

Lesson 6.4 Designing a Budget

Goal: Interpret and create a monthly budget

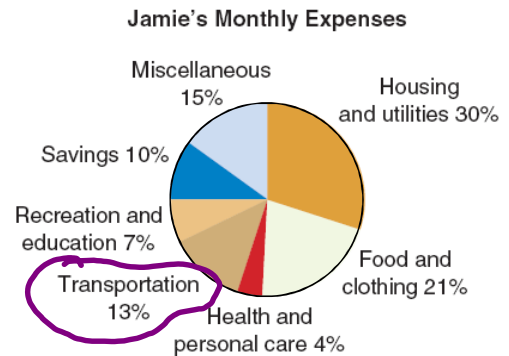
- Income is the money you earn. Expenses are the money you spend.
- A **BUDGET** is an organized list that tracks income and expenses.
- Budgets are used as a tool in **financial planning**:
 - To make sure you don't spend more than you earn
 - To help you understand exactly where your money is going
 - To help you focus your spending on the things that are most important to you
 - To help you save to meet a financial goal
- **Personal budgets** are usually planned per month. Monthly amounts can then be multiplied by 12 to determine annual amounts.
- Income and expenses are recorded by type of income or expense. Money set aside for the future is called savings and is shown as an **expense**.
- The balance of a budget is the difference between total expenses and total income.
- If the balance is **negative** you are spending more than you earn. You need to adjust some expenses so that the balance is zero. This is called balancing the budget.

Example 1 Interpreting a Budget

This pie chart shows Jamie's expenses for one month. The total dollar value of Jamie's monthly expenses was \$3 000.

- a) How much did she spend on transportation?

$$\begin{aligned} & \$3000 \times 0.13 \\ & = \$390 \end{aligned}$$



- b) How much did she spend on her top two expenses combined?

$$\begin{aligned} \text{Food and clothing} & : \$3000 \times 0.21 = \$630 \\ \text{Housing and utilities} & : \$3000 \times 0.30 = \$900 \\ \text{Total} & = \$630 + \$900 \\ & = \$1530 \end{aligned}$$

Example 2 Designing a Budget

Anika needs to save \$7 500 over the next 12 months to start her own small business. Her monthly income after payroll deductions is \$3 000. She earns an average of \$50 a month from investments. She prepares the following list of her expenses.

a) Which costs are fixed? Which costs are variable? Label them on the list.

b) Convert all amounts to monthly amounts.

ROUND all values to the nearest DOLLAR.

Rent: \$ 850
 Elec: \$ 75
 Phone, etc: \$105
 Car: \$ 420
 licence: $\frac{\$75}{12} = \6.25
 Insurance: $\frac{\$420}{2} = \210
 Gas: \$150
 Oil: $\frac{\$30}{2} = \10
 Repairs: $\frac{\$450}{12} = \37.5

Anika's Expenses	
Housing	
• \$850 for rent each month, which includes heat and water	Fixed
• an average of \$75 each month for electricity	V
• \$105 a month for a phone/cable/Internet bundle	F
Transportation	
• monthly car payment of \$420	F
• annual vehicle licence fee of \$75	F
• \$420 for car insurance twice a year	F
• \$150 a month for gas	V
• \$30 every three months for oil changes	F
• \$450 per year for maintenance and repairs	V
Other	
• \$250 for groceries	V
• \$200 for clothes and personal care	V
• \$100 a week for restaurant meals	V
• \$20 automatically deducted from her bank account for charitable donation	F

Groceries: \$250
 Clothes, etc: \$200
 Restaurant: $\$100 \times 4 = \400
 Charity: \$20

c) Are there expenses that you think Anika has forgotten to include? Explain. Estimate the monthly amount for any missing expenses.

- Fun (movies, etc)
- Memberships (gym)
- Books, school supplies

d) Create a monthly budget that shows fixed and variable expenses in each budget category. Group items where appropriate. Include any estimates from part c.

e) What percent of Anika’s costs are fixed? Why is this important?

$$\frac{3695}{4828} \times 100 = 76.5\%$$

license, oil

INCOME	Monthly Amount (\$)		
	Fixed	Variable	Total
Salary	3000		3000
Investments	50		50
<i>Total Income</i>	3050		3050
EXPENSES			
Housing			
Rent	850		
Utilities		75	
Phone/Cable/Internet	105		
<i>Subtotal</i>	955	75	1030
Transportation <i>repairs</i>			
Car Payment	420	38	
Fuel Costs		150	
Insurance	70		
Other	16.25		
<i>Subtotal</i>	211.5	188	2303
Food			
Groceries		250	
Eating Out		400	
<i>Subtotal</i>		650	650
Other			
Clothing/Personal		200	
Entertainment			
Charitable Donations		20	
<i>Subtotal</i>		220	220
Savings	625		625
<i>Total Expenses</i>	3695	1133	4828
BALANCE = Total Income – Total Expenses = 1778			

f) Can Anika meet her savings goal with her current income and expenses? If not, in which categories might she be able to cut back on costs?

No! she needs to cut back expenses or earn more.

Savings: $\frac{7500}{12} = 625$

g) How did the budget help you answer parts e and f? Explain.