

Basic Terms for Financial Statements

What are financial statements?

- Think of them as scoreboards or report cards that allow one to evaluate how a business is doing. Allows one to evaluate the "healthiness" of a business – and measure an organization's goals. Numbers tell a story.

Why is being able to read financial statements important?

- Interpreting them allows one to make good business decisions based on data and numbers.

Three basic financial statements:

1. Balance Sheet
2. Income Statement (Profit-Loss Statement; P&L Statement)
3. Statement of Cash Flow

As students, you need to learn:

- Why each statement is important
- What elements belong on each statement
- How to make decisions based on data/numbers from each statement

Sales forecasting: An estimate of sales for a specified period. (just like forecasting the weather)

Balance Sheet: Financial Statement that tells you what your business is worth at any given time. It shows a company's financial position at a specific point in time.

The Accounting Equation:

Assets = Liabilities + Owner's Equity (Net worth)

Assets: Items of value that belong to a business or an individual. (resources)

Liabilities: Money owed to others. (debt/non-owner claims)

Owner's Equity: What you own and paid for (includes capital, money, etc). (owner claims on financing).

sources
of
financing

Simple Example

If your assets are (\$500 television set, \$100 ice skates, \$50 worth of DVDs) and you owe your credit card company \$400 and your parents \$100), then your owner's equity or net worth is:

$$\begin{aligned} \text{Assets} &= \text{Liabilities} + \text{Owner's Equity (net worth)} \\ (500+100+50) &= (400+100) = 150 \end{aligned}$$

Accounts Receivable: Sales that have been made but not yet collected. It's money other people owe you. (it's an asset)

Accounts Payable: Expenses that you have incurred, but not yet paid for. It's money that you owe other people. (it's a liability)

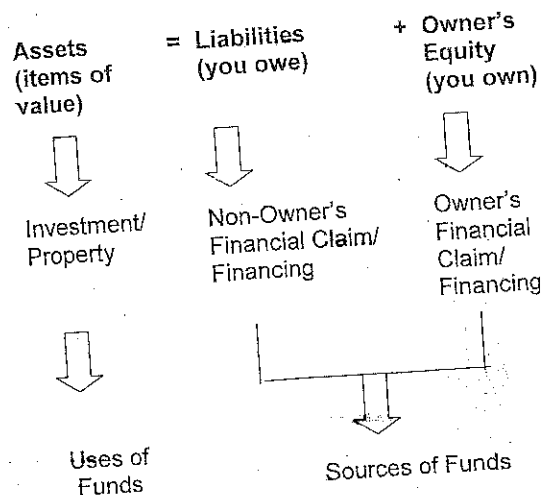
Income Statement: also known as a profit-and-loss statement: It is a financial statement that shows how much a business has earned or lost during/over a period of time.

Revenue or Sales: Income received in exchange for goods and services recorded for a given accounting period.

Expenses: Money spent by a firm to continue its ongoing operations. *Expenses are the opposite of income.*

Statement of Cash Flow: Describes the actual flow of cash into and out of a business over a period of time.

Accounting Equation



Simple Balance Sheet [for an ending period]

Balance Sheet: Assets – Liabilities = Owner's Equity (Net Worth)

Balance Sheet as of Jan 31

Assets:

Accounts Receivable	1,000
Computer	3,000
Copy Machine	2,000

Total Assets	<u>6,000</u>
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Liabilities:

Accounts Payable:

Staples	1,000
Loan for Copy	500
Machine	

Total Liabilities	<u>1,500</u>
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Owner's Equity	<u>4,500</u>
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Simple Income Statement [for a given period]

Income Statement: Revenue – Expenses = Profit

Income Statement as of Jan 31

Revenue:

Sales	<u>3,000</u>
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Operating Expenses:

Rent	1,000
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Electricity	100
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Total Expenses	<u>1,100</u>
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Net Income	<u>1,900</u>
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ABC Corp. Cash flow for Month of March

Beginning Cash	\$10,000
+ cash in	
Accounts Receivable	\$1,000
Cash Payments	\$6,000
- cash out	
Payroll	\$3,000
Inventory	\$7,000
Operating Expenses	\$2,000
Ending Cash	\$5,000

Balance Sheet is a financial statement that tells you how much your business is _____ as of a specific date.

Assets are items of _____.

Liabilities are what you _____ others.

Owner's Equity is what you actually _____.

Accounting equation is

_____ = _____ + _____

Cash is what type of account on a balance sheet? _____

Accounts Payable is what type of account on a balance sheet?

**Balance Sheet
September 24, 2004**

Assets:

Cash	2,000
Equipment	5,000
Accounts Receivable	-

Total Assets 7,000

Liabilities:

Accounts Payable	3,000
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Total Liabilities 3,000

Owner's Equity

Contributed capital	-
Retained earnings	4,000

Total Liabilities & Owner's Equity 7,000

**Income Statement
For Year Ended September 24, 2005**

Revenue	30,000
Expenses	13,000
Net Income	17,000

An **Income Statement** tells you if you earned a _____ or a _____ over a specific period of time.

Revenue is another name for _____.

Formula to calculate profit is: _____ - _____

**Statement of Cash Flows
For Year Ended September 24, 2005**

Cash Balance, Sep. 25, 2004	2,000
Cash Inflows	26,000
Cash Outflows	16,000
Cash Balance, Sep. 25, 2005	12,000

A Cash Flow Statement shows you the actually flow (money in and money out) of your business over a specific period of time.

The ending balance for one period becomes the _____ balance for the next period.

Basic Articulation of Financial Statement Linkages.
This has been modified and simplified slightly to show linkages between statements.
Sole Proprietorship - One owner, no employees.

Balance Sheet	
September 24, 2004	
Assets:	
Cash	2,000
Equipment	5,000
Accounts Receivable	-
Total Assets	7,000
Liabilities:	
Accounts Payable	3,000
Total Liabilities	3,000
Owner's Equity	-
Contributed capital	4,000
Retained earnings	-
Total Liabilities & Owner's Equity	7,000

Contributed Capital: Total value of stock that shareholders have purchased from issuer/co.

Assume 3k A/P is a bank loan for equipment.

Retained Earnings: Net income (profit) being reinvested back into the business.

Beginning of Year

Statement of Cash Flows	
For Year Ended September 24, 2005	
Cash Balance, Sep. 25, 2004	2,000
Cash Inflows	26,000
Cash Outflows	16,000
Cash Balance, Sep. 25, 2005	12,000

Income Statement	
For Year Ended September 24, 2005	
Revenue	30,000
Expenses	13,000
Net Income	17,000

Statement of Shareholder's Equity (Retained Earnings)	
Contributed Capital, Sept 25, 2004	-
Stock Issuance	-
Contributed Capital, Sept 24, 2005	-
Retained Earnings, Sept 25, 2004	4,000
Net Income	17,000
Less: dividends	-
Retained Earnings, Sept 24, 2005	21,000

During the Year

Sales - Accounts Receivable = Cash Rec'd from Sales
30,000 - 4,000 = 26,000

Statement of Shareholder's Equity (Retained Earnings):

Owner's equity or owner's interest in business.

Shows profits that are being reinvested (going back into business (called **Retained Earnings**)).

Retained Earnings = Beg RE + Net Income - Dividends

Assume No Taxes for simplicity

Balance Sheet	
September 24, 2005	
Assets:	
Cash	12,000
Equipment	5,000
Accounts Receivable	4,000
Total Assets	21,000
Liabilities:	
Accounts Payable	-
Total Liabilities	-
Owner's Equity	-
Contributed capital	-
Retained earnings	21,000
Total Liabilities & Owner's Equity	21,000

Assume equipment same value.
Paid off loan during year (Account Payable = 0)
Accounts Receivable = 4,000
(diff between sales & cash rec'd)

End of Year

Hingham Law

Hingham Law is a business owned and operated by Jimmy Bertoni. He provides legal services and consulting to members of the community. He rents office space from Lucky Luciano in downtown Hingham on a monthly basis. He also does a lot of traveling back and forth to local courthouses.

As of January 31, revenue from the business was \$5,000 (he charges \$100 per hour and was able to bill his clients for 50 hours of work). \$1,000 is still owed to him from one of his clients – who told him that he'd pay him next month. His fixed monthly expenses include: \$3,000 for rent, \$100 for telephone, \$100 for lights and electricity, \$50 for water, \$700 for traveling expenses (gas) and \$300 for insurance.

His current assets include a computer (valued at \$700), a desk (valued at \$200) and cash of \$2,000 that is in a checking account. His current liabilities include \$500 bill from Staples for printing brochures, \$700 bill from a local art dealer for 2 framed pictures, and a partial bill from CompUSA for \$200 for the remaining balance on the computer.

Answer the following question:

①
②

Is this business profitable?

Do you have enough information to answer this question?

Build an Income Statement and a Balance Sheet to help you answer the two questions above and to make some good business decisions.

Balance Sheet: $\text{Assets} - \text{Liabilities} = \text{Owner's Equity (Net Worth)}$ [for an ending period]

Income Statement: $\text{Revenue} - \text{Expenses} = \text{Profit}$ [for a given period]

Name: _____

Below is a comparative income statement for Aldo's Painting.

Aldo's Painting
Comparative Income Statement
For the years Ended December 31, 2010 and 2011

				Increase/Decrease 2011 over 2010	
		2010	2011	Amount	Percentage
Revenue (Sales):					
	Net Sales	500,000	600,000	100,000	20.00%
Expenses					
	Equipment Rentals	14,000	34,000		
	Supplies	24,000	38,000		
	Cell phone & Telephone	2,000	4,500		
	Advertising	100,000	150,000		
	Salaries	90,000	120,000		
	Total Expenses	230,000	346,500		
Net Income before taxes		270,000	253,500		
	Federal Income taxes (28%)	75,600	70,980		
Net Income (Profit/Loss)		194,400	182,520		

Calculate the percentage of increase/decrease for Amount and Percentage for each item.
 First line is done for you.

$$\frac{\$100,000}{500,000} = .2 * 100 = 20\%$$

Respond to the following questions:

- Did sales increase or decrease from 2010 to 2011?
- Did the business increase or decrease profits before taxes from 2010 to 2011?
 - What are possible reasons why?
- What item had the largest increase/decrease as a percentage? as an amount?
- What could Aldo do to improve profitability? What recommendation would you make?

Cash Flow (Actual vs. Projected)

Simone owns a small business that sells wreaths and wall hangings made of herbs and other natural materials. She has two full-time employees and hires part-time employees for the holiday seasons. She sells to customers by direct mail and has had a very good year.

Today is November 30th and she is currently forecasting her cash flow for the **month of December**:

She is forecasting sales of 1,000 units (at an average selling price of \$30 per unit) and from those sales she anticipates receiving payment for 10% of them by the end of December. She also anticipates receiving cash payments of \$12,000 from sales made in November.

Her cash on hand at the beginning of December is \$20,000. She incurred inventory expenses in November totaling \$15,000, which are payable in December. She also will have operating expenses totaling \$6,000 for staff salaries. She will also need to spend \$10,000 to purchase additional inventory.

Create an anticipated cash flow statement for December and then **answer the following two questions**:

Beginning Cash – 12/1	
+Cash Receipts (cash in)	
Total Available Cash	
- Cash Paid out (cash out)	
Ending Cash – 12/31 which is also the starting cash for January 1 st	

1. What is the ending cash as of December 31?
2. What could Simone do to manage her cash flow?

Dell Income Statement

At December 31, 2010, assume that the records of Dell Computer show the following amounts. For the sake of simplicity, income taxes have been omitted on purpose.

Cash.....	\$3,000
Accounts Receivable.....	\$12,000
Office Equipment.....	\$32,250
Land.....	\$36,000
Accounts Payable.....	\$7,500
Revenues.....	\$25,000
Rent Expense.....	\$5,000
Wages Expense.....	\$8,000
Utilities Expense.....	\$2,000
Other Expenses.....	\$4,000

Use this information, as necessary, to prepare the company's 2010 income statement (Profit or Loss)

Tutor Center is a small local business owned and operated by John Santosuosso. He is the owner and sole employee. The business provides foreign language tutoring in the town of West Twinkeeville. John currently rents office space in a downtown office building.

As of December 31, 2010 – assume that the records of the Tutor Center show the following amounts.

Cash: \$1,500

Accounts Receivable: \$800

Office Equipment: \$925

Accounts Payable: \$1,000

Automobile: \$8,000

John operates the business as a year-round business. Expenses include gas, electricity, foreign language materials and advertising. Below are the following 2010 monthly amounts for sales and expenses:

2010	Sales	Expenses
January	0	275
February	0	800
March	250	800
April	275	950
May	800	1250
June	1200	750
July	1600	750
August	2000	600
September	3000	600
October	1800	600
November	850	400
December	0	400

For 2008 – the business had a profit of \$450.

For 2009 – the business had a profit of \$1,200.

John's goal for a 2010 profit was at least \$1,600.

What was his total (cumulative) profit for the year? _____

As of 12/31/10 – what is the total amount of assets? _____

As of 12/31/10 – what is the total owner's equity amount? _____

How much is this business worth (current value of assets)? _____

What percentage of this business is being funded through non-owner financing? _____

Through owner financing? _____

Mad Murph's Barbershop Case

Mad Murph's is a business owned and operated by George Murphy. He provides haircuts to patrons at a local shop in the local mall. It is December 31, 2010 and he needs a really smart HHS student to create an income statement, a balance sheet, and a cash flow statement – because he really isn't sure how he's doing financially. His shop is open 7 days per week from noon until 10pm. Here are some numbers.

Murph started his business on December 1, 2010 – so he's only been operating it for one month. As of December 1, 2010 he had starting cash of \$10,000 in a checking account at Citizens Bank.

Total sales for the month were \$1,680 (based 140 haircuts at \$12 per haircut). He also has 8 individuals who haven't paid for their haircuts yet (you told him that they could pay him in January with no interest). Total expenses for the month are (and will be fixed monthly going forward):

- Rent \$1,500
- Phone \$55
- Lights and electricity \$100 for lights and electricity
- Water \$10
- Health insurance \$300
- Liability insurance (in case someone gets hurt) \$75

His current assets include:

- A computer that serves as a cash register (valued at \$1,000)
- Equipment (buzzers, scissors, hair dryer) valued at \$600
- Furniture (chairs, barber chairs, magazine racks, couch, artwork) valued at \$1,800
- Sign outside of shop (valued at \$440)

His current liabilities:

- Include \$750 from the local paper for a newspaper ad

- A partial bill from CompUSA for \$285 for the remaining balance on the computer in the store.

Last week he was offered a deal with a large nursing home in town where they will transport 20 elderly citizens to your barbershop one day per week in exchange for a group discount of \$8 per haircut beginning in January.

Address the following questions:

1. Is this business profitable after being open for just one month? Do you have enough information to answer this question? Build a Cash Flow Statement, an Income Statement and a Balance Sheet to help answer this question.
2. Murph is the only employee, has some busy times when people are unwilling to wait so they leave, and other times when he is idle with no business in sight. He's not sure if he should hire a part time employee to help out. What do you think? Why?
3. How is his cash flow? What could be done to improve it?
4. Should he accept the arrangement with the local nursing home beginning next month (January)? Why or why not?
5. What, if any, recommendations would you make to Murph in the management and operation of his business?
6. Should he close his business down at this point? Why or why not?

Business/Consumer Math

Sales Tax: Is a tax on retail sales that is paid by the final customer and sent to the state and/or federal government by the seller. In most cases, the seller accumulates the tax revenue over a period of time, and then sends the total collected to the appropriate government agency. Sales tax rates vary from state to state.

To calculate: Purchase total x tax rate = sales tax

Example: You sell a CD for \$15. If the sales tax is 6.5%, then the sales tax is \$.98

$$15.00 \times .065 = \$.98$$

Markup: The amount added to the cost of an item to cover expenses and ensure a profit.

To calculate: Cost + markup = Retail price

Example: Suppose it cost \$5 to make a ballpoint pen (\$3 for the casing and \$2 for the ink refill). The manufacturer will have to charge more than \$5 to make a profit – say \$2 more. Together, these two figures will determine the pen's price.

Once you understand the relationship between any of these items, you can compute any when you know the other two:

- Retail price – markup = cost
- Retail price – cost = markup

Understand that business owners use a system to price – a standard percentage markup typically based on one or more of the following: the average for their industry, their competitors, or how much they need to sell to cover their expenses.

Markup/Cost = percentage markup

$$\$2/\$5 = .4 \text{ or } 40\%$$

Markdown: to reduce inventories, businesses often mark down their merchandise. This means they lower their retail prices by a certain percentage (In other words, having a sale).

To calculate: Determines the dollar amount of the markdown.

Retail price x markdown (%) = \$ markdown

Retail price - \$ markdown = sale price

Example: Suppose a clothing retailer has some \$85 dresses that are just not selling. To get them to move, she decides to mark them down by 30%.

$$\$85 \times .3 = \$25.50$$

$$\$85 - \$25.50 = \$59.50$$

Discount & Terms of an Invoice: A discount is a reduction in the retail or wholesale price of a particular product. Businesses give discounts for a variety of reasons. Some give them as a benefit. Employee discounts are of this type. Others give them to stimulate business. For example, quantity discounts encourage buyers to place larger orders. Seasonal discounts

encourage buyers to buy in advance. Promotional discounts encourage them to advertise, display, or otherwise "push" a product.

2/10, N30

This means that the seller is offering the buyer a discount of 2% if she pays the amount due in 10 days. Otherwise, the whole (or net) amount is due in 30 days. Called cash discounts, such terms are routinely offered to encourage prompt payment.

Discounts are figured exactly the same way as markdowns.

Retail price x discount (%) = \$ discount

Example: John receives an employee discount of 10% on all store purchases. John purchases \$100 worth of merchandise. The discount is \$10 and John is responsible for only \$90.

Problems To Do:

Sales Tax

- You purchase a jacket for \$50. Sales tax is 8.5%. What is the sales tax?
- You purchase fluffy slippers \$22. Sales tax is 7%. What is the sales tax? Total amount due?

Markup

- You sell hats. You purchase them from a wholesaler for \$6 per hat. You have decided to mark them up by 75%. How much will you sell them for?
- You sell calculators. You purchase them from a wholesaler for \$15 each. You have decided to mark them up by 40%. How much will you sell them for?
- You purchase jackets from a manufacturer for \$20. You mark them up and sell them for \$55 each in your retail store. What is the percentage of the markup?

Markdown

- You're trying to move model airplanes so you decide to mark them down. They were originally \$90 each, but are now marked down to \$50. What is the amount of the markdown? What is the percentage of the markdown?
- You sell bags that you marked down 20% last week. They are now selling for \$40. What was their original price that they were last week?

Discounts

What does 3/10, N30 mean?

What does 2/15, N45 mean?