ASSIGNMENT 4

A) Steve and Mary Jo, both 35, own a house worth $150,000, have a yearly income of $50,000, monetary assets of $5,000, two cars worth $20,000, and furniture worth $10,000. The house has a $100,000 mortgage, they have college loans of $10,000 outstanding, and the cars have outstanding loans of $10,000 each. Bills totaling $1,150 for this month have not been paid ($1,000 is to pay off their credit card that they use for bills). They are requesting your help.

Calculations:

Using the data above, create a balance sheet to calculate Steve and Mary Jo's net worth. How are they doing?

ASSETS		LIABILITIES	
Cash/Checking and Savings Accounts	$5,000	Loans	$10,000
Marketable Securities	-	Credit Card/Charge Account Bills	$1,000
Nonmarketable Securities	-	Personal Debts	
Real Estate/Home	$150,000	Current Monthly Bills	
Partial Interest in Real Estate	-	Real Estate Mortgages	$150
Automobiles	$20,000	Unpaid Income Tax	$100,000
Personal Property	$10,000	Car Loan	$20,000
Personal Loans	-	**TOTAL LIABILITIES**	$131,150
Insurance Cash Values	-	**TOTAL EQUITY/ NETWORTH**	$53,850
TOTAL ASSETS	185,000	**TOTAL L + E**	$185,000
NET WORTH = $53,850			

Comments: Net worth is a measurement of your current financial position. Although Steve and Mary Jo have in total $53,850 for net worth, their assets are not very liquid therefore they might face difficulties in finding cash available to pay current expenses.
Ways to increase Net Worth

1) Increase your savings
2) Reduce Expenses
3) Increase value of investments and possessions
4) Reducing the amounts you owe

B) Steve and Mary Jo, who make $50,000 per year, calculated their average tax rate at 15 percent. They contributed 12 percent of their income to charity and pay themselves 10 percent of their income. They have 25 years and $100,000 remaining on their 6-percent mortgage ($7,730 per year), three years and $20,000 remaining on their 7-percent auto loan ($7,410), and 10 years and $10,000 remaining on their 3-percent college loan ($1,160). In addition, utilities and property taxes were $2,270 per year, food $6,000, insurance $1,500, and other expenses were $5,430.

Calculations:

Calculate their income statement using the "better" method, and round values to the nearest $10. How are they doing?

This is the way Steve and Mary Jo calculated their annual expenses:

Mortgage PV=$100,000, I = 6%, N=25*12, PMT=? *12 = $7,730

College Loan PV=$10,000, I=3%, N=10*12, PMT=? * 12 = $1,160

Car PV=$20,000, I=7%, N=3*12, PMT=? * 12 = $7,410

Income (Cash Inflows)		
Salary		50,000
Less: Personal Income Tax	7500	
Disposable Income		42,500
Less: Charity (Paying the lord)	6000	
Pay Yourselves	5000	11,000
TOTAL INCOME		31,500

Expense (Cash Outflows)	
Fixed Expense	
Mortgage	7,730
Auto Loan	7410
College Loan	1,160
Life Insurance	1,500
Utilities & Property Taxes	2270
Variable Expense	
Food	6000
Others	5430
TOTAL EXPENSE	31,500

Comments: When Net Cash Flow is equivalent to 0, there is no surplus or deficit in cash flow. A Net cash flow surplus is often good because this means the amount in surplus is available for savings, investing, paying off debts and emergency funds when there are unexpected expenses incurred.

Steve and Mary Jo will not be able to achieve their short-term and intermediate financial goals such as new cars, new phone or a vacation. Also, they will not be able to accomplish their long-term financial security in terms of retirement plans.

NET CASH FLOW = Income - Expense= 31,500-31,500= 0

3) Steve and Mary Jo would like you to help them understand where they are financially. You have Steve and Mary Jo's balance sheet and income statements, which were prepared earlier.

Liquidity Ratios

Current ratio = current assets / current liabilities

= 5000/1150 = 4.35

Month's Living Expense Covered Ratio = Monetary assets / (annual living expenses/12)

= 5000/(31,500/12)=1.90

Debt Ratios

Debt ratio = total liabilities / total assets

= 131,150/185,000 = 0.71

Long-term debt coverage ratio = income available for living expenses (wages - taxes or W-T) / long-term debt payments (debt you would not pay off in 12 months)

= 42,500/ 16,300 = 2.61

Savings Ratios

Savings ratio = income available for savings and investment / income available for living expenses

= 5000/42,500 = 0.12

Gross savings ratio = income available for savings and investment / gross salary

= 5000/ 50,000 = 0.1

Ratio		Value	Recommended	Interpretation	Recommendations
Leverage Ratio	Debt Ratio	0.71	Depends on your age, but should gradual approach 0	Debt ratio should be lower, they have too much debt over 71% of asset is being financed through borrowing.	Most of their net worth currently resides in equity in their homes. They should cut expenses, reduce their debt, and exchange expensive car for a cheaper one.
	LT Debt Coverage Ratio	2.61	>2.5	Indicates whether an individual can repay its existing liability and take on further loans. The numbers are rather high being above caution level at 2.5, they have high risk in the future.	
Liquidity Ratio	Current Ratio	4.35	>2	$4.35 in liquid assets for every $1 of current liability, the higher the better to have enough cash for expenses. As long as it is not under 1.0 they are considered alright. They are somewhat liquid, with a good current ratio (>2) but could only cover annual living expenses for less than 2 months (>3-6+ months is better). They need to cut expenses, and reduce and pay off debt.	Need to increase monetary assets/ or cash to save more for emergency fund. This can be achieved through spending less or liquidating some assets to become more liquid
	Mthly Living Exp. Covered Ratio	1.9	> 3 – 6+		
Savings Ratio	Savings Ratio	0.12	>10%	They are saving within range of 5-10% normal saving percentage, which is considered as ok.	We recommend Steve and Mary to save more, around 20%.
	Gross Savings Ratio	0.1	Min. at 10%		