

MAP 4CI : Creating Budgets

When living on your own you need to work on how to manage your expenses as they relate to your income. A budget is an _____.

A good budget has 2 main sections:

- 1. _____
- 2. _____

A budget is _____ if the money coming in equals the money going out (which includes money going to savings and investing). To keep the budget balanced, an increase in some expenses must be countered by a _____ in other expenses, or an _____ in income, or both.

1. Income

Gross Income - your total income before deductions for income taxes, pension plans, employment insurance etc.

Net Income - the amount of income after deductions (commonly referred to as your take-home pay).

2. Expenses

Fixed Expenses - expenses that do not change from month to month.

Examples include : mortgage, car payment, loan repayments etc.

Variable Expenses - expenses that change from month to month and may not follow a regular schedule. These expenses are harder to estimate.

Examples include: food, entertainment, clothing, gifts, etc.

Saving is an important part of being financially responsible.

Example 1: Jackson works part-time and earns approximately \$450 every two weeks. He would like to buy a \$6000 motorcycle as soon as possible. Jackson lives at home and gives his mother \$50 per week to help with expenses.

a) How much is Jackson able to save from each paycheque? What is the earliest time that he can purchase the motorcycle?

b) Design a savings plan for Jackson so that he can buy his motorcycle in one year.

c) If Jackson deposits his savings in an account that pays 4% per year, compounded daily, will he be able to buy the motorcycle sooner?

Use the TVM calculator on the site: <http://www.fncalculator.com/> or the EZ Calculators app on your i-device if you have one...(blue Icon with calculator and coins in front of it)

Determine if the interest earned will reduce the number of paycheques required.

N =
I% =
PV =
PMT =
FV =
P/Y =
C/Y =
PMT: END BEGIN – indicates if the payment is at the end or the beginning of the payment cycle

TVM Advanced Calculator

Mode

☒End☐Beginning

Present Value

PV

Payment

PMT

Future Value

FV

Annual Rate (%)

Annually

Rate

Periods

Monthly

Periods

Compounding

Monthly

Reset

U7D1

MAP 4CI : Budget Worksheet Example : Paul

Paul is studying to be an electrician. During the summer he worked full time to pay for his books, tuition, and supplies. However, he doesn't think he has saved enough for his living expenses during the school year.

He receives a \$3500 scholarship each school year

He also earns \$500 bi-weekly at a part time job during school.

He has \$74 in payroll deductions on each pay cheque.

He estimates his other expenses to be: rent and utilities at \$400/month, transportation \$80/month, food \$75/week, entertainment \$25/week, clothing \$110/month, miscellaneous costs \$100 bi-weekly.

Design a monthly budget for Paul. Is he earning enough to cover his expenses, if not how can he balance his budget?

Paul's Budget

Income		Annually	Monthly
	Total Income:		

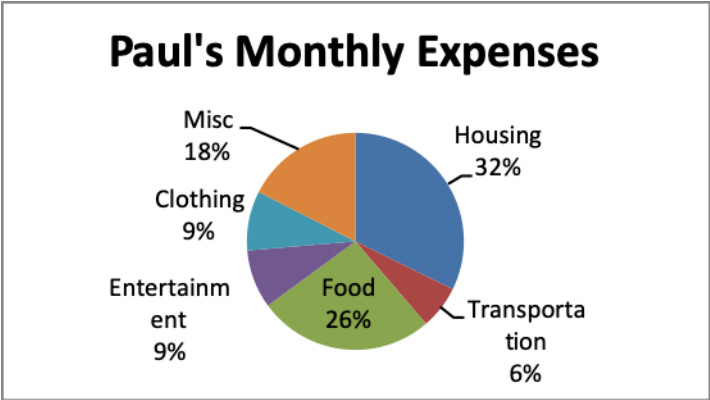
Monthly Expenses			
Fixed			
	Total Fixed Expenses:		
Variable			
	Total Variable Expenses:		
	Total Expenses:		

Balance :

Use a Pie Chart to display the percent of monthly expenses, using the following steps:

1. Identify a minimum of 5 key categories of expenses – all housing costs should be grouped, all entertainment costs should be grouped, all vehicle costs should be grouped, etc.
2. Calculate the percent of the total expenses for each category (Sheets will do this for you)
3. Divide the pie into segments that are proportional to each percent (Sheets will do this for you)
4. Label each segment with the name and percent (Sheets will do this for you)

You can make your graph in Sheets. Make notes from Mrs. Behnke's demonstration so you can do it on your own for your project.



Case Study : Jane and Bob – Saving for a trip...

Over the upcoming year Jane and Bob want to save \$5000 for a trip at the end of the year. Their total net income is \$65 000 per year and they also earn \$75/month from their investments.

Their current expenses are:

- bi-weekly mortgage and property tax payments of \$675
- \$650/year for home insurance and \$1050/year for car insurance
- utility (water and electricity) costs that average \$230/month
- phone/cable costs of \$75/month
- vehicle lease of \$410/month
- average gasoline costs of \$175/month
- RRSP (retirement savings plans) contributions of \$225 bi-weekly
- grocery costs of \$160/week
- clothing costs of \$3000/year
- entertainment costs of \$120/week
- charitable donations of \$1000/year
- miscellaneous costs of \$150 bi-weekly.

1. Convert all of the income and expense amounts to monthly values and label as fixed or variable.
2. Design a monthly budget for Jane and Bob that shows fixed and variable costs.
3. Can Jane and Bob meet their goal of saving \$5000 in one year for their trip?
4. If their net income was cut to \$60 000 per year can they still meet their savings goal? If not, what ways could they balance their budget?

Jane and Bob’s Monthly Budget

Income		Annually	Monthly	Adjusted Monthly
	Total Income :			

Monthly Expenses				
Fixed				
	Total Fixed Expenses:			
Variable				
	Total Variable Expenses:			
	Total Expenses:			

Balance :

Budget Case Study 1:

- Rebecca is 22 years old and in her last year of college. She is studying hotel and restaurant management. She has worked in the food services industry since she was 16.
- After graduation, Rebecca will move to Niagara Falls and begin work at a local hotel and conference centre. Her starting wage will be \$14.30/h based on a 40-h work week, with an increase in pay and responsibility after six months. Rebecca's net earnings are approximately 80% of her gross earnings. She will be paid every second Friday.
- Rebecca does not own a car.
- She decides to rent an apartment within walking distance of the hotel for \$700 per month.
- Assume the average monthly cost for utilities – water, electricity, and heating - will be \$75, since utilities are not included.

1. Estimate Rebecca's other expenses, such as food and household items.
2. Design a budget for Rebecca with the information you know. Use the paper budget template. Is she earning enough to cover her expenses? If not, how can she balance her budget?
3. Use a Pie Chart to display the percent of monthly expenses.

One Year Later

- Rebecca has been promoted to the position of assistant manager. Her pay rate has increased to \$16.83/h. Her bi-weekly net earnings are now \$1077.12.
 - Rebecca has a short-term goal of going on a three-week vacation in Cuba with some friends.
 - She wants to be more aggressive with her long-term savings. She would like to invest 20% of her net income.
4. Redesign Rebecca's monthly budget to make her goals a reality.
 5. Suggest options for what Rebecca can do with the balance of her monthly budget.