

Managing Money

8



Keith is a dairy farmer near Balgonie. Each day, he feeds his cattle and mends fences. He grows hay that he dries for feed. He sells the cows' milk, which is picked up every second day.

A. Why would Keith use a bank account?

e.g., keeping his money safe, earning interest, keeping records,
writing cheques for supplies, paying bills, paying a business
loan online

B. What are some expenses that Keith might have?

e.g., vaccines, ear tags, fencing, electricity, tractor gas and
repairs, haying and foraging equipment, vet services, upkeep of
buildings, insurance, crops, living expenses, coolers for the milk

8

Getting Started

1. Write each percent as a decimal.

a) 75% = 0.75

d) 20% = 0.2

b) 10% = 0.1

e) 35% = 0.35

c) 2.5% = 0.025

f) 1.2% = 0.012

2. Match each calculation with a dollar value.

Calculation	Dollar Value
7% of \$500	\$3.50
35% of \$10 000	\$35
0.5% of \$700	\$350
2.5% of \$14 000	\$3500

3. Leah lives in Kelowna. She works at a local restaurant from Friday to Sunday. The chart shows the hours Leah worked in one weekend. Complete the chart.

Day	Fr	Sat	Sun	Total
Time worked (h)	6.5	7.5	6.0	20.0

a) How many hours did Leah work at the restaurant? 20.0 h

b) Leah is paid \$9.25/h. How much did she earn this weekend?

$$20.0 \text{ h} \times \$9.25/\text{h} = \$185.00$$

Hint

- 1 yr = 12 mo
- Bi-weekly means every 2 wk.

4. Hannah listed some of her expenses. What is the monthly cost for each?

a) house insurance: \$840/yr = \$70 /mo

b) groceries: \$120/wk

$$\begin{aligned} \$120/\text{wk} \times \underline{52} \text{ wk/yr} &= \$ \underline{6240} / \text{yr} \div \underline{12} \text{ mo/yr} \\ &= \$ \underline{520} / \text{mo} \end{aligned}$$

c) car payment: \$197.24 bi-weekly

$$\begin{aligned} \underline{\$197.24} \text{ bi-weekly} \times \underline{26} \text{ 2 wk periods} &= \$ \underline{5128.24} / \text{yr} \\ \underline{\$5128.24} / \text{yr} \div \underline{12} \text{ mo/yr} &= \$ \underline{427.35} / \text{mo} \end{aligned}$$

Hint

When working with money, round to the nearest cent after you have made the final calculation.

5. Aviv is a naturalist tour guide in Churchill. He leads tours to see polar bears and beluga whales. Aviv needs to invest money for times when he is not working. He invested in a GIC.

- principal = \$8000
- rate = 3%/yr simple interest
- time = 5 yr

a) How much interest does Aviv earn on his investment?

$$\begin{aligned} I &= Prt \\ &= (\$8000)(0.03)(5) \\ &= \$1200 \end{aligned}$$

Aviv earns \$1200 in interest.

b) What is the total amount of Aviv's investment after 5 yr?

$$\begin{aligned} A &= P + I \\ &= \$8000 + \$1200 \\ &= \$9200 \end{aligned}$$

Aviv's investment is worth \$9200 after 5 yr.

c) Aviv found another GIC that offered him 3%/yr compounded annually. How much would his investment be worth after 5 yr?

$$\begin{aligned} A &= P(1 + i)^n \\ &= \$8000(1 + 0.03)^5 \\ &= \$9274.192\dots \end{aligned}$$

Aviv's investment would be worth \$9274.19 after 5 yr.

Hint

Simple Interest Formulas

$$\begin{aligned} I &= Prt \\ A &= P + I \end{aligned}$$

See Lesson 1.1.

Hint

Convert interest rates to decimal form.

Hint

Compound Interest Formula

$$A = P(1 + i)^n$$

See Lesson 1.3.

6. Julie is at her hairdresser's in Maple Creek.

a) Julie has long hair. How much will a cut and colour cost Julie, before taxes?

$$\$20 + \$65 = \$85 \quad \text{It will cost } \$85.$$

b) Julie likes to tip 15% for hair services. How much will the tip be?

$$0.15 \times \$85 = \$12.75 \quad \text{The tip will be } \$12.75.$$

c) Julie would like to buy a can of hairspray for \$18. What is Julie's total for her visit, including tip, but before taxes?

$$\text{Total: } \$85 + \$18 + \$12.75 = \$115.75$$

Julie's total cost is \$115.75 before taxes.

THE LOOK		
cut		\$20
perm	full	\$65
	weave	\$65
	spiral	\$120
colour	short	\$25
	medium	\$40
	long	\$65

Practice

1. Circle the services provided by a credit union.

loans

bank drafts

estate management

online banking

health insurance

RRSPs

2. Kate is starting a bookstore in Quesnel. She needs a small loan to help with start-up costs. Why might she borrow money from a loan company? What advice could you give her?

e.g., A loan company may have lower interest rates, but she should check the interest rates offered at a bank or credit union where she currently banks, as well.

3. Austin is an automotive parts person in Fort Smith. He wants to start an RRSP but does not know much about them. Which type of financial institution could Austin ask for information?

e.g., a bank, a credit union, or an investment company

4. What financial institutions might you consider for each?

- a) day-to-day money transactions

bank or credit union

- b) obtaining a mortgage

loan company, bank, or credit union

- c) investments

investment company, bank, or credit union

- d) wealth management

investment company, trust company, or bank

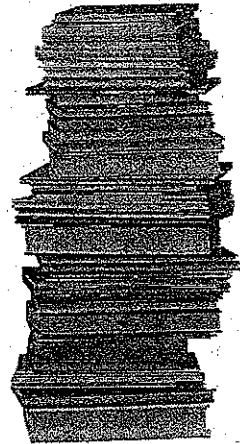
5. a) Research to find two different types of financial institutions in your area. What are their names?

e.g., Answers might be the name of a bank and credit union in the students' area.

- b) How are the financial institutions listed in Part a) the same? How are they different?

e.g., Same: They all offer investment services.

Different: Only the bank and credit union offer other banking services (account services, currency exchange, safe deposit boxes).



Hint

A mortgage is a loan for a house, condominium, or other property such as a piece of land or a cabin.

REFLECTING

Why is it important to know what services each type of financial institution provides?

Practice

For Questions 1 and 2, use the information in Example 1.

1. Jeremiah averages 20 transactions per month. He keeps a minimum balance of \$3500 in his chequing account.
 - a) Which account would you suggest? Explain.

e.g., Jeremiah's minimum balance is \$3500. So none of the accounts would have a monthly fee. I would suggest the Unlimited Account. It allows the most transactions.

- b) Jeremiah withdraws cash from an ATM that is not his own bank's 8 times per month. He pays \$1.50 per transaction. What is the cost per month?

$8 \text{ transactions} \times \$1.50 / \text{transaction} = \12.00 The cost per month is \$12.00.

REFLECTING

What could Jeremiah do to pay less in service fees?

2. Joanne manages an all-terrain vehicle and snowmobile shop. Joanne keeps a balance of at least \$1000. She usually makes 12 debit card transactions, two teller transactions, and four ATM transactions a month.

- a) How much will the Low-Fee Account cost Joanne?

No monthly fee of \$3.95

$18 \text{ transactions total} - 10 \text{ free} = 8 \text{ transactions}$

$8 \text{ transactions} \times \$0.65 / \text{transaction} = \5.20

The Low-Fee Account will cost \$5.20.

- b) How much will the Value Account cost her?

e.g., no charge for transactions; \$8.95 for the monthly fee

- c) Joanne chooses the Low-Fee Account. What changes in her banking would make the Value Account a better choice?

e.g., Joanne could keep a balance of at least \$2000 or increase the number of transactions.

3. a) What are some ways to keep records for a bank account?

e.g., cancelled cheques, receipts, deposit slips, withdrawal slips, on-line account statements

- b) Choose one way to keep records in your answer for Part a). What type of account would you choose for it?

e.g., cancelled cheques; chequing account



4. Kieran's bank offers these savings accounts. He keeps a monthly balance between \$2000 and \$3000.

Account information	Every-day savings	Bonus savings	High-interest savings
free debits/month	1	0	1
cost per transaction	\$2.00	\$5.00	\$5.00
transfers to other accounts at bank	free	\$5.00	\$5.00, or free with \$5000 balance
annual interest rate	0.25%	0.10%; 0.70% if balance over \$3000	1.50% if balance over \$5000; 0% if under \$5000

- a) Compare Kieran's interest earnings for the different accounts.
- High-Interest Savings: he would earn \$0 interest.
 - Bonus Savings: his interest rate would be 0.10%.
 - Every-Day Savings: his interest rate would be 0.25%.
- b) Which account should Kieran choose? Why?

The best account for Kieran is Every-Day Savings. e.g., The interest is better. Transactions are cheaper.

5. Brad is saving to start his own business after he has worked for a few years. He invests \$5000 each January 1 in a TFSA (tax-free savings account).

- a) Brad's account pays 3.8% interest, compounded daily. How much will Brad have at the end of 2 yr?

Year	Opening balance	Deposit	Amount (closing balance)
1	\$0.00	\$5000	$\$5000 \left(1 + \frac{0.038}{365}\right)^{365} = \5193.65
2	\$5193.65	\$5000	$\$10193.65 \left(1 + \frac{0.038}{365}\right)^{365} = \10588.44

Brad will have \$10588.44.

- b) How much interest will Brad earn over the 2 yr?

$$A = P + I$$

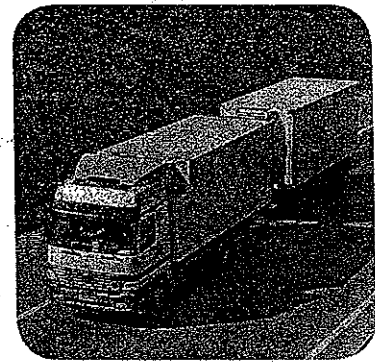
$$\$10588.44 = 2 \times \$5000 + I$$

$$\$10588.44 - \$10000 = I$$

$$\$588.44 = I \quad \text{Brad will earn } \$588.44 \text{ in interest.}$$

Example

Sean is a truck driver. In a typical week, he uses ATMs three times at truck stops. The average charge is \$3.25/transaction. About how much does Sean pay monthly for ATM use?



Solution

- A. How many ATM transactions does Sean make each month?

$$\underline{3} \text{ transactions/wk} \times \underline{52} \text{ wk/yr} = \underline{156} \text{ transactions/yr}$$
$$\underline{156} \text{ transactions/yr} \div 12 \text{ mo/yr} = \underline{13} \text{ transactions/mo}$$

- B. What does he spend on ATM charges per month?

$$\underline{13} \times \$3.25 = \$ \underline{42.25}$$

Sean pays \$ 42.25 each month in ATM charges.

- C. How could Sean reduce his ATM expenses?

e.g., Sean could withdraw money less often. He could go to an ATM belonging to his bank.

REFLECTING

Why do you think transaction fees are higher at ATMs that are not with your own bank?

Practice

1. Circle the services connected with a debit card.

withdraw money

buy items on credit

pay bills

transfer funds

borrow money

buy groceries

earn interest

deposit money

check balances

withdraw money when travelling

invest in TFSA's

2. Kit's account has a daily cash withdrawal limit of \$500 on her debit card. Kit is thinking about asking her bank for an increase in her limit to \$1000 per day.

- a) What are advantages of increasing the limit?

e.g., She can use it to buy more expensive items; she can withdraw greater amounts of cash as needed.

- b) What are disadvantages of increasing the limit?

e.g., She might spend more than she can afford.

REFLECTING

Do you think using a debit card is better than using a credit card? Explain.

3. Circle the advantages of using a debit card. Underline the disadvantages.

- e.g., no interest charges safer than carrying money
may have fees accepted by most retailers
easy to carry another number to remember
can be used 24/7 can be lost or stolen
easily obtained cannot spend more than you have

REFLECTING

Why might you use cash instead of a debit card for small transactions?

4. Many retailers charge customers a fee for using a debit card for purchases less than \$5.00. Don uses his debit card daily to buy these items at the cafeteria:

- a morning snack for \$2.25
- lunch for \$4.75
- an afternoon drink for \$1.25

The cafeteria charges \$0.35 for each debit transaction.

a) How much does Don spend in the cafeteria each day?

$$\$2.25 + \$4.75 + \$1.25 = \$8.25 \quad \text{Don spends } \$8.25 \text{ in the cafeteria each day.}$$

b) How much is Don charged to use his debit card each day?

$$3 \times \$0.35 = \$1.05 \quad \text{Don is charged } \$1.05 \text{ to use his debit card each day.}$$

c) Write the ratio of the charges to the food cost as a percent.

$$\frac{\$1.05}{\$8.25} \times 100\% = 12.727\% \text{, or about } 13\%$$

5. Mackenzie is a nurse. She works 12 h shifts, so it is often difficult for her to get to her own bank. Last month,

- Mackenzie used an ATM at the gas bar twice. The fee was \$3.25 per transaction.
- Mackenzie used another financial institution's ATM 3 times. The fee was \$1.50 per transaction.

How much did Mackenzie pay in service fees?

$$2 \times \$3.25 + 3 \times \$1.50 = \$6.50 + \$4.50, \text{ or } \$11.00$$

Mackenzie paid \$11.00 in service fees.

6. What would be the most important advantage of a debit card to you? Why?

e.g., The most important advantage to me would be that I do not need to carry money. I might lose it.

Mid-Chapter Review

1. Laura and Mark are buying their first home. List the types of financial institutions they could use to get their mortgage.

e.g., banks, credit unions, loan companies, mortgage brokers

2. Laverne is saving to buy a new car. She plans to put 25% of every paycheque in the bank. She may need to withdraw some of the money once or twice a month.

- a) Which account would you advise Laverne to use?

e.g., a savings account

- b) Describe the account.

e.g., It earns interest and has high charges for withdrawals.

- c) Explain why you suggested the account.

e.g., She can earn interest. She expects to make only a few withdrawals a month.

3. Aziz is saving to buy a high-end computer gaming system. His savings account pays 1.5%/yr interest, compounded daily. Complete the chart to determine his month-end interest.

Date	Deposit	Balance	Number of days	Interest earned
Oct. 1	—	\$2800	4	\$0.46
Oct. 5	\$320	\$3120.46	7	\$0.90
Oct. 12	\$200	\$3321.36	8	\$1.09
Oct. 20	\$410	\$3732.45	11	\$1.69
Oct. 31		Total interest earned		\$4.14

4. Marla used an independent ATM 3 times in a month. The charge was \$3.75 for each transaction.

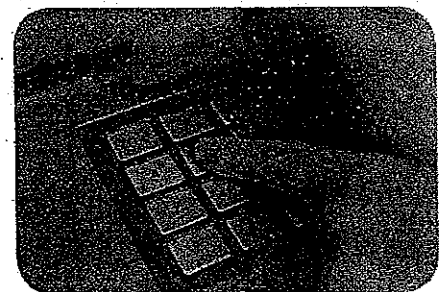
- a) How much did this cost? $3 \times \$3.75 = \11.25

It cost \$11.25.

- b) Suppose Marla continued these transactions at the same rate for a year. What would it cost?

$$\$11.25/\text{mo} \times 12 \text{ mo/yr} = \$135.00/\text{yr}$$

It would cost \$135.00.



Example 2

A debit card number is needed for online banking. Debit cards also have a 4- or 5-digit PIN (personal identification number). The PIN is needed to access your account at an ATM or to use the debit card to make purchases.

Sydney's bank has given her a debit card. How can she make up a PIN?

Solution

Sydney can use the dates of events that have special meaning. Sydney went on a trip with her family on December 23, 2007. How could she use this to make up a PIN?

4 digits: 12 23 or 2307 or 1207 5 digits: 12 237 or 72312

Example 3

What services are available for online banking?

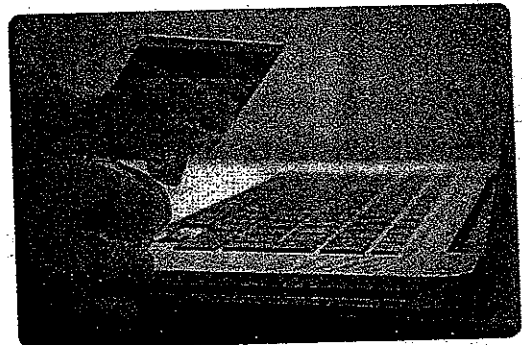
Solution

A. What are some online services?

e.g., monitoring accounts, paying bills for companies with online payment access, paying taxes, transferring money between accounts, managing investments, ordering cheques, applying for loans or credit cards, reporting a lost or stolen debit card

B. Compare your list with those of your classmates. Record any additional services.

Students might record services listed for Part A.



Practice

1. Circle the ways online banking helps people and businesses. Underline the reasons they may choose not to bank online.

- have difficulty using a computer
- can do banking after business hours
- worried about fraud or computer safety
- enjoy the social part of talking with tellers at the bank
- do not have to stop working to go to the bank
- can see all transactions online

2. Is each statement true or false?

- a) You need your debit card number and password to bank online. true
- b) It is not safe to use the age or birthday of a family member as your PIN. true
- c) You cannot pay bills with online banking. false
- d) Online banking is available only on weekdays. false
- e) Online banking is safest using your own home computer. true
- f) Financial institutions use encryption technology to ensure your information is safe when you bank online. true
- g) Bills paid on the weekend are not processed until the next working day. true
- h) It is important to log out each time you have finished your banking online session. true

Hint

Encryption technology is a way to scramble information on a computer network.

3. a) Write a true statement about online banking.

e.g., You need to set up an account to bank online.

b) Write a false statement about online banking.

e.g., Banking online is expensive.

4. Keenan is creating a secure PIN using the digits in a pair of phone numbers he often calls.

- The last 4 digits of one grandmother's phone number are 5006.
- The last 4 digits of the other grandmother's phone number are 3339.

What are some 4-digit and 5-digit PINs Keenan can create using digits from both of these phone numbers?

4 digits: 5033 or 0639 or 5039

5 digits: 60539 or 35069 or 96035

5. Research ways you can prevent identity theft.

e.g., Shred documents with any personal information. Never give personal information to people over the phone, on non-secure websites, or through the mail. Limit access to your personal computer. Create a password that is difficult to guess.

Solution

A. Complete Tiffany's monthly budget.

Monthly income			
annual take-home pay is \$29481.12			
$\$29481.12 \div 12 \text{ mo/yr} = \$2456.76 / \text{mo}$			
Monthly expenses			
Fixed		Variable	
rent	\$950.00	<u>food</u>	\$271.42
<u>car payment</u>	\$219.37	gas	\$84.28
insurance	\$114.70	clothing	\$75.98
utilities	\$86.45	personal care	\$54.39
cellphone	\$62.50	<u>recreation</u>	\$68.00
savings	\$220.00	leisure	\$75.88
		miscellaneous	\$67.23
total expenses: \$2350.20/mo			
income of \$2456.76 - expenses of \$2350.20 = \$106.56			

RECEIPT	
Rent	\$950

RECEIPT	
Car payment	\$219.37

RECEIPT	
Utilities	\$86.45

RECEIPT	
Food	\$271.42

RECEIPT	
Gas	\$84.28

RECEIPT	
Clothing	\$75.98

RECEIPT	
Recreation	\$68.00

B. Does Tiffany have a surplus, deficit, or neither? How much is it?
surplus of \$106.56

C. This month Tiffany won \$500 in a charity raffle and must pay a vet bill of \$785.00 for her dog. How does this affect her budget?

$$\text{Income of } \$2956.76 - \text{expenses of } \$3135.20 = \underline{-\$178.44}$$

Tiffany has a deficit of \$178.44 this month.

D. Tiffany wants to save an additional \$50/mo toward an RRSP. How could she adjust her budget to do this?

e.g., Tiffany might spend \$30 less each month on food, \$10 less on clothing, and \$10 less on leisure.

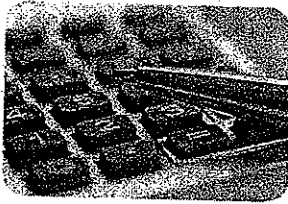
REFLECTING

What are some other sources of unexpected income or unexpected expenses?

Practice

1. Financial planners say, save by "paying yourself" 10% of your salary each month. Why do you think they suggest this?

e.g., If you don't pay yourself first, you may spend your income on bills and other expenses. It is important to have savings for unexpected events or emergencies.



2. Ali wants to save for a trip to Yellowknife. The airfare is \$563.08. Accommodation for eight nights costs \$1080.00. He is planning to have \$300.00 spending money.

a) Ali would like to go on the trip in 1 yr. How much does he need to save each month?

$$\$563.08 + \$1080.00 + \$300.00 = \$1943.08$$

$$\$1943.08 \div 12 = \$161.92$$

Ali needs to save \$161.92 each month.

b) Train fare is less, \$355.00. How much does he need to save each month?

$$\$355 + \$1080 + \$300 = \$1735$$

$$\frac{\$1735}{12} = \$144.58 \text{ He needs to save } \$144.58 \text{ each month.}$$

c) Should Ali save for this trip or charge it on his credit card? Why?

Save. e.g., If he charges it, he will be paying interest. If his situation changes, it may be difficult to pay off the cost of the trip.

3. Savanna is taking courses in Calgary.

- She lives with her parents. Her parents pay her tuition.
- Her net monthly income as a waitress is \$1203.12.

These charts show Savanna's monthly and annual expenses.

Monthly expenses			
room and board	\$150.00	car payment	\$295.14
cellphone	\$ 54.34	gas and maintenance	\$ 65.00
clothing	\$ 65.00	computer supplies	\$ 20.00
gifts	\$ 65.00	entertainment	\$100.00
eating out	\$ 70.00	magazines and music	\$ 25.00
personal care	\$ 50.00	savings	\$ 50.00

Annual expenses			
books and supplies	\$590.00	car insurance	\$775.00

a) List Savanna's fixed expenses.

e.g., room and board, car payment, cellphone plan, savings, books and supplies, car insurance

REFLECTING

What could make cellphone charges fixed?
 What could make cellphone charges variable?

b) List Savanna's variable expenses.

e.g., gas and maintenance, clothing, computer supplies, extra cellphone charges, gifts, entertainment, eating out, magazines and music, personal care

4. Use the charts for Savanna's expenses in Question 3.

a) Create a monthly budget for Savanna. List the income, fixed expenses, and variable expenses. Include the monthly cost of annual expenses. Record the surplus or deficit. Circle to show whether the amount is a surplus or deficit.

Monthly income: \$ 1203.12
 Total fixed expenses: \$ e.g., 663.23
 Total variable expenses: \$ e.g., 460.00
 Total expenses: \$ 1123.23
 (Surplus) or deficit: \$ 79.89

b) In the second year, Savanna will pay her tuition of \$1850. She also has a car repair that she charged on her credit card. The monthly payment for 1 yr is \$79.83. Will her monthly budget be in surplus or deficit?

$$\text{Monthly tuition: } \$1850 \div 12 = \$154.17$$

$$\$79.89 - \$154.17 - \$79.83 = -\$154.11$$

She will have a deficit of \$154.11.

c) What budget changes could Savanna make to reduce expenses?

e.g., reduce her entertainment by \$50, eating out by \$35, clothing by \$25, personal care by \$15, savings by \$29.10

5. a) Collect income and expense data for your situation in a few years from now. Create your own budget.

e.g., Students' budgets should have information related to a possible student situation. The setup should be similar to Tiffany's budget in the Example.

b) Suppose your income for Part a) decreased by \$200 per month. What changes might you make for your budget?

e.g., I would have a deficit, not a surplus, unless I made some changes. I could decrease my entertainment costs by \$20, meals or snacks out by \$40, and save less.

5. a) e.g.,

Monthly income: \$2200

Monthly expenses:

Fixed

rent \$650

utilities \$45

transportation

\$95

computer

expenses \$60

savings \$500

cellphone \$55

Variable

clothing \$150

groceries \$210

entertainment

\$120

sports \$70

household items

\$70

meals or

snacks out \$90

personal

care \$70

Total expenses:

\$2185

Surplus of \$15

Practice

1. Esther has a monthly income of \$3245. Paolo earns \$1460, bi-weekly.

a) Create a budget spreadsheet for Paolo and Esther.

Monthly expenses			
mortgage	\$1580.00	groceries	\$584.00
transportation	\$ 288.00	car payment	\$262.00
clothing	\$ 146.00	health care	\$ 63.00
personal care	\$ 62.00	household	\$169.00
student loans	\$ 544.00	utilities	\$296.00
leisure	\$ 160.00	vacations	\$290.00
property taxes	\$ 271.67	insurance	\$426.00
miscellaneous	\$ 188.00	telecommunications	\$163.50
gifts and donations	\$ 95.00		

Annual expenses			
insurance	\$4284.00	gym membership	\$1134.00

Hint

Record amounts from your spreadsheet.

b) What is the value for each?

Total monthly income: \$6408.33

Total monthly expenses: \$6039.67

Savings (10% of income): \$640.83

Surplus or deficit: -\$272.17

c) Do Paolo and Esther have a surplus or a deficit? Is this a problem right now? Do you think they might run into financial problems later with this budget? Explain.

Deficit. e.g., This is not a problem now, because their deficit is less than their savings. So they decrease their savings. They could have problems later. If they have any unexpected expenses, they may go into debt.

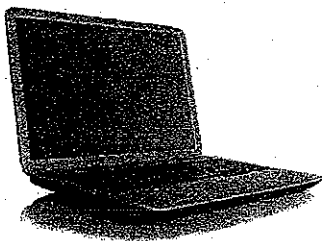
2. Esther's income increased by \$100 per month compared to Question 1 Part a). They had finished paying their student loans. Make the changes in your spreadsheet.

a) How much are the total monthly expenses?

The total monthly expenses are \$5495.67.

b) Paolo and Esther will still save 10% of their income. Do they have a surplus or deficit? How much is it?

Paulo and Esther have a surplus. It is \$361.83.



Hint

Ignore the change in situation from Question 2.

3. Paolo and Esther's mortgage in Question 1 increased to \$1632. Their property taxes went up to \$298. They adopted a pet, so they have pet care costs of \$66 a month. They needed to replace their roof and will make payments of \$500 for 24 mo.

a) Paolo and Esther decided to not save each month. How much will they have to cut other expenses?

They need to cut other expenses by \$275.67.

b) Which expenses would you suggest they cut back? By how much would you suggest cutting?

e.g., They could cut their vacation fund, their clothing, and their leisure by half. This would save them \$301 a month.

c) What if Esther were to receive a 10% raise? Would they still have a problem?

No. e.g., Esther's income would now be \$3569.50 a month. This would be enough so they wouldn't have to cut expenses. They would only be able to save \$48.83 a month. They may want to cut somewhere to be able to save more.

d) After 2 yr, Esther's net income increased to \$3440. Paolo's increased to \$1570. Their roof and their car have been paid off. They decide to put only 5% of their net pay into savings.

They now have a goal of paying off their house. How much surplus do Paolo and Esther have to put toward the house?

Paolo and Esther have \$577.59.

e) If Paolo and Esther decide to increase their mortgage payment by \$1000 to \$2632, they will have to cut back on other expenses.

- Which categories would be very difficult to cut from?
- Which categories could they cut only a little?

e.g., Difficult: nearly all fixed expenses, health care, pet care, gifts and donations, transportation

Cut a little: groceries, clothing, household items, miscellaneous, personal care

f) Decide which areas they can cut back on to achieve their goal. State the new budgeted values for these areas.

e.g., Cut vacations to \$180, leisure to \$100, clothing to \$100, groceries to \$520, household to \$100, and miscellaneous to \$114.59.

Chapter Review

1. a) Name two different types of financial institutions in Canada.

e.g., banks, loan companies

- b) What are two similar services they provide?

e.g., loaning money for cars; loaning money for mortgages

- c) What are two different services they provide?

e.g., at banks: savings accounts and online banking

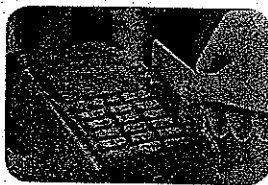
2. Why is a tax-free savings account better than a regular savings account?

e.g., The earnings are tax-free.

3. Ed's balance in his savings account was \$650 on June 1. On June 10 he made a deposit of \$200. His account pays 2%/yr, compounded daily and paid monthly. How much interest did he earn this month?

$$\left[\$650 \left(1 + \frac{0.02}{365} \right)^9 - \$650 \right] + \left[\$850 \left(1 + \frac{0.02}{365} \right)^{21} - \$850 \right] = \$0.32 + \$0.98, \text{ or } \$1.30$$

He earned \$1.30.



4. Think of a date that is important to you. Explain why. Use the date to create three different PINs.

e.g., June 25, 2012, or 25/06/2012 – last day of high school
2506, 62512, 12625

5. a) Name three expenses that are fixed each month.

e.g., rent, car payment, insurance

- b) Name three expenses that are variable each month.

e.g., entertainment, utilities, clothing

6. What are some ways that a debit card can be used?

e.g., withdrawing cash at any ATM, depositing cheques or money or paying bills at any ATM at a branch of your bank, paying for items/services at businesses, using online banking

- c) Which of the expenses you listed in Part a) or b) are recurring? Explain.

e.g., Most are, except entertainment and clothing. I can choose whether to spend money in these categories, whereas the other expenses must be paid every month.

7. Trista is a dental assistant. She has a net annual income of \$34 161.31. She has these monthly expenses:

rent	\$1300.00
utilities	\$ 75.00
phone and cable	\$ 215.00
car insurance	\$ 140.00
medical insurance	\$ 59.00
savings	\$ 100.00
food	\$ 400.00
transportation (gas and maintenance)	\$ 100.00
clothing	\$ 200.00
dental	\$ 100.00
entertainment	\$ 300.00
household	\$ 150.00
vacation	\$ 200.00

- a) Create a spreadsheet budget for Trista.
b) Does Trista have a surplus or deficit? How much is it?

Trista has a deficit of \$492.22.

- c) What could Trista do to improve her financial position?

e.g., She could cut back on her variable expenses, such as food, clothing, and entertainment. She could also get a part-time job to increase her monthly income.

- d) Trista's dad gave her this advice: spend \$75 less each month on food, spend \$75 less each month on clothes, spend \$200 less each month on entertainment, and get a part-time job for \$10/h.

How many additional hours must Trista work at the part-time job each month to get out of debt under this plan?

$$\text{e.g., } \$492.22 - (\$75 + \$75 + \$200) = \$142.22$$

$$\$142.22 \div \$10/\text{h} = 14.222 \text{ h}$$

She must work about 15 h more each month.

7. a) e.g.,

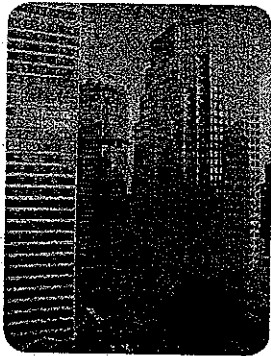
MONTHLY INCOME	
Net Income 1 (\$34 161.31/12 =)	\$2846.78
TOTAL MONTHLY INCOME	\$0
MONTHLY EXPENSES	
FIXED EXPENSES	
Rent or mortgage	\$1300.00
Insurance (car, driver's licence, home, contents, life)	\$199.00
Utilities (water, gas, electricity)	\$75.00
Telecommunications (telephone, cable, internet, cell phone)	\$215.00
Savings	\$100.00
TOTAL FIXED MONTHLY EXPENSES	\$1889.00
VARIABLE EXPENSES	
Food (groceries, eating out, cafeteria)	\$400.00
Transportation (gas, vehicle maintenance, parking, bus pass)	\$100.00
Clothing and accessories	\$200.00
Health care (dentist, medications, glasses/contacts)	\$100.00
Household (cleaning, maintenance, furniture or appliances)	\$150.00
Recreation (movies, concerts, games, equipment, plays, sports)	\$300.00
Travel	\$200.00
TOTAL VARIABLE MONTHLY EXPENSES	\$1550.00
TOTAL MONTHLY INCOME	\$2846.78
TOTAL MONTHLY FIXED AND VARIABLE MONTHLY EXPENSES	\$3339.00
SURPLUS OR DEFICIT	-\$492.22

Chapter Test

1. Sol is planning to invest in an RRSP. What financial institutions should he consider for this service?
e.g., banks, credit unions, investment companies
2. When would you pay a service charge for withdrawing money at an ATM?
e.g., if the ATM is not with your own bank; if you go over the number of free transactions per month your account allows
3. Mac drives a taxi. Last month, he used an ATM at a variety store 5 times and was charged \$1.75 per transaction. He also used other financial institutions' ATMs 6 times, with a transaction charge of \$1.50. How much did Mac pay in service fees?

$$5 \times \$1.75 + 6 \times \$1.50 = \$8.75 + \$9.00, \text{ or } \$17.75$$

Mac paid \$17.75 in service fees.



Hint

Assume typical starting net incomes are from \$1500/mo to \$2500/mo.

4. Suppose you need to move to a different city to start your first full-time job. You do not have a car but you can use public transit to get to work.
 - a) What type of job might you have? How much might your net income be each month?

e.g., A painter; I might earn about \$2200/mo.

- b) List the fixed expenses and variable expenses that you would have.

e.g., Fixed: rent, utilities, cellphone, cable TV, transportation (bus pass)

Variable: food, clothing, entertainment

- c) Create a budget with a surplus at the end of the month.
e.g., Students should create a budget with the net income from Part a) and fixed and variable expenses from Part b). Students' budgets might be created without technology like Tiffany's budget in Lesson 8.6 or with technology like Kari's budget in Lesson 8.7.