8.4

Student Text Pages

468-477

Suggested Timing

80-160 min

Tools

- computers with Internet access
- graphing calculators

Optional

spreadsheet software

Related Resources

BLM 8-8 Section 8.4 Living Expenses BLM 8-9 Budget Template

Living Expenses

Link to Prerequisite Skills

Students should complete all the Prerequisite Skills questions before proceeding with this section.

Warm-Up

- **1.** How many hours does Colleen work in one month, if she works 20 h/week?
- **2.** List three fixed expenses and three variable expenses that you or your family has.
- **3.** Calculate the average of \$185, \$195, \$200, and \$245.

Warm-Up Answers

- 1. 80 h for a month with four weeks or 100 h for a month with five weeks.
- Answers may vary. For example:
 Fixed expenses: mortgage, home insurance, cable television.
 Variable expenses: groceries, entertainment, car repairs.
- **3.** \$206.25

Teaching Suggestions

• Throughout this section, there are many opportunities for students to weigh options, create strategies, and defend their choices. Encourage student discussion.

Warm-Up

 Display the Warm-Up questions. Have students complete the questions independently. Then, discuss the solutions as a class.

Investigate

• The Investigate introduces students to on-line budget templates. Explain that structured money management is a skill that students can (and should) use for the rest of their lives.

Investigate Answers (page 468)

Answers may vary. For example:

- residence fees, meal plan, amenities (laundry, telephone, cable television), parking, textbooks and school supplies
- **2.** home telephone, cellular telephone, groceries, dry cleaning, gasoline, parking, public transportation, cable television, health insurance
- **3.** mortgage, property taxes, utilities (gas, electricity, water), daycare or babysitting, groceries, health and home insurance
- **4.** mortgage, property taxes, utilities (gas, electricity, water), tuition, school supplies, groceries, health and home insurance, maintenance and repairs
- 5. property taxes, utilities (gas, electricity, water), groceries, health and home insurance, vacation fund, medication

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Examples

- For Example 1, it might be necessary to supply an additional scenario for students requiring more competence or confidence before moving to Example 2. Stress the concept of the balance, be it positive, negative, or zero. Discuss the implications of each.
- For Example 2, students should realize that not all expenses are constant. A budget needs to be revisited whenever income or expenses change. Explain that there are many ways of rebalancing a budget. The option in Example 2 is only one possibility.

Key Concepts

• Review the Key Concepts as a whole group exercise.

Discuss the Concepts

- These questions can be done in pairs, small groups, or as whole class discussions.
- In **question D2**, stress how many options Julian has and have students weigh the relative merits of each option.

Discuss the Concepts Suggested Answers (page 471)

- **D1.** Reduce other non-essential expenses such as the gift account and clothing.
- **D2.** Add to his college savings, start a savings account for some other purpose, or invest the money.

Practise (A)

- You may wish to have students work in pairs or small groups to complete the Practise questions.
- Encourage students to refer to the Examples before asking for assistance.
- These questions could be done as a class activity using an interactive whiteboard.

Apply (B)

- Have all students complete **question 5**. Understanding these types of expenses, their estimated cost, and whether they are fixed or variable will help students with the other questions and with the case studies in section 8.5.
- For **questions 6**, **10**, **and 11**, encourage students to be flexible in their thinking and to consider the suggestions of others. Remind them that there are many acceptable ways to answer the questions.
- You could supply students who prefer not to use spreadsheet software
 with BLM 8-9 Budget Template for question 11. Edit or delete the Income
 and Expense items on the template as necessary before printing. Remind
 students to check their calculations if they are rebalancing the budget
 by hand.

Extend (C)

• There are no Extend questions. Section 8.5 focuses on in-depth case studies that are an extension to this section.

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Common Errors

- Some students underestimate daily living expenses.
- R_x Have students read grocery fliers or research utility costs. Share your own costs with students if you are comfortable or have students ask their parents or guardians.
- Some students may struggle with decision making when rebalancing a budget.
- **R**_x Students may benefit from working in pairs or small groups.
- Some students forget that not all expenses are incurred monthly.
- R_x Have students answer a question such as: "How many times per month will this expense need to be paid?" or "What is the average cost per month for this expense?"

Accommodations

Language—for the **Investigate**, provide a partner to read the instructions and record the Internet results

Visual—for the **Investigate**, make a handout of an on-line budget template and have students highlight the items in a different colour to answer each question

Spatial—for Example 2, add blank columns to BLM 8-9 Budget Template so students can calculate the new values on the original budget. Edit or delete the Expense and Income items on the template as necessary before printing.

Perceptual—for **Example 2**, have students use different colours to identify the options for rebalancing the budget

Memory—provide a worked example for **question 6**. Use the on-line budget template to demonstrate how to modify the template for different situations. Students can use this worked example as a model for **questions 8 to 11**.

Motor—for questions 8, 9, and 11, provide a partner to enter the data into the spreadsheet

ESL—provide a partner to assist with reading the instructions and completing the Investigate. Ensure students understand the meaning of the items listed in the budgets in the Examples and **questions 1 and 2**. Have students add definitions for new terms to their personal math dictionaries.

Mathematical Process Expectations

Process Expectation	Questions
Problem Solving	4, 5, 11
Reasoning and Proving	1, 2, 5–7, 10, 11
Reflecting	2, 9
Selecting Tools and Computational Strategies	3, 4, 6, 8–11
Connecting	1–11
Representing	6, 8–11
Communicating	1, 2, 4, 10, 11

Extra Practice

• Use **BLM 8-8 Section 8.4 Living Expenses** for extra practice or remediation.

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