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Portfolio Project

MATH201 College Mathematics: Quantitative Reasoning

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Introduction

This Portfolio Project will help me organize my finances and plan for the future. It is very important for me to understand my finances and determine if I can afford a mortgage payment. I will create a spreadsheet to organize my finances and learn in depth what my current expenses are. By viewing my spreadsheet, a loan officer can see my income, expenses and how much I put into savings every month and tell me if I qualify for a mortgage and what I can afford.

Table 1: Income	
Profession:	Social Worker
Annual Salary:	\$ \$58,380 per year
Gross Monthly Pay (rounded to the cent): Annual salary divided by 12 Show your work!	$\$58,380 \text{ divided by } 12 = \$4,865.00 \text{ a month}$
Monthly Net (take-home) Pay (rounded to the cent): Gross monthly pay minus 20% for income taxes, FICA taxes, and health insurance deductions Show your work!	$\$4,865.00 \times 0.20 = \$973.00.$ $\$4,865.00 - \$973.00 = \$3,862.00 \text{ which would be my take home pay.}$

Budgeted Category	Category Details	Total Budgeted Amount	Percent of Total Take Home Pay (Rounded to Nearest Whole Percent) – Show work
Housing (Need)	Rent or mortgage payment = \$750 property taxes = 0 repairs = \$50 etc.\$25	\$825.00	21 % Work: Divide the 825 by 3862 = 0.2136
Food (Need)	Groceries = \$300 going out to eat = \$100 small snacks (lattes, vending machine, etc.) = \$60	\$460.00	12% Work: Divide 460 by 3862 = 0.1191
Insurance (Need)	Life = \$25 Medical = \$60 Auto = \$180	\$265.00	7 % Work: Divide 265 by 3862 = 0.0686
Transportation (Need)	Car payment = \$175 Fuel = \$60 Oil change = \$10	\$245.00	6 % Work Divide 245 by 3862 = 0.063
Utilities (Need)	Water = \$30 Electricity = \$60 Internet = \$50 Gas = \$20 Phone = \$50	\$210.00	5 % Work: Divide 210 by 3862 = 0.054
Personal care (Want)	Clothing = \$50 Toiletries = \$50 Hair and Nail Care = \$120	\$220.00	6 % Work: Divide 220 by 3862 = 0.0569
Entertainment (Want)	Anything fun (leisure activities) = \$100 Netflix = \$20 Vacation = \$50 Birthday/Holiday gifts = \$50	\$220.00	6% Work: Divide 220 by 3862 = 0.0569
Miscellaneous (Want)	Credit Card Payment = \$250	\$250.00	6% Work: Divide 250 by 3862 = 0.0647
Savings (Savings)	Retirement / Savings = \$100 Emergency Fund (leftover income) = 1067	\$1167.00	30% Work: Divide 1167 by 3862 = 0.3021
TOTAL		\$3862	99%

Needs (Housing + Food + Insurance + Transportation + Utilities)	<u>51</u> %
Wants (Personal Care + Entertainment + Miscellaneous)	<u>18</u> %
Savings	<u>30</u> %



- I. According to my pie chart I am close but not exactly at 50/30/20. I am at 52/18/30. I think I am doing better than normal with my savings. By having more allotted for savings vs wants I can plan for a better future and maybe invest later on to have a better retirement income.
- II. I think I am doing well in my percentages. If I could change anything it would be lowering my rent by purchasing a home instead of paying for someone else's property. I can put that money towards owning my own home. I can also

change the amount I put aside for emergencies just in case I do purchase a home and it needs repairs.

Part 2 - Debt and Expenses

Debt and Expenses

Debt-to-Income Ratio

- I. My debt is $750 + 175 + 250 = 1175$ divided by $3862 = 0.3042$ which is 30% of my income.
- II. My Debt-to-Income Ratio is good. I am well under the 43%. I think I have good odds at getting approved for a mortgage. A loan officer will be able to determine that I spend wisely and I like to save money which is helpful in case of unexpected expenses.

a) Calculate your Life Insurance Policy

- I. $58,380 \times 10 = 583,800$. I would get insurance for \$600,000.
- II. A dependent is a person who relies on someone else for financial support. If a person has dependents, they need to make sure the dependents will be cared for. Younger individuals most likely have less savings. However, they probably have dependents and liabilities. These could be their own children, parents who are approaching retirement age, younger siblings who need to be educated, or even grandparents with critical ailments. There could also be debts that need to be repaid.

b) Calculate your Retirement Savings

- I. $100 \times 12 = 1200 \times 25 = \$30,000$

$$100 \quad 12 = 1200 \times 30 = \$ 36,000$$

II. After doing this calculation I think I have to invest more in my retirement fund. With \$30,000 or \$36,000 I cannot survive more than 6-8 months after I retire. I think I have to invest more in the retirement fund and less in my savings account.

c) Calculate your Emergency Fund

I. $3862 - 1067 = 2795 \times 6 = \$16,770$

II. 16,770 divided 1067 = 15.71. It would take me about 16 months to have enough to cover 6 months of expenses.

Part 3 – Mortgage, Monthly Payments, and Analysis

Mortgage, Monthly Payments, and Analysis

a) Determine Documents for Mortgage Pre-Approval

I would have to provide the loan officer with two months of paystubs. My last two years of W-2s and the last 60 days of bank statements. They would also run my credit report to see what debts I have.

b) Research Houses of Interest

Address, City, State	List Price	Number of Bedrooms	Number of Bathrooms	Square Footage
609 E Mercury Blvd, Hampton VA 23663	\$200,000	2	1	1,300 sqft
505 Highland Ave, Hampton	\$190,000	2	1	826 sqft

VA 23661				
10 S Greenfield Ave, Hampton VA 23666	\$197,000	3	1	1,448 sqft
433 Lee St, Hampton VA 23669	\$160,000	2	1	1,100 sqft
55 Pacific Dr, Hampton VA 23666	\$124,999	1	1	602 sqft

c) Calculate Monthly Payment

House Address	Monthly Payment
433 Lee St, Hampton VA 23669	\$832.07
609 E Mercury Blvd, Hampton VA 23663	\$1046.80
505 Highland Ave, Hampton VA 23661	\$993.12
10 S Greenfield Ave, Hampton VA 23666	\$1,030.70
55 Pacific Dr, Hampton VA	\$644.18

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d) Calculate Housing Ratio

House Address	Housing Ratio (Show all work)
433 Lee St, Hampton VA 23669	22% Divide 832.07 by 3862 = 0.2154
609 E Mercury Blvd, Hampton VA 23663	27% Divide 1046.80 by 3862 = 0.2710
505 Highland Ave, Hampton VA 23661	26% Divide 993.12 by 3862 = 0.2571
10 S Greenfield Ave, Hampton VA 23666	27% Divide 1030.70 by 3862 = 0.2668
55 Pacific Dr, Hampton VA 23666	17% Divide 644.18 by 3862 = 0.1667

I. The only house that is within my budget is the last house at 55 Pacific Dr, Hampton VA 23666. Even though it is much smaller in sqft and it is only one bedroom and one bathroom it would work out because it would be a great starter home for someone on a budget that does not have more than one dependent. It should be very cozy and homey.

e) Calculate Total Amount Paid and Interest

I am choosing the house at 55 Pacific Dr, Hampton VA 23666 which is listed at \$124,999

- I. Each month the interest charged will be %5 of the balance owed. The payment of the balance owed. I will be giving \$5,000 dollars down and I would be financing the remaining \$119,999 at a 5% interest mortgage loan. Each month the amount of interest charged will be different and the remainder after the interest is charged will be allocated towards my principal. That following month my interest will be calculated according to my balance after the principal I paid the month before is deducted. At the end I will be paying a total of \$111,906.42 in interest, adding this to the \$119,999 which was initially financed I will end up paying \$231,905.42 for the house.

f) Calculate Closing Costs

I will be paying \$5,999.95 for the closing costs. I multiplied \$119,999 by 0.05 = \$5,999.95.

g) Financial Analysis

Being that the mortgage payment is lower than a rent payment I would apply for the mortgage loan. I believe that the property would be a good investment and I can rent it to a college student when the family outgrows it and I have a higher paying job. I would make sure I budget correctly to have enough savings in case of an emergency and any unforeseen repair the home might need in the future.