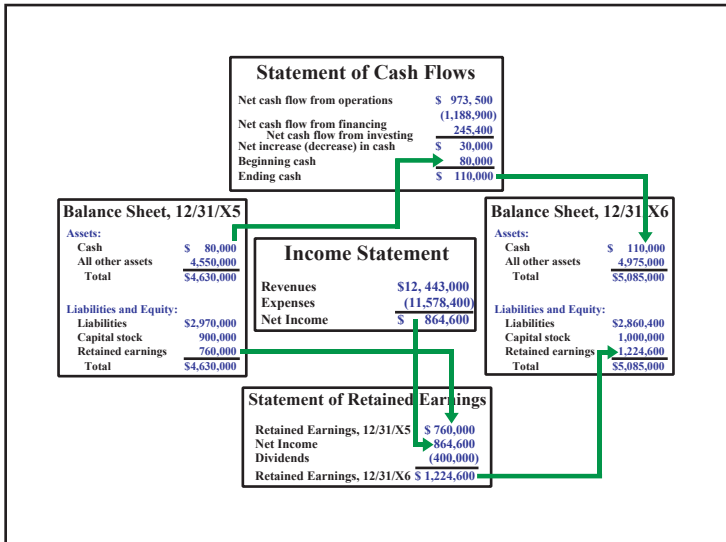
Assuming assets increased by \$25,000 during the year and liabilities amounted to \$75,000 and \$65,000 at the beginning and end of the year, respectively, calculate revenues for the year assuming the following additional information:

Dividends for the year	\$12,000
Capital contributions during the year	\$10,000
Expenses for the year	\$100,000

Expanded Accounting Equation

Answer: Expanded Equation 2			
	<u>A</u>	=	<u>L</u> + <u>OE</u>
Beginning	?	=	75,000 + ?
Ending	?	=	65,000 + ?
"Δ"	<u>↑25,000</u>	=	<u>↓10,000</u> + <u>↑35,000</u>
<div>"Δ" Capital Stock + "Δ" Retained earnings</div> <div>↑10,000 + ↑25,000</div> <div>Net income - Dividends</div> <div>37,000 - 12,000</div> <div>Revenues - Expenses</div> <div>137,000 - 100,000</div>			

Financial Statement Formats



XYZ Corporation Balance Sheet as of December 31, 20X1 and 20X2					
	12/31/X1	12/31/X2		12/31/X1	12/31/X2
Assets:			Liabilities and Equity:		
Current Assets			Current Liabilities		
Cash	\$ 14,000	\$ 21,000	Accounts Payable	\$ 25,000	\$ 27,000
Accounts Receivable	28,000	30,000	Other Payables	12,000	16,000
Inventory	32,000	36,000		37,000	43,000
	74,000	87,000	Long Term Liabilities		
Long Term Assets			Notes Payable	345,000	455,000
Land and Buildings	445,000	566,000	Total Liabilities	382,000	498,000
Equipment	143,000	235,000	Owners' Equity		
	588,000	801,000	Capital Stock (10,000 Shares)	100,000	100,000
Total Assets	\$662,000	\$888,000	Retained Earnings	180,000	290,000
				280,000	390,000
			Total Liabilities & Equity	\$662,000	\$888,000

XYZ Corporation Statement of Retained Earnings for the years ended December 31, 20X1 and 20X2		
	20X1	20X2
Retained Earnings, at beginning of year	\$ 130,000	\$ 180,000
Add: Net Income for year	75,000	150,000
Less: Dividends for year	(25,000)	(40,000)
Retained Earnings, at end of year	\$ 180,000	\$ 290,000

XYZ Corporation Income Statement for the years ended December 31, 20X1 and 20X2		
	20X1	20X2
Revenues:		
Sales Revenues	\$2,540,000	\$3,176,000
Other Revenues	10,000	12,000
	2,550,000	3,188,000
Expenses:		
Cost of Goods Sold	1,760,000	2,090,000
Salary & Wage Expense	430,000	550,000
Office Expenses	225,000	325,000
Other Expenses	60,000	73,000
	2,475,000	3,038,000
Net Income	\$75,000	\$ 150,000
Earnings Per Share (EPS)	\$ 7.50	\$ 15.00

Problem: Statement Formats		
Given the following information for S&W, Inc.:		
	12/31/X1	12/31/X2
Cash	20,000	15,000
Accounts Receivable	35,000	?
Accounts Payable	40,000	45,000
Land and Buildings	250,000	500,000
Notes Payable	175,000	417,000
Wages Payable	5,000	7,000
Utilities Payable	3,000	5,000
Equipment	75,000	135,000
Sales Revenues	375,000	415,000
Investment Revenues	5,000	10,000
Dividends	20,000	30,000
Cost of Goods Sold	265,000	272,000
Wage Expense	45,000	50,000
Office Supplies	3,000	5,000
Office Expenses	10,000	12,000
Capital Contributions	75,000	75,000
Retained Earnings	85,000	?
Prepare:		
A. A comparative income statement for the years ended 12/31/X1 and 12/31/X2.		
Assume that there are 7,500 shares of stock outstanding at 12/31/X1 and 12/31/X2.		
B. A comparative statement of retained earnings for the years ended 12/31/X1 and 12/31/X2.		
Assume the retained earnings balance was \$45,000 at 12/31/X0.		
C. A comparative balance sheet as of 12/31/X1 and 12/31/X2. (Classify assets and liabilities as either "current" or "long term".)		

Answer: Statement Formats		
A.		
S&W, Inc. Income Statement as of December 31, 20X1 and 20X2		
	20X1	20X2
Revenues:		
Sales Revenues	\$375,000	\$415,000
Investment Revenues	5,000	10,000
	380,000	425,000
Expenses:		
Cost of Goods Sold	265,000	272,000
Wage Expense	45,000	50,000
Office Expenses	10,000	12,000
	320,000	334,000
Net Income	\$60,000	\$91,000
Earnings Per Share	8.00	12.10

Financial Statement Formats

Statement of Cash Flows		
Net cash flow from operations	\$ 973,500	
Net cash flow from financing	(1,188,900)	
Net cash flow from investing	245,400	
Net increase (decrease) in cash	\$ 30,000	
Beginning cash	80,000	
Ending cash	\$ 110,000	

Balance Sheet, 12/31/X5		
Assets:		
Cash	\$ 80,000	
All other assets	4,550,000	
Total	\$4,630,000	
Liabilities and Equity:		
Liabilities	\$2,970,000	
Capital stock	900,000	
Retained earnings	760,000	
Total	\$4,630,000	

Income Statement		
Revenues	\$12,443,000	
Expenses	(11,578,400)	
Net Income	\$ 864,600	

Balance Sheet, 12/31/X6		
Assets:		
Cash	\$ 110,000	
All other assets	4,975,000	
Total	\$5,085,000	
Liabilities and Equity:		
Liabilities	\$2,860,400	
Capital stock	1,000,000	
Retained earnings	1,224,600	
Total	\$5,085,000	

Statement of Retained Earnings		
Retained Earnings, 12/31/X5	\$ 760,000	
Net Income	864,600	
Dividends	(400,000)	
Retained Earnings, 12/31/X6	\$ 1,224,600	

XYZ Corporation Balance Sheet as of December 31, 20X1 and 20X2					
	12/31/X1	12/31/X2		12/31/X1	12/31/X2
Assets:			Liabilities and Equity:		
Current Assets			Current Liabilities		
Cash	\$ 14,000	\$ 21,000	Accounts Payable	\$ 25,000	\$ 27,000
Accounts Receivable	28,000	30,000	Other Payables	12,000	16,000
Inventory	32,000	36,000		37,000	43,000
	74,000	87,000	Long Term Liabilities		
Long Term Assets			Notes Payable	345,000	455,000
Land and Buildings	445,000	566,000	Total Liabilities	382,000	498,000
Equipment	143,000	235,000	Owners' Equity		
	588,000	801,000	Capital Stock (10,000 Shares)	100,000	100,000
Total Assets	\$662,000	\$888,000	Retained Earnings	180,000	290,000
				280,000	390,000
			Total Liabilities & Equity	\$662,000	\$888,000

XYZ Corporation Statement of Retained Earnings for the years ended December 31, 20X1 and 20X2		
	20X1	20X2
Retained Earnings, at beginning of year	\$ 130,000	\$ 180,000
Add: Net Income for year	75,000	150,000
Less: Dividends for year	(25,000)	(40,000)
Retained Earnings, at end of year	\$ 180,000	\$ 290,000

XYZ Corporation Income Statement for the years ended December 31, 20X1 and 20X2		
	20X1	20X2
Revenues:		
Sales Revenues	\$2,540,000	\$3,176,000
Other Revenues	10,000	12,000
	2,550,000	3,188,000
Expenses:		
Cost of Goods Sold	1,760,000	2,090,000
Salary & Wage Expense	430,000	550,000
Office Expenses	225,000	325,000
Other Expenses	60,000	73,000
	2,475,000	3,038,000
Net Income	\$75,000	\$ 150,000
Earnings Per Share (EPS)	\$ 7.50	\$ 15.00

XYZ Corporation Statement of Cash Flows for the years ended December 31, 20X1 and 20X2		
	20X1	20X2
Cash at beginning of year	\$16,000	\$14,000
Net cash flow from operations	87,000	179,000
Net cash flow from investing	(122,000)	(307,000)
Net cash flow from financing	33,000	135,000
Cash at the end of year	\$14,000	\$21,000

Problem: Statement Formats		
Given the following information for S&W, Inc.:		
	12/31/X1	12/31/X2
Cash	20,000	15,000
Accounts Receivable	35,000	?
Accounts Payable	40,000	45,000
Land and Buildings	250,000	500,000
Notes Payable	175,000	417,000
Wages Payable	5,000	7,000
Utilities Payable	3,000	5,000
Equipment	75,000	135,000
Sales Revenues	375,000	415,000
Investment Revenues	5,000	10,000
Dividends	20,000	30,000
Cost of Goods Sold	265,000	272,000
Wage Expense	45,000	50,000
Office Supplies	3,000	5,000
Office Expenses	10,000	12,000
Capital Contributions	75,000	75,000
Retained Earnings	85,000	?
Prepare:		
A. A comparative income statement for the years ended 12/31/X1 and 12/31/X2.		
Assume that there are 7,500 shares of stock outstanding at 12/31/X1 and 12/31/X2.		
B. A comparative statement of retained earnings for the years ended 12/31/X1 and 12/31/X2.		
Assume the retained earnings balance was \$45,000 at 12/31/X0.		
C. A comparative balance sheet as of 12/31/X1 and 12/31/X2. (Classify assets and liabilities as either "current" or "long term".)		

Financial Statement Formats

Answer: Statement Formats

A. S&W, Inc. Income Statement as of December 31, 20X1 and 20X2

	<u>20X1</u>	<u>20X2</u>
Revenues:		
Sales Revenues	\$375,000	\$415,000
Investment Revenues	<u>5,000</u>	<u>10,000</u>
	<u>380,000</u>	<u>425,000</u>
Expenses:		
Cost of Goods Sold	265,000	272,000
Wage Expense	<u>45,000</u>	<u>50,000</u>
Office Expenses	<u>10,000</u>	<u>12,000</u>
	<u>320,000</u>	<u>334,000</u>
Net Income	<u>\$60,000</u>	<u>\$91,000</u>
Earnings Per Share	8.00	12.10

Answer: Statement Formats

B. S&W, Inc. Statement of Retained Earnings as of December 31, 20X1 and 20X2

	<u>20X1</u>	<u>20X2</u>
Retained Earnings, balance at beginning of year	\$45,000	\$85,000
Add: Net Income	<u>60,000</u>	<u>91,000</u>
Less: Dividends	<u><20,000></u>	<u><30,000></u>
Retained Earnings,	<u>\$85,000</u>	<u>\$146,000</u>

Answer: Statement Formats

C. S&W, Inc. Balance Sheet as of December 31, 20X1 and 20X2

	<u>12/31/X1</u>	<u>12/31/X2</u>		<u>12/31/X1</u>	<u>12/31/X2</u>
ASSETS:			LIABILITIES & OWNERS' EQUITY:		
Current Assets:			Current Liabilities:		
Cash	\$20,000	\$15,000	Accounts Payable	\$40,000	\$45,000
Accounts Receivable	<u>35,000</u>	<u>40,000</u>	Wages Payable	<u>5,000</u>	<u>7,000</u>
Office Supplies	<u>3,000</u>	<u>5,000</u>	Utilities Payable	<u>3,000</u>	<u>5,000</u>
	<u>58,000</u>	<u>60,000</u>		<u>48,000</u>	<u>57,000</u>
Long-Term Assets:			Long-Term Liabilities:		
Land and Buildings	250,000	500,000	Notes Payable	<u>175,000</u>	<u>417,000</u>
Equipment	<u>75,000</u>	<u>135,000</u>	Total Liabilities	<u>223,000</u>	<u>474,000</u>
	<u>325,000</u>	<u>635,000</u>	Owners' Equity:		
Total Assets	<u>\$383,000</u>	<u>\$695,000</u>	Capital Contributions	75,000	75,000
			Retained Earnings	<u>85,000</u>	<u>146,000</u>
				<u>160,000</u>	<u>221,000</u>
			Total Liabilities and Owners' Equity	<u>\$383,000</u>	<u>\$695,000</u>