

Chapter 3 Planning Chart

Section Suggested Timing	Teacher's Resource Blackline Masters	Assessment Tools	Materials and Technology Tools
3.0 Opener (TR page 74) (15 min)		Diagnostic Assessment (TR page 74)	
Tech Tip: Research Accommodations (TR page 76) (30–45 min)	BLM 3–1 Practice Researching Accommodations Online		• Internet access
3.1 What's Available? (TR page 77) (75–150 min)	BLM 3–1 Practice Researching Accommodations Online	Ongoing Assessment (TR Page 81)	• calculator • Internet access (optional) • newspaper classified ads or similar resource, such as real estate flyers
3.2 Preparing to Move (TR page 82) (75–150 min)	BLM 3–2 Moving Needs	Ongoing Assessment (TR Page 85)	• calculator • Internet access • store flyers
Skills Practice 3: Comparing Rental Prices (TR page 86) (30 min)	SP BLM 3 Comparing Rental Prices		• calculator
Skills Practice 4: Writing a Cheque for Rent (TR page 88) (45–60 min)	Master 7 Cheque Templates SP BLM 4 Writing a Cheque for Rent		• calculator
3.3 Looking for the Better Buy (TR page 90) (75–150 min)		Ongoing Assessment (TR Page 93)	• calculator
3.4 Rights and Responsibilities (TR page 94) (75 min)	Master 6 Calendar Template	Ongoing Assessment (TR Page 96)	• Internet access
Skills Practice 5: Reading a Lease (TR page 97) (30–45 min)	SP BLM 5 Reading a Lease		• Internet access • dictionary or thesaurus (optional)
3.5 Some Other Living Expenses (TR page 98) (75 min)	SP BLM 6 Reading a Utility Bill	Ongoing Assessment (TR Page 101)	• calculator • Internet access
Tech Tip: Adding Percent to a Number (TR page 102) (20–30 min)	Master 3 Fractions, Decimals, and Percents BLM 3–3 Practice Adding a Percent to a Number		• calculator
Skills Practice 6: Reading a Utility Bill (TR page 103) (30–45 min)	SP BLM 6 Reading a Utility Bill		• calculator
Chapter 3 Review (TR page 104) (75 min)	Master 2 Chapter Summary BLM 3–4 Chapter 3 Word Search		• calculator
Chapter 3 Practice Test (TR page 106) (60–75 min)	Master 2 Chapter Summary	BLM 3–5 Chapter 3 Test	• calculator
Task: Leaving Town (TR page 108) (60–75 min)	BLM 3–6 Chapter 3 Task BLM 3–8 Chapter 3 BLM Answers	BLM 3–7 Chapter 3 Task Rubric	• calculator • Internet access (optional) • newspaper classified ads or similar resource

CHAPTER 3

Renting Accommodations (page 83)

SUGGESTED TIMING

15 min

Overall Expectation

B.1 – gather, interpret, and compare information about owning or renting accommodation and about the associated costs

Contributing Expectations

A.1 – collect, organize, represent, and make inferences from data using a variety of tools and strategies, and describe related applications

B.2 – interpret, design, and adjust budgets for individuals and families described in case studies

C.3 – identify and describe situations that involve proportional relationships and the possible consequences of errors in proportional reasoning, and solve problems involving proportional reasoning, arising in applications from work and everyday life

What’s the Math?

The chapter opener is designed to prompt students to start thinking about the financial and the non-financial aspects of living on one’s own. Determine whether there are students who currently live or have lived on their own. They may prove to be a valuable resource.

Activity Planning Notes

Give students several minutes to examine the cartoon and answer the questions. Encourage them to share their answers and to discuss each openly. Some students may currently live on their own or may have past experience living on their own. As students provide ideas, you may wish to record and display student suggestions on the board or on an overhead. Consider the mathematics that may be involved in each potential answer.

The Tech Tip on pages 84–85 can be done at this time.

Diagnostic Assessment

The discussion with the class should give you a sense of their past or current living conditions. Encourage their willingness to participate in discussions. Some things to consider include:

- Are any students currently living on their own?
- Do the students have a sense of the financial and non-financial implications of living on their own?
- Are their comments reasonable?

Use your assessment of their awareness of these concepts to help you plan the amount of time needed for the lessons that follow and the amount of assistance students may need. If students seem to have little experience, you may wish to guide them through many of the activities as a class. If students seem to have a good understanding and awareness of work and money concepts, you may find that they can work on their own to some degree.

Literacy Link

The renting of accommodations has a number of specific terms. Look for the inclusion of some of the key terms of the chapter during the opening discussion. These terms may be accompanied by stories of personal experience.

Answers (page 83)

1. Answers will vary. Possible responses include the ability to

- decorate as you choose,
- have no curfew,
- have friends over when you like,
- come and go as you please.

2. Answers will vary. Encourage discussion regarding various living expenses such as rent, heat, water, electricity, Internet, cable, telephone, groceries, transportation, and laundry.

3. Answers will vary. Possible responses include

- cleaning,
- making repairs,
- decorating,
- finding transportation to work or school,
- learning about a new neighbourhood, and
- dealing with a roommate.

Tech Tip: Research Accommodations (page 84)

SUGGESTED TIMING

30–45 min

MATERIALS

- Internet access

BLACKLINE MASTERS

BLM 3–1 Practice Researching Accommodations Online

Specific Expectation

B.1.2 – gather and compare, through investigation, information about the costs and the advantages and disadvantages of different types of rental accommodation in the local community

Accommodations

- Students who need additional reinforcement of these skills could use **BLM 3–1 Practice Researching Accommodations Online**.

Activity Planning Notes

It may be beneficial to go through the two pages of the Tech Tip prior to accessing the computers. Some of the questions can be discussed and answered without computer use.

Monitor students' progress while they search the Internet. Ensure that students search for attainable places; for example, caution students about searching for \$1500 per month condominiums. After question 2, computers are no longer needed.

Some students may be attending or considering attending a college in the near future. The Internet search can include cities and towns where Ontario colleges are located.

Note that question 6 is not a question, but a message to students. Discuss this message and how it might inform an apartment search.

Answers to Tech Tip: Research Accommodations (pages 84–85)

Answers will vary. Examples are provided.

1. Students may need to select the closest town or city if they are unable to find results online because they live in a small community. Useful Web sites for rental accommodations include
 - www.kijiji.ca,
 - www.mls.ca, and
 - various newspaper Web sites.
2. Possible criteria include
 - close to bus route,
 - rent less than \$750 per month,
 - has a separate living room.

3. Possible questions include
 - Are the neighbours quiet?
 - Can I have a pet?
 - Is there somewhere close by where I can do my laundry?

4.

Possible Places	Reason
Duplex near the downtown	Good location, good price
Condo in downtown financial district	New, good location, has gym
Apartment in the north end of town	Good price, on-site laundry, quiet street

5. I would like to take my brother and my father, because they have both lived in apartments in the past and they know a lot about home repairs and safety.

3.1 What's Available? (page 86)

SUGGESTED TIMING

75–150 min

MATERIALS

- calculator
- Internet access (optional)
- newspaper classified ads or similar resource, such as real estate flyers

BLACKLINE MASTERS

BLM 3–1 Practice Researching Accommodations Online

Specific Expectations

B.1.1 – identify the financial implications and the non-financial implications associated with living independently

B.1.2 – gather and compare, through investigation, information about the costs and the advantages and disadvantages of different types of rental accommodation in the local community

Cumulative Review

1. A balanced budget occurs when income – expenses = ____.
2. How many diamonds are in a deck of cards?
3. What is the probability of picking a diamond from a deck of cards?
4. What is the average of \$150, \$220, \$180, and \$110?

Answers to Cumulative Review

1. 0
2. 13
3. $\frac{1}{4}$
4. \$165

What's the Math?

Students will consider what they need and want in rental accommodations. They will use math skills learned previously to determine the suggested income necessary to afford a place of their own. Students then search available resources to select places in their community that they would consider renting.

Warm Up Notes

The main purpose of the Warm Up is to provide structure to the classroom environment and to provide students with an opportunity to work with basic mathematics skills. This exercise will also provide the teacher with some sense of how comfortable students are working with mathematics and may provide an opportunity for diagnostic and ongoing assessment of basic skills.

Accommodations

- Students who have difficulty with the Warm Up questions could benefit from additional reinforcement.

When discussing answers with students, stress the mathematical processes at work as well as obtaining “the right answer.” Wherever appropriate, look for and have students consider multiple representations and multiple strategies for working through questions.

All of these Warm Up questions review concepts learned in *Mathematics 11 Workplace and Everyday Life* and earlier. Encourage students to do the Warm Up questions without a calculator.

For question 1, discuss how to calculate the answer mentally. For example:

$$\$15 = \$10 + \$5$$

$$\$10 \times 30 = \$300$$

$$\$5 \times 30 = \$150$$

$$\$300 + \$150 = \$450$$

Encourage students to consider other methods of doing this calculation, then have them do question 2 using one of the methods you have discussed.

For questions 3 and 4, students could use fractions. For example:

$$3. \ 25\% = \frac{1}{4}$$

$$\begin{aligned} \$450 \div 4 &= \$100 + \$12.50 \\ &= \$112.50 \end{aligned}$$

$$4. \ 10\% \text{ of } \$600 = \$60$$

$$30\% \text{ of } \$600 = \$180$$

For question 5, have students break up the more complex numbers and do each part.

$$a) \ 6 \times 2 = 12; \text{ therefore } \$600 \times 2 = \$1200$$

$$b) \ \$745 = \$700 + \$45$$

$$\$700 \times 2 = \$1400$$

$$\$45 \times 2 = \$90$$

The answer is \$1490.

$$c) \ \$890 = \$800 + \$90$$

$$\$800 \times 2 = \$1600$$

$$\$90 \times 2 = \$180$$

The answer is \$1780.

Discuss other methods of doing this question using mental math.

The first two parts of question 6 are fractions.

$$a) \ \frac{300}{1000} = \frac{30}{100} = 30\%$$

$$b) \ \frac{400}{1600} = \frac{100}{400} = \frac{25}{100} = 25\%$$

The third part of question 6 can be done by breaking the question down into parts students can do mentally.

$$10\% \text{ of } 2000 = 200$$

$$20\% \text{ of } 2000 = 400$$

You may wish to have students do other questions similar to question 6c).

For questions 7 and 8, consider having students break \$720 into numerals they can multiply in their head. Example:

$$\$720 = \$700 + \$20$$

$$4 \times \$700 = \$2800$$

$$4 \times \$20 = \$80$$

The answer is \$2880.

Answers to Warm Up (page 86)

1. \$450

2. \$600

3. \$112.50

4. \$180

5. a) \$1200

b) \$1490

c) \$1780

6. a) 30

b) 25

c) 400

7. 2880

8. 3600

Activity Planning Notes

Questions 1 and 2 can be done as a whole class discussion or in small groups. The intent is to get students thinking about their current needs as they relate to renting living accommodations in their community.

For question 3, have students consider the ideal place they would like to have, then scale that down to something they might be able to afford. In this process, they will need to prioritize what they would like to have as they consider what they can afford. What would they be willing to settle for? Encourage students to consider that young people often do not at first have the same lifestyle as their parents. Many of their parents may have started in very simple accommodations and worked up to something more expensive as their salaries increased.

Questions 4 and 5 require a number of calculations based on generally accepted financial planning principles. The amounts that students can do individually will vary. It may be necessary to chunk the questions so that students understand the concepts. Basically, students should not spend more than 25% on accommodations. This is one quarter of their income. Take up these questions before moving on.

Questions 6 through 9 provide students with applications to these principles.

Question 10 requires students to look at their current financial situation. This question leads into the Check Your Understanding, where students research available accommodations in the community based on the answers to earlier questions in this section.

Students who have not completed the Tech Tip on pages 84–85 may wish to do so before starting the Check Your Understanding. You may wish to provide **BLM 3–1 Practice Researching Accommodations Online** to students who need additional reinforcement in this skill.

Accommodations

- Some students may benefit from working in pairs or in a group of three.
- It may not be necessary for all students to do all questions. For example, questions 6 to 9 are similar but different applications of the concepts involved with being able to afford accommodations.

Speed Bump

- Some students may have difficulty working with 25% when dealing with the amount of income to spend on accommodations.
- R_x** Some students may find it easier to work with a fraction rather than a percent. For example:
 - If you want an apartment that costs \$600, then multiply by 4 to find out how much you need to make per month. (\$2400)
 - If you make \$3200 per month, then divide by 4 to find out the maximum you should spend on accommodations. (\$800)

Literacy Link

Ensure that students understand the terms for the different types of accommodations in question 1 on page 86. You may wish to have students develop a poster with a picture of each type of accommodation and its name (i.e., detached house, semi-detached house, apartment house, high-rise apartment, basement apartment, condominium, rented room, etc.).

Depending on your class, one group could work on the various types of house accommodations, while another works on the various types of apartment accommodations. A third group could work on accommodations that are not types of houses or apartments (i.e., rented rooms, long-term motel rental, trailer, etc.).

Answers to Activity Questions (pages 86–91)

- Answers will vary. Encourage discussion about the types of rental accommodations available in the community. You may also wish to have students check local classified ads or real estate flyers.
- Answers will vary. Students should be prompted to consider the location of their school or current workplace, how they will get to school or work, and if they will have a roommate. They can then consider communities that will meet all or the most important of their needs. Life changes such as getting a new job or buying a car can affect where they would like to live.
- Answers will vary. Refer students to their checklist in question 2 to help them describe the properties of their dream place. Considering other responses from question 2 will help them determine the most important properties of the place.
- 25
- \$600
 - \$15
 - \$20
 - Answers are in italics.
- Answers will vary. Possible responses include holding a part-time job or finding a roommate to split the cost of rent.
 - \$3200
 - 22%
- \$3200
 - 30%
 - She could find a part-time job to earn more, she could work overtime, or she could get a roommate to share the cost of rent.
- Example: $\frac{1}{2}$. The rent is split evenly between them because they evenly share the apartment.
 - \$450
 - \$446.25
 - \$401.63
 - \$1606.50
 - 28%
 - Example: A roommate can pay a fraction of the rent and reduce the amount you have to pay each month. This means that you can afford to live in a better apartment than you could get on your own.
- 30%
 - 23%
 - Example: Yes, because if they share the apartment evenly, they should pay equal fractions of the rent.

Monthly Rent	Weekly Earnings Needed	Wage Needed If Working 40 Hours Per Week	Wage Needed If Working 30 Hours Per Week
\$500	<i>\$500</i>	<i>\$12.50</i>	<i>\$16.67</i>
\$800	<i>\$800</i>	<i>\$20</i>	<i>\$26.67</i>
\$1000	<i>\$1000</i>	<i>\$25</i>	<i>\$33.33</i>

10. Answers will vary. An example is provided.

a) \$1600

b)

20% of My Monthly Income	25% of My Monthly Income	30% of My Monthly Income	35% of My Monthly Income	40% of My Monthly Income
\$320	\$400	\$480	\$560	\$640

c) Example: The minimum amount I would spend on rent each month is \$320, because it is less than the maximum amount recommended by financial experts.

d) The maximum amount I would spend on rent each month is \$400, because it is 25% of my monthly income. Financial experts recommend that you spend 25% or less of your monthly income on rent.

Answers to Check Your Understanding (Page 91)

1. Answers will vary. Encourage students to research and describe aspects such as the rental price and amenities of their choices and relate these to their monthly income.

Challenge!



Students can calculate the percent of their monthly income spent on rent if they decide to rent one of the places from the Check Your Understanding.

Ongoing Assessment

- Check students' ability to make correct calculations while applying previously learned math skills. Ensure that the Check Your Understanding responses are reasonable.

3.2 Preparing to Move (page 92)

SUGGESTED TIMING

75–150 min

MATERIALS

- calculator
- Internet access
- store flyers

BLACKLINE MASTERS

BLM 3–2 Moving Needs

Specific Expectations

- B.1.4** – gather, interpret, and compare information about the different types of ongoing living expenses associated with renting and owning accommodation and related costs
- B.1.6** – generate a checklist of necessary tasks associated with moving, and estimate the total cost involved under various conditions
- C.3.2** – identify situations in which it is useful to make comparisons using unit rates, and solve problems that involve comparisons of unit rates

Cumulative Review

1. How much rent would you pay in 1 year, if your monthly rent is \$750?
2. List the combinations for rolling a 9 with 2 dice.
3. At \$15 per hour, how much would you earn in a 40-hour week?
4. Give two examples of variable expenses.

Answers to Cumulative Review

1. \$9000
2. (3, 6), (4, 5), (5, 4), (6, 3)
3. \$600
4. Answers will vary. Some examples include groceries, gasoline, car maintenance, clothes, and cleaning supplies.

What's the Math?

Students look at moving out on their own. Mathematical and non-mathematical considerations are dealt with. Students research checklists for moving and consider how they would furnish an apartment of their own. They also research the cost of new and/or used items that they would need to live independently.

Warm Up Notes

Although unit price is not officially defined until the next section, it is used in the first two questions of this Warm Up and is review from earlier years. You may wish to have students define this term in their own words in the Money Matters glossary starting on page 45.

Have students estimate the answers to questions 1 and 2 before using a calculator to determine the answers. Discuss how they did their estimates. For example, \$2.29 is close to \$2.40, so each roll will cost around \$0.40 but less than that.

For question 3, discuss what students mean by “better buy.” For example, buying 12 rolls for \$3.99 is not a good buy if you don’t need that many rolls. Also, they might want to consider how absorbent each type of paper towel is.

Discuss with students various methods for estimating the tax.

Answers to Warm Up (page 92)

- | | |
|--------------------------|-----------|
| 1. 38¢ | 4. 13 |
| 2. 33¢ | 5. 52¢ |
| 3. A package of 12 rolls | 6. \$4.51 |

Activity Planning Notes

Begin with reading the bullets that lead into question 1. For question 1, students can work alone or in small groups, or question 1 can be dealt with as a whole class discussion as some students may currently live on their own or may have some experience with moving.

Question 2 requires Internet access, although it could be done as a whole group activity if an interactive whiteboard or projector is available. If students download their own moving checklists, you may wish to have them print them and tape them into their student resource. If Internet access is not available, have students use **BLM 3–2 Moving Needs** to help them with this question. You may wish to discuss the blank cells as a class or have students fill in their own sheets according to their personal preferences and needs. Consider brainstorming ideas for part c).

Students can do questions 3 and 4 individually or in small groups. Since this apartment has two bedrooms, you may wish to have students work in pairs and consider what they might need if they shared the apartment. Encourage students to list the names of stores or other sources of items they will need. They can use these sources to help them estimate the costs for question 4b).

Accommodations

- Students who have difficulty with the Warm Up questions could benefit from additional reinforcement.

Accommodations

- Read instructions aloud to the class, if necessary.
- Students who currently live on their own, and therefore may have done much of the work in this section, can assist students who may need more guidance.

Speed Bump

- Some students may have difficulty thinking of items they will need to set up their first apartment.
- R_x** Use **BLM 3–2 Moving Needs** to provide students with a jumping-off point.

Questions 5 and 6 should be done individually and require some research. Remind students that they are on a budget. They cannot spend more than \$1000, but could spend less. Discuss the advantages of spending less (i.e., money left for a dinner out or short vacation). Also discuss the different ways of getting things for free (relatives, friends, things left out for garbage pickup or recycling) or for very little money (thrift stores, yard sales). You may wish to discuss the wisdom of renting furniture. Some financial experts advise against this since money is going toward items that the renter will never own.

Take time to consider question 7. Some students will have items they cannot store in their apartment. Should they sell them? If not, what other options do they have? You may wish to discuss the cost of storing such items and how cost-effective that is. Also consider discussing alternatives, such as the advantages and disadvantages of letting someone else use the items they need to store.

Conclude the section with the Check Your Understanding. It may be beneficial to complete the Check Your Understanding as a class since the questions (other than question 4) are very general in nature.

Literacy Link

Encourage students to create their own definitions of unfamiliar terms in the moving checklists.

Answers to Activity Questions (pages 92–99)

1. a) Answers will vary. Possible responses include bedroom or living room furniture, electronics, and kitchen items such as pots, pans, cutlery, and dishes.
b) A moving plan helps you make sure you don't forget anything and helps you budget for moving expenses.
 2. b) Answers will vary. Possible responses include renting a moving van, purchasing packing supplies such as boxes, padding, and tape, and buying cleaning supplies.
c) Answers will vary. Example: I would ask family or friends to lend their vehicles to move boxes and furniture, and ask them for any unused boxes to pack my belongings in.
 3. Answers will vary. Possible responses include kitchen items such as pots and pans, cutlery, and dishes, and bedroom items such as a bed, dresser, desk, sheets, blankets, and pillows.
 4. a) A department store or discount department store, shopping mall, or furniture store
b) Answers will vary. Encourage students to consider their day-to-day needs when selecting what items to list for the kitchen and bathroom.
 5. a) and b) Answers will vary. A discussion about the cost of items and how the place where they are purchased affects the price will help students complete the chart.
- c) Answers will vary. It is unlikely that a budget of \$1000 would cover all the costs of setting up an apartment if students need to purchase larger items such as furniture.
 - d) Borrow or purchase used items from family and friends, buy from classified ads in a newspaper or online, or buy from a thrift store.
6. Answers will vary. Students should be able to afford more items when buying used or borrowing than they are able to purchase new.
 7. a) Bicycle, skateboard, sporting equipment
b) These items could be stored in storage lockers if they are available, in the spare room in the apartment, or at a larger place belonging to a family member or friend.

Answers to Check Your Understanding (page 99)

1. Answers will vary. Example:

Advantages: I can have friends over when I like; there is no curfew.

Disadvantages: It can be more costly than living at home; I need to care for and maintain my place.

2. Find 25% of my monthly net income.
3. Percentages, multiplication and division, estimating
4. Answers will vary. Possible responses include a hydro company, a cable provider, a credit card company, family and friends, and a workplace.

Challenge!



- Students can design their ideal apartment layout using the model floor plan given in the student resource.
- Students who live on their own may wish to create a drawing of their current floor plan.

Ongoing Assessment

- Check students' ability to make correct calculations as needed, given the context of the material.

Skills Practice 3: Comparing Rental Prices

(page 100)

SUGGESTED TIMING

30 min

MATERIALS

- calculator

BLACKLINE MASTERS

SP BLM 3 Comparing Rental Prices

Specific Expectations

A.1.7 – explain how the media, the advertising industry, and others use and misuse statistics to promote a certain point of view

B.1.4 – gather, interpret, and compare information about the different types of ongoing living expenses associated with renting and owning accommodation and related costs

Speed Bump

- Some students may be unsure of terms like *bi-monthly* and *quarterly*.

R_x Do question 2 of Skills Practice 3 as a whole class activity.

Accommodations

- Some students may benefit from working in pairs or in a group of three.
- Students who can benefit from additional reinforcement might find it useful to complete **SP BLM 3 Comparing Rental Prices**.

What’s the Math?

This Skills Practice involves previously learned mathematical concepts including billing frequencies and calculating averages. You may wish to use it as a diagnostic test before moving on to work with determining the better buy.

Activity Planning Notes

This activity builds on previously learned skills by encouraging students to apply the mathematics to the task of determining which apartment is more affordable. It also starts students thinking about the “extras” of renting accommodations.

You may wish to have students work in pairs on this Skills Practice, with one member of each pair handling question 1 related to Harbour Side Apartments and the other handling question 2 related to Fields Rental Properties. They can then discuss and check each other’s answers before doing question 3 together.

Literacy Link

Encourage a discussion about the ads in the Skills Practice and how the wording may encourage renters to choose an apartment with a higher rent.

Answers to Skills Practice 3: Comparing Rental Prices (pages 100–101)

1. a) \$895
 b) Heat: \$0; hydro: \$0; water: \$0; parking: \$0
 c) \$895

2. a) Answers are in italics.

Expense	Billing Frequency	Rounded Amount Per Bill	Annual Total Cost	Average Monthly Cost
Hydro	Bi-monthly	\$130	<i>\$780</i>	<i>\$65</i>
Heat	Monthly	\$90	<i>\$1080</i>	<i>\$90</i>
Water	Quarterly	\$220	<i>\$880</i>	<i>\$73.33</i>
Parking	Monthly	\$25	<i>\$300</i>	<i>\$25</i>

b) \$1028.33

3. a) Fields Rental Properties
 b) Harbour Side Apartments
 c) It doesn't give the actual costs for heat, hydro, water, and parking.
 d) Example:

Fields Rental Properties:
 2-bedroom apartments, \$775/month plus approx. \$250 in utilities.

Harbour Side Apartments:
 2-bedroom apartments from \$895/month. No charge for heat, hydro, water, or parking!

Skills Practice 4: Writing a Cheque for Rent (page 102)

SUGGESTED TIMING

45–60 min

MATERIALS

- calculator

BLACKLINE MASTERS

Master 7 Cheque Templates
SP BLM 4 Writing a Cheque for Rent

Accommodations

- Some students may benefit from working in pairs or in a group of three. Students who are familiar with cheques can work with students who are not as familiar with cheques and who may require more guidance.
- You may wish to provide students with **SP BLM 4 Writing a Cheque for Rent** for extra practice and reinforcement.

Speed Bump

- Explain that a cheque must be cashable. Therefore, all of the required parts must be correct. Some common errors in cheque writing include writing
 - the previous year for cheques written early in a new year,
 - the amount in numbers that don't match the amount in words, and
 - the cents in words rather than in numbers above /100.
- R_x** Display page 102, preferably on an interactive whiteboard, and go through the process of putting the required information in the required places. Provide sufficient practice for students to master the skill. Use **Master 7 Cheque Templates** as necessary.

What's the Math?

This Skills Practice involves writing cheques, which should have been covered in earlier mathematics classes. **Master 7 Cheque Templates** can be used in lieu of or in addition to the cheque templates in the student resource.

Activity Planning Notes

Students who have cheques or are familiar with cheques may notice that the cheques provided by various banks have the date displayed in different formats. Encourage a discussion about the different formats on cheques, and the possible issues that may arise from these differences.

Review with students the different parts of the cheque and how each is filled in. You may wish to discuss the wisdom of writing lines across the amount line so that no one can increase the amount for which the cheque is written. You may also wish to review key terms such as *issuer* and *recipient*.

For question 4, discuss why the first cheque for an apartment rental is for the first and last month's rent. This is discussed further in Section 3.4.

Literacy Link

Some of the activities in this chapter involve the use of the Internet. Note that if students use American Web sites, *cheque* will appear as *check*. In banking, *chequing* (account) will be spelled *checking*.

Answers to Skills Practice 4: Writing a Cheque for Rent (pages 102–103)

1. a) J. Consumer
 b) John A. MacDonald
 c) \$23.45
2. So the issuer, the recipient, and the bank can ensure that the amount is accurate, and so no one can change the amount of the cheque to a different amount
3. a) Year (4 digits), month (2 digits), day (2 digits)
 b) Answers will vary depending on the year. A possible response is 2010/08/19.
 c) Answers will vary depending on the year. A possible response is 2010/05/08.

4. Examples:

a)

Stu Dent	189
75 Scholar Blvd.	
Summer City, ON	2015 10 08 Y Y Y Y M M D D
Pay to the Order of	Circle Apartments \$ 1300.00
<i>One thousand three hundred.....XX</i> /100 Dollars	
MATH Bank	Stu Dent
3.14 159 2653 5897	

b)

Stu Dent	190
75 Scholar Blvd.	
Summer City, ON	2015 10 08 Y Y Y Y M M D D
Pay to the Order of	Circle Apartments \$ 650.00
<i>Six hundred and fifty.....XX</i> /100 Dollars	
MATH Bank	Stu Dent
3.14 159 2653 5897	

3.3 Looking for the Better Buy (page 104)

SUGGESTED TIMING

75–150 min

MATERIALS

- calculator

Specific Expectations

- B.1.4** – gather, interpret, and compare information about the different types of ongoing living expenses associated with renting and owning accommodation and related costs
- B.1.6** – generate a checklist of necessary tasks associated with moving, and estimate the total cost involved under various conditions
- C.3.2** – identify situations in which it is useful to make comparisons using unit rates, and solve problems that involve comparisons of unit rates
- C.3.3** – identify and describe real-world applications of proportional reasoning, distinguish between a situation involving a proportional relationship and a situation involving a non-proportional relationship in a personal and/or workplace context, and explain their reasoning

Cumulative Review

1. Joe earns \$225 bi-monthly doing odd jobs. How much does he earn in 1 year?
2. Calculate the average of \$400, \$450, \$300, and \$550.
3. An employee is paid bi-weekly. If this week's payday is December 14, what is the date of the next payday?
4. List two common fixed expenses.

Answers

1. \$1350
2. \$425
3. December 28
4. Answers will vary. Examples include rent, car payments, and insurance premiums.

What's the Math?

Students look at calculating unit prices in a number of common scenarios. An emphasis is placed on the decision making that follows these types of calculations.

Warm Up Notes

Students who have never done any grocery shopping or worked in a grocery store may have trouble with question 1. Encourage them to consider what is sold by the pound or kilogram.

For question 2, you may need to clarify that *volume* refers to something sold by the litre or part-litre.

For question 3, make sure that students understand the meaning of *perishable*.

Before students start question 4, discuss with them how to divide by 1000 mentally. You may have them orally divide each number by 10, 100, and then 1000.

For question 5, students may need to review that 1 litre has 1000 millilitres and that 1 kilogram has 1000 grams.

Before students start question 6, discuss with them how to multiply by 1000 mentally. You may have them orally multiply each number by 10, 100, and then 1000.

For further reinforcement, you could have students multiply each part of question 4 by 10, 100, and 1000, and then divide each part of question 6 by 10, 100, and 1000. How are these processes similar? (Answer: The decimal point moves the same number of spaces as the number of zeros.) How do they differ? (Answer: Multiplication and division differ in the direction in which the decimal point moves.)

When discussing answers with students, stress the mathematical processes at work as well as merely obtaining “the right answer.” Stress the use of mental mathematics, thinking strategies, and patterning as opposed to having students simply getting the answers using a calculator.

Answers to Warm Up (page 104)

Answers will vary for questions 1–3. Examples are provided.

1. a) Meat
b) Vegetables
c) Fruit

2. a) Canned goods
b) Milk
c) Juice

3. a) Milk
b) Bread
c) Eggs

4. a) 0.750
b) 7.200
c) 0.250

5. a) 1000
b) 1000
c) 0.5
d) 0.1

6. a) 355
b) 1890
c) 1140
d) 473

What’s the Math?

Students review the work they did in earlier years by reviewing *unit price* and calculating the unit price of various sale items. Various different methods of calculating unit price are covered. In addition, students are asked to consider why, sometimes, it may be wise to buy the item that has the more expensive unit price.

Activity Planning Notes

After reading the information in the list immediately following the Warm Up, it may be possible to assign the entire section as an individual assignment.

Speed Bump

- Some students will struggle making the appropriate calculations.

R_x These students may need one-on-one assistance or could be paired with a stronger student.

Accommodations

- Students can use a calculator throughout this section. Suggest that they estimate each answer before doing the calculation. Review with them how to do such estimates.

Example for question 1 on page 105:
79¢ is about 80¢.
3 rolls at 80¢ would cost \$2.40.
Independent Mart has the cheaper paper towels.

The majority of the mathematics concepts have been practised in earlier math classes. The flexible part of this section involves decision making. That is, once the math has been completed and the appropriate calculations made, students need to evaluate the choices available, given their needs and circumstances. Encourage students to provide reasoning for their decisions.

Question 1 has students do a regular calculation of unit price, then consider when and whether a unit price would affect their decision to buy a certain type of paper towels. You may wish to discuss other considerations that would come into play, such as the distance to the different stores and the quality of the paper towels. The amount of paper towelling they use might also affect their decision.

Question 2 provides two different ways to compare pricing [in part a) and part b)]. Have students consider which method they prefer and whether that method would always work. Discuss what else besides price would affect the place they bought their tires and how to use estimation to make this comparison.

Question 3 has students evaluate how much mayonnaise they need as they consider the best buy and the best-before date on the product. If they don't use a lot of mayonnaise, it may be poor economy to buy a large bottle and throw out most of it.

In question 4, students look at two ways of pricing exactly the same type of meat. Students will see this type of pricing in many stores. Encourage them to experiment with both ways of comparing the prices.

Question 5 encourages students to consider the value of buying 45 rolls at a very inexpensive price per roll versus 12 rolls at a slightly higher cost per roll. Part of their decision might have to do with how they do their shopping (it might be rather awkward to carry home a 45-roll package) and how much toilet paper they need.

Suggest that students use what they have learned in this section to complete the Check Your Understanding.

Literacy Link

If students have not already defined *unit price* in the Money Matters glossary starting on page 45, make sure they do so now.

Ensure that students state the units for each situation. Since many calculations in this section involve unit price, answers must be stated in the price per unit.

Answers to Activity Questions (pages 105–107)

1. a) \$2.37
b) 76¢
c) Answers will vary.
d) Answers will vary. Example: Yes, I would buy the paper towels with the lower unit price because I want to save money.
e) Answers will vary. Example: It would depend whether the other things I need to buy are available at the store with the lower unit price.
2. a) \$359.96
b) \$82.50
c) Answers will vary.
d) Answers will vary. Example: Yes, I would buy the tires from the place with the lowest unit price.
e) Answers will vary. Example: The price of a single tire could be rounded to \$90 and multiplied by 4 to estimate the unit price.
f) \$360
3. a) The retailer must sell the product before the best-before date, or they will have to throw it away.
b) The consumer should eat or use the product before the best-before date. It is usually not a major problem to eat food slightly after the best-before date; however, eating food well

beyond that date could result in food poisoning or other illness. Other products may not work as well after their best-before date.

- c) 2-L jar: \$2.25/L, 500-mL plastic bottle: \$5.58/L
 - d) The 2-L jar
 - e) Answers will vary. Example: Round the price of the 500-mL plastic bottle to the nearest dollar, and multiply the value by 4 to compare prices to the 2-L jar.
 - f) Answers will vary. Example: I would buy the 500-mL plastic bottle even if it is more expensive, because I might not use 2 L of mayonnaise before the best-before date.
4. a) \$21.20
b) \$2.00
c) The second store
 5. a) First store: 33¢, second store: 58¢
b) Answers will vary. Possible responses include what else is on sale at the store, the brand or quality of the toilet paper, or the availability of storage for the number of rolls selected.

Answers to Check Your Understanding (page 107)

1. First package: \$1.58 for 500 sheets (2 packages); second package: \$1.79 for 500 sheets. The first package is the better buy.

Challenge!



Students could check grocery flyers, then make up and exchange their own better buy questions. Discuss how these calculations might help them afford accommodation in the future.

Ongoing Assessment

- Check students' ability to make calculations correctly, to state answers using proper units, and to explain the reasoning behind their choices.

3.4 Rights and Responsibilities (page 108)

SUGGESTED TIMING

75 min

MATERIALS

- Internet access

BLACKLINE MASTERS

Master 6 Calendar Template

Specific Expectations

B.1.5 – gather, interpret, and describe information about the rights and responsibilities of tenants and landlords

B.2.1 – categorize personal expenses as nondiscretionary or discretionary

B.2.2 – categorize personal nondiscretionary expenses as fixed or variable

Cumulative Review

1. Calculate the annual earnings of someone who earns \$4000 per month.
2. What is the highest number that can be rolled with 4 dice?
3. As a fraction, what is the probability of selecting a face card (J, Q, or K) from a deck of cards?
4. Give 2 answers for the possible weekly earnings of someone who earned \$4000 last month.

Answers to Cumulative Review

1. \$48 000

2. 24

3. $\frac{12}{52}$ or $\frac{3}{13}$

4. \$1000 (4 pays) or \$800 (5 pays)

What's the Math?

The section focuses on students' investigating the rights and the responsibilities of landlords and tenants in Ontario. It is important for students to understand these concepts in order to be responsible tenants. Although being a responsible tenant includes paying rent on time and budgeting accordingly, students must know that there are non-mathematical aspects of renting.

Accommodations

- Students who have difficulty with the Warm Up questions could benefit from additional reinforcement.

Technology Link



Go to www.mcgrawhill.ca/books/workplace12 and follow the links for various poems that help students remember the number of days in each month.

Warm Up Notes

Some students may find it useful to have **Master 6 Calendar Template** when they are doing questions 1 to 3. For question 3, you may also wish to have them learn a mnemonic such as:

Thirty days hath September,

April, June, and November.

All the rest have thirty-one,

Except for February.

Leap year cometh once in four,

February then has one day more.

Other versions of this rhyme are available in the Technology Link.

Discuss with students various ways of doing question 4. For example, they might use knowledge of fractions to get 450 as half of 900 [part a)], and then patterning to get that 225 [part c)] is half of that half, or one quarter of 900. They could get the answer to part b) using front-end loading. ($9 \div 3 = 3$; therefore, $900 \div 3 = 300$).

Encourage them to use patterning to help answer question 5:

- a) 10% of \$800 is like dividing \$800 by 10.
- b) Get 1% of \$800 by dividing the answer to part a) by 10.
- c) Get 2% of \$800 by multiplying the answer to part b) by 2.

They can calculate the answer to question 6 in a number of different ways, including patterning.

$$\begin{aligned}
 1 \times \$800 &= \$800 \\
 10 \times \$800 &= \$8000 \\
 2 \times \$800 &= \$1600 \\
 12 \times \$800 &= \$8000 + \$1600 \\
 &= \$9600
 \end{aligned}$$

Challenge students to come up with other methods of doing this orally.

Stress that the mathematical processes they use are just as important as obtaining the correct answer.

Answers to Warm Up (page 108)

- | | |
|---|------------|
| 1. July 7 | b) 300 |
| 2. May 14 | c) 225 |
| 3. January, March, May, July, August, October, December | 5. a) \$80 |
| 4. a) 450 | b) \$8 |
| | c) \$16 |
| | 6. \$9600 |

Activity Planning Notes

This section is designed to be delivered in small parts or question by question. Have students complete question 1 individually or in a small group. Encourage debate and have students explain their reasoning.

For question 2, have students research the correct answers for question 1. Have them note which parts they thought were correct, but were in fact incorrect. Ask them to correct the wording of those parts.

Question 3 is located here to provide a change of pace to the activity, although it does not have to be done in the indicated sequence. This question also introduces the idea of a rent *deposit*, which is a common practice in Ontario. Students also review how to write a cheque and calculate the amount of annual rent.

Speed Bump

- Some students may have no experience with the material covered in this section.
- R_x** You may wish to spend extra time on each question in this section to give students an opportunity to get more familiar with the rights and responsibilities of landlords and tenants.
- Some students may find the Web sites cited for this activity difficult to navigate.
- R_x** Consider having students work in pairs or in small groups. Alternatively, project the information from the Landlord and Tenant Board and discuss it as a class.

Accommodations

- It may be beneficial to work through question 1 as a group and then do question 2 using an interactive whiteboard or projector.

Students will need Internet access in order to answer question 4. You may wish to provide this to individuals, or use a whiteboard or other technology to show the information from the Landlord and Tenant Board to the entire class.

The Check Your Understanding also involves online research and some explanation.

Literacy Link

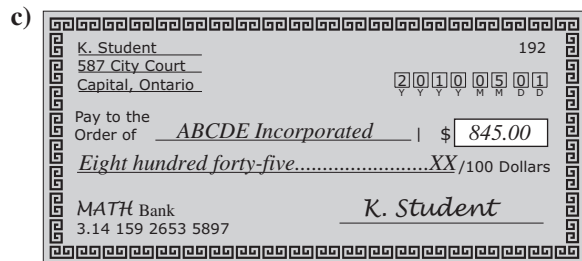
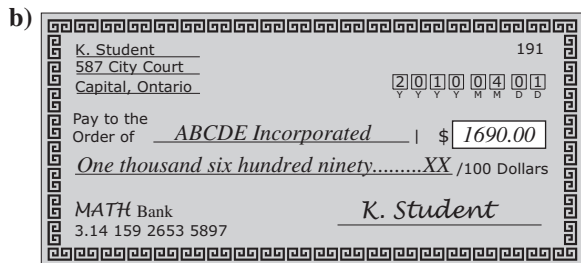
Have students define *tenancy agreement*, *lease*, *landlord*, *tenant*, *deposit*, and *post-dated cheque* in the Money Matters glossary beginning on page 45.

There will likely be a number of terms that students are unfamiliar with. Encourage students to make a list of these terms. Discuss them as a class. Students can then write their own definitions.

Answers to Activity Questions (pages 108–111)

- false
 - true
 - true
 - true
 - true
 - false
 - true
 - true
 - true
 - true
 - true
 - false
 - false

3. a) \$1690



- \$10 140
- \$40 560

- 12
 - 12
 - 90
 - 14
 - 60

Answers to Check Your Understanding (page 111)

1. Yes. If the landlord requires the tenant to be employed, and the tenant's employment ends, the landlord can ask the tenant to leave.

Ongoing Assessment

- Ensure that students understand the concepts being addressed. Note participation in discussions and the nature of the comments made. Note students' ability to research information.

Challenge!



Students proficient at Internet research can do this section individually.

Skills Practice 5: Reading a Lease (page 112)

SUGGESTED TIMING

30–45 min

MATERIALS

- Internet access
- dictionary or thesaurus optional

BLACKLINE MASTERS

SP BLM 5 Reading a Lease

Specific Expectation

B.1.5 – gather, interpret, and describe information about the rights and responsibilities of tenants and landlords

What’s the Math?

Skills Practice 5 is intended as a light-hearted activity designed to put the often confusing wording of legal documents into everyday English.

Activity Planning Notes

This activity should have the added effect of enhancing students’ vocabulary and promoting awareness of their responsibilities when they sign a lease. A dictionary or thesaurus can be used as reference for difficult words.

Using **SP BLM 5 Reading a Lease** can provide students with additional practice and the opportunity to see a variety of rental agreements.

Accommodations

- Students who do not have English as their first language may benefit from working in a pair with a student who is fluent in English.
- **SP BLM 5 Reading a Lease** provides additional reinforcement for this material.

Literacy Link

After completing this activity, students will be able to make connections between a number of legal terms that deal with the renting of accommodations and the everyday English definition of the terms. Have students define *lessor*, *lessee*, *parties*, and *fixed term* in the Money Matters glossary beginning on page 45. You may wish to have them add additional terms to the end of that glossary.

Answers to Skills Practice 5: Reading a Lease (pages 112–113)

1. Example: I will pay a deposit of \$100, which is less than 1 week’s rent (if I rent by the week), or less than 1 month’s rent (if I rent by the month).
2. Example: I and my guests will not interfere with the use of the property by the other tenants.
3. Example: I will maintain the cleanliness of my unit up to normal standards. I will be responsible for paying for the damages to the unit caused by me or my guests.
4. Example: If I pay rent late, the landlord may give me a 20-day notice of eviction.
5. Example: If I pay my late rent within 10 days of the eviction notice, the eviction will be cancelled.

3.5 Some Other Living Expenses (page 114)

SUGGESTED TIMING

75 min

MATERIALS

- calculator
- Internet access

BLACKLINE MASTERS

SP BLM 6 Reading a Utility Bill

Specific Expectations

B.1.1 – identify the financial implications and the non-financial implications associated with living independently

B.1.4 – gather, interpret, and compare information about the different types of ongoing living expenses associated with renting and owning accommodation and related costs

B.2.2 – categorize personal non-discretionary expenses as fixed or variable

B.2.3 – read and interpret prepared individual or family budgets, identify and describe the key components of a budget, and describe how budgets can reflect personal values

B.2.5 – identify and describe factors to be considered in determining the affordability of accommodation in the local community

Cumulative Review

1. A package of 12 rolls of paper towels sells for \$6.99. Estimate and then calculate the unit price.
2. Is it likely to rain if the P.O.P. is 30%?
3. How much can you save in one year if you save \$25 per week?
4. Express 5% as a decimal and as a fraction.

Answers

1. Estimate: 60¢ per roll. Calculation: 58¢ per roll
2. No, it is not likely to rain.
3. \$1300
4. 0.05, $\frac{5}{100}$, or $\frac{1}{20}$

What's the Math?

Students work with additional topics that they may encounter as renters. These include:

- calculating percent or percent increase in the context of annual rent increases and
- looking at insurance and utilities.

Students have done these calculations before, although in different contexts. A Tech Tip on adding a percent to a number immediately follows this section. You may wish to do it ahead of work on the section.

Warm Up Notes

Stress the use of mental mathematics, thinking strategies, and patterning as opposed to having students simply getting the answers using a calculator.

Have students explain how patterning can assist them with completing question 1.

Accommodations

- Students who have difficulty with the Warm Up questions may benefit from additional reinforcement.

Discuss as a class how to do question 4 mentally. For example:

$$\begin{aligned} \$927 \times 12 &= (\$900 \times 12) + (\$20 \times 12) + (\$7 \times 12) \\ &= \$10\,800 + \$240 + \$84 \\ &= \$11\,040 + \$84 \\ &= \$11\,124 \end{aligned}$$

A calculator will be necessary for questions 5 and 6.

Answers to Warm Up (page 114)

- a) \$90
b) \$9
c) \$18
d) \$27

- a) \$990
b) \$909
c) \$918
d) \$927

3. \$10 800

4. \$11 124

5. 15.45

6. \$25.50

Activity Planning Notes

This section is somewhat of a catch-all that deals with typical expenses that renters will or may incur. Each of the subsections will likely need to be introduced as a whole group activity. This may guide the pacing for the section.

Allow students to use a calculator for questions 1 and 2. These questions then become simple calculations.

For question 3, it may be beneficial to have one individual research the percent increases or to do it as a class on an interactive whiteboard or projector. Depending on the skill level of the students, some will benefit from working through the Tech Tip that follows the section before completing this question.

Question 4 can be used as an assessment of the students' understanding of the concept of annual rental increases and their ability to calculate them.

Question 5 has students consider rent increases from the point of view of the landlord. What is the advantage to landlords of annual increases? What might happen if they don't increase the rent annually?

Question 6 provides additional practice in calculating percent increases, this time with insurance.

Question 7 should be dealt with in detail as paying utilities appears frequently in the next chapter. Skills Practice 6 can be done at this time before moving to question 8.

Complete the section with the Check Your Understanding.

Speed Bump

- There is a lot of information in the section that may be new to students who have not lived on their own.
- R_x** You may wish to go over parts of the section as an entire class, or to pair students who are not familiar with insurance or utilities with students who may be familiar with these concepts.

Accommodations

- Additional utility bills and extra practice can be found in **SP BLM 6 Reading a Utility Bill**.

Literacy Link

Have students define *premium* and *utilities* in the Money Matters glossary beginning on page 45. Encourage students to generate their own definition of the term *utilities* since it will be seen later in the course.

Answers to Activity Questions (pages 114–117)

1. Answers are in italics.

Monthly Rent in 1974 (\$)	Allowable Rent Increase (\$)	Monthly Rent in 1975 (\$)
\$475	\$38	\$513

2. Answers are in italics.

Monthly Rent in 2004 (\$)	Allowable Rent Increase (\$)	Monthly Rent in 2005 (\$)
\$860	\$12.90	\$872.90

3. Answers will vary depending on the years researched. Make sure that students research the current year and the two preceding years. The increases for 2008 to 2010 are in italics.

Year	Percent Rent Increase
2010	2.1%
2009	1.8%
2008	1.4%

4. Answers are in italics.

Year	Previous Amount of Rent	Percent Rent Increase (%)	Amount of Increase (\$)	Total Monthly Rent
2007	\$970.00	2.6%	\$25.22	\$995.22
2008	\$995.22	1.4%	\$13.93	\$1009.15
2009	\$1009.15	1.8%	\$18.16	\$1027.31
2010	\$1027.31	2.1%	\$21.57	\$1048.88

5. Answers will vary. Example: I would charge the maximum because I would make more money to maintain the building and pay the costs of maintenance that go up with inflation.

6. a) \$20.17
b) \$21.18

7. a) Answers are in italics.

Item	Billing Frequency	Average Amount Billed	Estimated Annual Cost
Natural gas	Monthly	\$118	\$1416
Electricity	Bi-monthly	\$140	\$840
Water	Quarterly	\$120	\$480
Estimated Total Annual Cost			\$2736

- b) About \$3000

8. a) \$1830
b) \$10 980
c) Answers will vary. Possible responses include insurance, cable, and Internet.
d) Example: Some landlords include heat, but have a maximum limit to the cost. So, if Christine uses too much heat, the landlord may charge her if she exceeds the maximum.

Answers to Check Your Understanding (page 117)

1. It is the maximum amount by which landlords may increase rent each year.
2. Examples:
Heating: turn the heat down; open the curtains to let sunlight in.
Electricity: turn off the lights when you are not in the room; use energy-efficient appliances.
Water: take shorter showers; run the dishwasher only when it is full.
3. \$450

Challenge!



Students can investigate utility usage in their own homes and use these values to create their own version of the chart in #7.

Ongoing Assessment

- Use the Check Your Understanding to ensure that students understand the concepts being addressed. In terms of calculations, any part of the Tech Tip on pages 118–119 could be used for assessment.

Tech Tip: Adding Percent to a Number

(page 118)

SUGGESTED TIMING

20–30 min

MATERIALS

- calculator

BLACKLINE MASTERS

Master 3 Fractions, Decimals, and Percents
BLM 3–3 Practice Adding a Percent to a Number

Specific Expectations

C.3.3 – identify and describe real-world applications of proportional reasoning, distinguish between a situation involving a proportional relationship and a situation involving a non-proportional relationship in a personal and/or workplace context, and explain their reasoning

C.3.5 – solve problems involving proportional reasoning in everyday life

What’s the Math?

Students learn two methods for using a calculator to add percent to a number.

Activity Planning Notes

You may wish to have students do this Tech Tip before starting Section 3.5, or just before starting question 3 in that section.

Many students have been taught to calculate the percent increase and then add the increase to the original amount. This is a cumbersome method that may cause confusion for some students. Method 1 is simpler.

Method 1 is preferred as it takes students right to the final answer, be it an after-tax cost or the cost of next year’s rent. The vast majority of calculators will accept Method 1. Often there is no need to calculate the value of the increase; students may simply want to know the new amount.

Many students carry a cell phone with a built-in calculator. Many phone calculators do not have a percent key. Students using this form of technology need to be acquainted with Method 2.

Have students work through questions 1 to 4. Check students’ understanding of the concept of and ability to calculate percent increases.

Accommodations

- Using **Master 3 Fractions, Decimals, and Percents** can provide extra support for this exercise.
- **BLM 3–3 Practice Adding a Percent to a Number** provides additional reinforcement of this skill.

Answers to Tech Tip: Adding a Percent to a Number (pages 118–119)

- a)** \$662.50
b) \$662.50
c) Answers will vary. Students may choose an option based on their comfort level with operations such as multiplication or using percent.

- a)** \$10.97
b) \$1755.20
- \$181.50
- \$828

Skills Practice 6: Reading a Utility Bill

(page 120)

SUGGESTED TIMING

30–45 min

MATERIALS

- calculator

BLACKLINE MASTERS

SP BLM 6 Reading a Utility Bill

Specific Expectations

A.1.1 – read and interpret graphs obtained from various sources

B.1.4 – gather, interpret, and compare information about the different types of ongoing living expenses associated with renting and owning accommodation and related costs

What’s the Math?

Reading a utility bill requires a certain level of math skills, including determining the start and end date of the billing period, identifying the frequency of billing used, reading the various pieces of information on the bill, and analyzing the graph showing the historical usage data.

Activity Planning Notes

This Skills Practice should be dealt with in some detail as there is a lot of information in the utility bill provided and the paying of utilities comes up frequently in the next chapter.

Display the page, preferably on an interactive whiteboard or projector, and go through the bill in detail with the students as a whole class activity, to aid in student understanding.

The questions provided are a sample of the possible questions that can be generated. Consider adding questions dealing with the reading and interpretation of the graph or the list of charges in addition to the actual charge for the energy. Many communities have installed “smart meters” which will bill customers at different rates for electricity used at different times of day. This can elicit a discussion on personal electricity usage habits and how they can be modified to reduce cost.

Speed Bump

- There is a lot of information in the utility bill in Skills Practice 6. Some students may feel intimidated by the amount of data included in such a relatively small space.

R_x Display the page and go through the bill in great detail to aid in student understanding.

Accommodations

- **SP BLM 6 Reading a Utility Bill** can be used for additional reinforcement.

Answers to Skills Practice 6: Reading a Utility Bill (pages 120–121)

- a)** Beginning date: May 12 of this year.
End date: July 12 of this year.
b) bi-monthly
c) 6
d) August 28 of this year
- 714033-002-5050

- a)** \$0.033 or 3.3¢
b) 25
c) approximately 3000
d) approximately \$99
- Look for suggestions such as:
 - use energy-efficient appliances,
 - use large appliances like the dishwasher and dryer only when full, and
 - use natural light when possible.

Chapter 3 Review (page 122)

SUGGESTED TIMING

75 min

MATERIALS

- calculator

BLACKLINE MASTERS

Master 2 Chapter Summary
BLM 3–4 Chapter 3 Word Search

Accommodations

- Students may benefit from making a chapter summary page that summarizes some of the key ideas/skills from the chapter. **Master 2 Chapter Summary** can help provide structure for this process.
- Encourage students to highlight key words and key information contained in each question.
- When students have difficulty on a particular review question, use the Study Guide to identify the section they need to review. You may wish to provide them with additional reinforcement of the questions in this section before moving on to the Practice Test.
- Some students can forgo the Practice Test and move directly to the Chapter Task.

Using the Chapter Review

Insist that students read through the 2 pages of the review before any of the review questions are attempted. Students should be able to work through the review at their own pace. You may wish to suggest that students follow the strategy outlined below in order to complete the review:

1. Look for and complete any questions that you can do unassisted.
2. Next, complete the questions that you understand but may need to refer back to notes or similar questions earlier in the chapter to complete.
3. Ask a classmate for help.
4. Ask the teacher for help.

Some students may need to do the review in chunks. For example, have students try question 2a), and then take it up. Then, have them complete question 2b). This process will avoid the problem of students rushing through and completing many questions incorrectly. Re-teach concepts and/or procedures as necessary.

Use **BLM 3–4 Chapter 3 Word Search** as a means of reviewing the key terms.

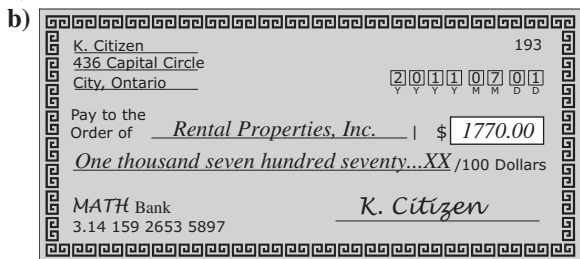
Note: The teacher or a student will need to research the most recent annual percent rent increase so that students can complete question 7.

Review Guide

Question	Section(s)	Refer To
1	3.1	What Are Your Choices? (page 86, #1)
2	3.1	What Are Your Choices? (pages 88–91)
3	3.1	What Are Your Choices? (pages 88–91)
4	3.1	What Are Your Choices? (pages 88–91)
5	SP 4 3.4	Skills Practice 4 (pages 102–103) Rights and Responsibilities (page 110, #3)
6	SP 3 3.5	Skills Practice 3 (pages 100–101) Some Other Living Expenses (pages 116–117)
7	3.5	Some Other Living Expenses (pages 114–115)
8	3.5 SP 6	Some Other Living Expenses (pages 116–117) Skills Practice 6 (pages 118–119)
9	3.3	Looking for the Better Buy (pages 104–107)

Answers to Chapter 3 Review (pages 122–123)

1. Answers will vary. Possible responses include condominium, basement apartment.
2. a) \$800; \$20
b) \$26.67
c) Get a part-time job to earn more money or share with a roommate.
3. 23%
4. \$739.20
5. a) \$1770



6. Answers will vary. Possible responses include heat, hydro, water, insurance.

7. Answers will vary depending on the year. An example is 2.1%; \$964.85.

8. a) \$13 440
b) Answers are in italics.

Item	Billing Frequency	Average Amount Billed	Estimated Annual Cost
Natural gas	Monthly	\$140	<i>\$1680</i>
Electricity	Bi-monthly	\$190	<i>\$1140</i>
Water	Quarterly	\$160	<i>\$640</i>
Estimated Total Annual Cost			<i>\$3460</i>

- c) \$3979
9. a) 21¢; 37¢
b) Answers will vary. Examples:
 - I will buy the 24-roll package because it is a better buy.
 - I will buy the 4-roll package because I do not use a lot of toilet paper and have nowhere to store 24 rolls.

Chapter 3 Practice Test (page 124)

SUGGESTED TIMING

60–75 min

MATERIALS

- calculator

BLACKLINE MASTERS

Master 2 Chapter Summary
BLM 3–5 Chapter 3 Test

Accommodations

- If they have not already developed a chapter summary, some students may benefit from making one now. **Master 2 Chapter Summary** provides a useful outline.
- When students have difficulty on a particular question, use the Study Guide to identify the section they need to review. You may wish to provide them with additional reinforcement of the questions in this section before they do the chapter test.

Summative Assessment

- Have students complete **BLM 3–5 Chapter 3 Test** and/or **BLM 3–6 Chapter 3 Task** to assess individual performance.

Using the Chapter Practice Test

As in the chapter review, encourage students to read through the practice test before they attempt any of the questions. Students should be able to work through the test at their own pace. You may wish to suggest that students follow the same strategy as for the chapter review. Remind them that a test is a time to show what they know. That’s why it’s important to do the questions they feel confident of first.

Re-teach concepts and/or procedures as necessary.

Study Guide

Question	Section(s)	Refer To
1	3.1	What Are Your Choices? (page 86, #1)
2	3.1	What Are Your Choices? (pages 88–91)
3	3.1	What Are Your Choices? (pages 88–91)
4	3.1	What Are Your Choices? (pages 88–91)
5	3.5	Some Other Living Expenses (pages 114–115)
6	SP 4 3.4	Skills Practice 4 (pages 102–103) Rights and Responsibilities (page 110, #3)
7	3.3	Looking for the Better Buy (pages 104–107)

Answers to Chapter 3 Practice Test (pages 124–125)

1. Answers will vary. Possible responses include a house or a room in a house.
2. a) \$900
b) \$22.50
c) Answers will vary. Possible responses include an older 2-bedroom apartment.
3. 26%
4. a) \$493.50
b) Answers will vary. Possible responses include renting a smaller place farther from the downtown core or a basement apartment in someone’s home.
5. \$1092.86
6. a) \$1590

b)

O. Consumer	196
1129 City Circle	
City, Ontario	2012 11 01 Y Y Y M D D
Pay to the Order of <u>City Rental Inc.</u>	\$ 1590.00
<i>One thousand five hundred ninety.....XX</i> /100 Dollars	
MATH Bank 3.14 159 2653 5897	<u>O. Consumer</u>

7. a) Answers are in italics.

Item	Package and Price	Unit Price
Milk	\$1.99 for 1-L carton	<i>\$1.99/L</i>
	\$4.99 for 4 L in bags	<i>\$1.25/L</i>
Light Bulbs	\$6.99 for 3	<i>\$2.33</i>
	\$19.99 for 12	<i>\$1.67</i>
Paper Towels	99¢ for 2 rolls	<i>50¢</i>
	\$9.99 for 30	<i>33¢</i>

b) Answers may vary. Example: If Aimee uses a lot of milk, light bulbs, and paper towels, she should choose the second choice for each item because the unit prices are lower.

Task: Leaving Town (page 126)

SUGGESTED TIMING

60–75 min

MATERIALS

- calculator
- Internet access (optional)
- newspaper classified ads or similar resource

BLACKLINE MASTERS

BLM 3–6 Chapter 3 Task
BLM 3–7 Chapter 3 Task Rubric
BLM 3–8 Chapter 3 BLM
Answers

Specific Expectations

- B.1.1** – identify the financial implications and the non-financial implications associated with living independently
- B.1.2** – gather and compare, through investigation, information about the costs and the advantages and disadvantages of different types of rental accommodation in the local community
- B.1.4** – gather, interpret, and compare information about the different types of ongoing living expenses associated with renting and owning accommodation and related costs
- B.1.5** – gather, interpret, and describe information about the rights and responsibilities of tenants and landlords
- B.1.6** – generate a checklist of necessary tasks associated with moving, and estimate the total cost involved under various conditions
- B.2.5** – identify and describe factors to be considered in determining the affordability of accommodation in the local community
- B.2.6** – make adjustments to a budget to accommodate changes in circumstances, with technology
- C.3.5** – solve problems involving proportional reasoning in everyday life

Accommodations

- Some students may need to refer to their student resource and/or chapter notes.
- You may wish to have students work in pairs on this Task. By pooling their projected income, they could afford a different apartment. Many young people pool their resources in such a way when first moving out on their own. Students who do this could still provide individual responses.

Summative Assessment

- Use **BLM 3–7 Chapter 3 Task Rubric** to assist you in assessing student work on this Task.

Activity Planning Notes

The Task in the student resource provides opening content for a longer Task that is scaffolded in **BLM 3–6 Chapter 3 Task**.

Display page 126 and read the situation aloud. Discuss and have students answer all questions. Ensure that students understand the scenario. Have students print or cut out the rental accommodation that they have chosen. You may wish to have them glue it to the bottom of page 126 in their student resource or attach it to **BLM 3–6 Chapter 3 Task**.

Distribute **BLM 3–6 Chapter 3 Task**. Encourage students to provide reasoning and to show their calculations for their answers. Note that students may wish to refer back to their work in Chapter 2 to assist them with question 9b). Discuss how such budgeting will be part of many spending decisions as they progress through the course.

Remind them to refer back to notes or earlier sections for help if they are struggling with other concepts or questions.

Answers to Task: Leaving Town (page 126)

1.

Weekly Gross Income	Weekly Net Income (Assume 85% of Gross Income)	Monthly Net Income (Assume a 4-Pay Month)
\$456	\$388	\$1552

- Answers will vary. Example: \$388. This is approximately 25% of my monthly income.
- Answers will vary. Encourage students to examine accommodations in different areas of their community that meet their needs. They should consider price and amenities.

