


8 Chapter Review

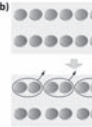
Key Words
Copy and complete each statement in #1 to #3.

- Integers include positive and negative whole numbers and .
- When following the order of operations to evaluate $-2 + (4 - 9) \div 5 \times 3$, do first.
- An integer chip representing $+1$ and an integer chip representing -1 are together called a(n) .

8.1 Exploring Integer Multiplication, pages 286–292

4. What multiplication statement does each set of diagrams represent?


a) 

b) 

5. Determine each product.

- $(+3) \times (+3)$
- $(+4) \times (-5)$
- $(-2) \times (-1)$
- $(-5) \times (+3)$

6. A sloth took 9 min to climb down a tree at 2 m/min. How far did the sloth climb down?



8.2 Multiplying Integers, pages 293–299

7. Determine each product using a number line.

- $(+3) \times (-6)$
- $(+4) \times (+2)$

8. Calculate.

- $(+7) \times (-8)$
- $(-12) \times (-9)$

9. Estimate and then calculate.

- $(+22) \times (+35)$
- $(-49) \times (+13)$


10. The product of two integers is -99 . What could the integers be? Give four possible answers.


11. Kenji spends \$5 per week to buy a sports magazine.

- Represent the amount he spends in a year by an integer multiplication.
- Determine the amount he spends in a year.

8.3 Exploring Integer Division, pages 300–305

12. Copy both division statements. Use the diagrams to complete them.

a) 
 $(+10) \div (+2) = \square$
 $(+10) \div (+5) = \square$

b) 
 $(-8) \div (-2) = \square$
 $(-8) \div (+4) = \square$

13. Determine each quotient.

- $(+16) \div (+8)$
- $(-14) \div (-2)$
- $(-2) \div (+2)$

14. Write a word problem that you can solve using the expression $(-14) \div (+7)$.

8.4 Dividing Integers, pages 306–311

15. Determine $(-18) \div (-3)$ using a number line.

16. Without evaluating the quotients, identify the greatest quotient. Explain your reasoning.

- $(-247) \div (+13)$
- $(-247) \div (-13)$
- $(+247) \div (-13)$

17. Calculate.

- $(+75) \div (+25)$
- $(+64) \div (-8)$
- $(-85) \div (+5)$
- $(-88) \div (-11)$

18. If two integers have a quotient of -1 , how are the integers related?

19. Six friends visited a zoo. The total cost of admission was \$90. One of the group was celebrating his birthday, so the others agreed that he should not pay. How much did each of the others pay?

8.5 Applying Integer Operations, pages 312–317

20. Calculate.


- $-3 \times [(-4) - (-10)] + 12$
- $12 \div (5 - 8) - 4 \times (-2)$

21. The sum of six integers is -42 .

- What is their mean?
- Do you have enough information to determine the six integers? Use examples to help explain your answer.

22. Over a five-year period, the number of Manitobans living on farms decreased from 79 840 to 68 135. What was the mean change per year?

23. A small aircraft descended 90 m at 3 m/s and then descended 80 m at 2 m/s. For how much time did it descend altogether?



24. A fitness club charges its members \$250/year. If a member makes a single payment to pay for the next three years, there is a discount of \$5/month. How much is the single payment?

MathLinks 8, pages 318–319

Suggested Timing

50–60 minutes

Materials

- red and blue integer chips

Blackline Masters

- BLM 8–5 Section 8.1 Extra Practice
- BLM 8–6 Section 8.2 Extra Practice
- BLM 8–8 Section 8.3 Extra Practice
- BLM 8–9 Section 8.4 Extra Practice
- BLM 8–11 Section 8.5 Extra Practice

Planning Notes

Provide an opportunity for students to ask about and discuss any questions with features they find difficult and to consider alternative strategies for answering these questions. Encourage them to refer to their chapter Foldable, the modelled examples for the sections, and previously completed questions in the related sections of the student resource.

For #1 to #3, students may wish to review the words in pairs. One student could read the sentence and the other could say the word that belongs in the blank.

After students complete the chapter review, encourage them to make a list of questions that they needed a little help with, a lot of help with, or no help with. Students can then use this list to help them prepare for the practice test.

Meeting Student Needs

- Allow students to complete the chapter review using a combination of oral descriptions, diagrams, and written answers.
- Encourage students to use their chapter Foldable and to add new notes if they wish.
- Have students exchange their work with a classmate to check each other's answers and then try to correct their own mistakes.
- Students who require more practice on a particular topic may refer to **BLM 8–5 Section 8.1 Extra Practice**, **BLM 8–6 Section 8.2 Extra Practice**, **BLM 8–8 Section 8.3 Extra Practice**, **BLM 8–9 Section 8.4 Extra Practice**, and **BLM 8–11 Section 8.5 Extra Practice**.

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- You may choose to have some students complete fewer word problems, as these learners may find deciphering the language too challenging and time consuming.

Gifted and Enrichment

- Some students may already be familiar with the skills handled in this review. To provide enrichment and extra challenge for gifted students, go to www.mathlinks8.ca and follow the links.

Assessment	Supporting Learning
Assessment for Learning	
Chapter 8 Review The Chapter 8 Review is an opportunity for students to assess themselves by completing selected questions in each section and checking their answers against the answers in the back of the student resource.	<ul style="list-style-type: none">• Have students check the contents of the What I Need to Work On section of their chapter Foldable and do at least one question related to each item.• Have students revisit any section that they are having difficulty with prior to working on the chapter test.