Financial Statements & Business Math– Solutions

Hingham Law	
Income Statement as of Jan 31	
Revenue:	
Sales	5,000
Operating Expenses:	
Rent	3,000
Telephone	100
Electricity	100
Water	50
Gas	700
Insurance	300
Total Expenses	4,250
Net Income (Profit)	750

Is the business profitable? Yes.

What could Jimmy do to become profitable? Increase sales and/or reduce expenses by eliminating art work, negotiate lower rent, move to new location, ride a bike to visit clients, or shop around for lower insurance.

Hingham Law
Balance Sheet as of Jan 31

Assets:		
Cash (checking account)	2,000	
Computer	700	
Desk	200	
Accounts Receivable	1,000	
Total Assets		3,900
Liabilities:		
Accounts Payable:		
Staples	500	
Art dealer	700	
CompUSA	200	
Total Liabilities		1,400
Owner's Equity		2,500
Total Liabilities and OE		3,900

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

		2010	2011	Increase/Decrea 201(Amount	Percenta(
Revenue:					
	Net Sales	500,000	600,000	100,000	20.00%
Operating Expenses					
	Equipment Rentals	14,000	34,000	20,000	142.86%
	Supplies	24,000	38,000	14,000	58.33%
	Cell phone & Telephone	2,000	4,500	2,500	125.00%
	Advertising	100,000	150,000	50,000	50.00%
	Salaries	90,000	120,000	30,000	33.33%
	Total Expenses	230,000	346,500	116,500	50.65%
Net Income before taxes		270,000	253,500	(16,500)	-6.11%
	Federal Income taxes	75,600	70,980	(4,620)	-6.11%
Net Income		194,400	182,520	(11,880)	-6.11%

1. Increase
2. Decrease
Why?
3. Equipment rental

Cash Flow Statement Mad Murph's Barbershop	
Beginning Cash - 12/1/10	10,000
CASH RECEIPTS	
Cash sales (1680-96)	1,584
Total Available Cash	$11,584
CASH PAID OUT	
Rent	1,500
Phone	55
Electricity	100
Water	10
Health Ins	300
Liabilities	75
Total cash Out	$2,040
Ending Cash - 12/31/10	$9,544

Balance Sheet-Mad Murph's Barber

12/31/2010

ASSETS			LIABILITIES	
Cash	9,544			
Accounts Receivable (8*12)	96		Newspaper Ad	750
Computer	1,000		CompUSA	285
Equipment	600			
Furniture	1,800			
Sign	440			
			Total Liabilities	$1,035
			OWNER'S EQUITY	
			Total Owner's Equity	$12,445
TOTAL ASSETS	$13,480		**TOTAL LIABILITIES & OE**	$13,480

Income Statement (Profit and Loss Statement)
Mad Murph's Barbershop

For the Month ending Dec 31st

	Current Period	% of Total
Sales Revenue		
Monthly Sales	1,680	
Total Sales Revenue	$1,680	100%
Expenses		
Rent	1,500	74%
Phone	55	3%
Lights/Electricity	100	5%
Water	10	0%
Health Insurance	300	15%
Insurance	75	4%
Total Expenses	$2,040	100%
Profit/Loss	($360)	

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

Assets are items of value.

Liabilities are what you owe others.

Owner's Equity is what you actually own.

ALOE

Accounting equation is

Assets = Liabilities + Owner's Equity

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

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

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	-
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 (P/L)	17,000

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

Revenue is another name for Sales.

Formula to calculate profit is: Sales - Expenses

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 starting/beginning balance for the next period.

Nature on the Wall Solutions

Anticipated Cash flow for December

Beginning Cash	$20,000	
+ cash in		
Accounts Receivable	$3,000	$15,000 from sales
Cash Payments	$12,000	
Available Cash	$35,000	
- cash out		
New Inventory	$10,000	
Last Month's Inventory	$15,000	
Operating Expenses	$6,000	
Total Cash Out	$31,000	
Ending Cash	$4,000	

Dell

Income Statement as of Dec 31, 2010

Revenue:	
Sales	25,000
Operating Expenses:	
Rent Expense	5,000
Wages Expense	8,000
Utilities Expense	2,000
Other Expense	4,000
Total Expenses	19,000
Net Income (Profit)	6,000

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? _____

Business Math Problems - Solutions

Sales Tax

- You purchase a jacket for $50. Sales tax is 8.5%. What is the sales tax?
  50 x .085 = **4.25**

- You purchase fluffy slippers $22. Sales tax is 7%. What is the sales tax? 22 x .07 = **1.54**;
  Total amount due? 22 + 1.54 = **23.54**

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?
  6 x .75 = 4.50; 6 + 4.50 = 10.50 or 6 x 1.75 = **10.50**

- 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?
  15 x .4 = 6; 15 + 6 = **21**

- 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?
  55-20=35; $35 is the markup in dollars. 35/20= **175%**

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? 90 – 50 = 40
  What is the percentage of the markdown? 40/90= .44 or **44%**

- 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? **Answer is 50.**

  We established today that the original price is going to be greater than 40 as the price was marked down to 40. At this point, you can't calculate the dollar amount of the markdown because you don't have the Original Price.

(Original Price) * (% markdown) = (dollar amount of markdown)
(Original Price) * .2 = (dollar amount of markdown)

But you do know that 80% (or .8) of the original price gives you a new markdown price of 40. If you put it in the equation below with X as the original price you'll get: .8X = 40
Divide each side by .8 and **X = 50**

Therefore if the original price of bags was $50 and you marked them down 20%, the dollar amount of the markdown would be: 50*.2 = 10
50-10 = 40, which would be the new price.

- x - .2x = 40; .8x = 40; divide each side by .8; x=**50**