

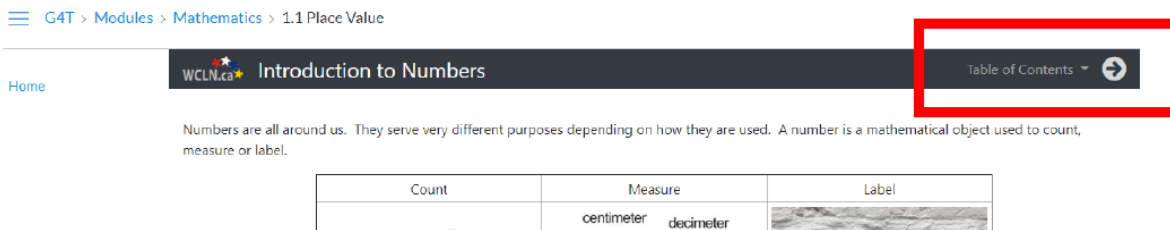
Grade 7 Mathematics
Week of October 26 – October 30

Lesson 1.5: Integers

Lesson Materials

- Lessons for [Section 1.5 Integers](#)
- Integers Learning Guide (This PDF)

Use the link above to open the lessons for Section 1.5 Integers. Remember: on the lesson page, use the arrow next to the “Table of Contents” at the **top of the page** to move through the lessons. You can also click on the Table of Contents to open the menu so you can jump to a specific lesson page.



Work through the online lessons. You can work at your own pace or follow the suggested schedule below. Complete the activities in your Learning Guide as you work through the lessons. You can print the Learning Guide, or, copy out the questions on a separate piece of paper. Be sure to try the games and practice quizzes as you make your way through the online lesson book.

Suggested Lesson Schedule

<p>Monday</p> <ul style="list-style-type: none">• Addition and Subtraction• Hiking Example• LG 1.5 #1-3, p. 21 <p>Tuesday</p> <ul style="list-style-type: none">• Using a Number Line• Number Line Media• Practice #1• LG #4-5, p. 21-22 <p>Wednesday</p> <ul style="list-style-type: none">• Positive or Negative 1• Positive or Negative 2• LG #6, p. 22-23	<p>Thursday</p> <ul style="list-style-type: none">• Multiplication & Division 1• Applications• Practice #2• LG #7-10, p. 23-24 <p>Friday</p> <ul style="list-style-type: none">• Practice #3• Balloon Game• LG #11-13 p. 24-25
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1.5 INTEGERS

1. Name as many examples as you can of when integers (whole positive and negative numbers) are used in real life.

2. Order the integers from least to greatest.

Ex. -3, 1, 7, -2, -7

a. 0, -4, -1, 8, -8

b. 5, -6, 2, -3, -10

c. -12, -6, -19, 0, -3,

Least		—————→			Greatest	
-7	-3	-2	1	7		

3. Rewrite these problems without the brackets. You do not need to solve the problem.

Ex. $3 + (+2)$

$3 + 2$

c. $3 - (+2)$

f. $20 - (+43)$

a. $3 - (-2)$

d. $5 - (-9)$

g. $(-15) - (+10)$

b. $3 + (-2)$

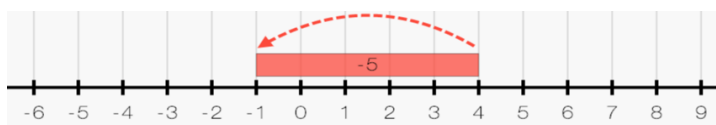
e. $(-8) + (-3)$

h. $(-650) + (+75)$

4. Use a number line to solve these problems. *Reminders: First rewrite the problem without the brackets, then solve. Go left on the number line for subtraction. Go right on the number line for addition.*

Ex. $4 - (+5)$

$4 - 5$



a. $6 + (-3)$

b. $(-2) + (+7)$

c. $5 - (-2)$ _____

d. $(-4) + (-1)$ _____

e. $(-1) - (+6)$ _____

5. Solve. Reminder: First rewrite the problem without the brackets, then solve. Use a number line if you wish.

a. $7 + (-3)$

d. $6 - (+7)$

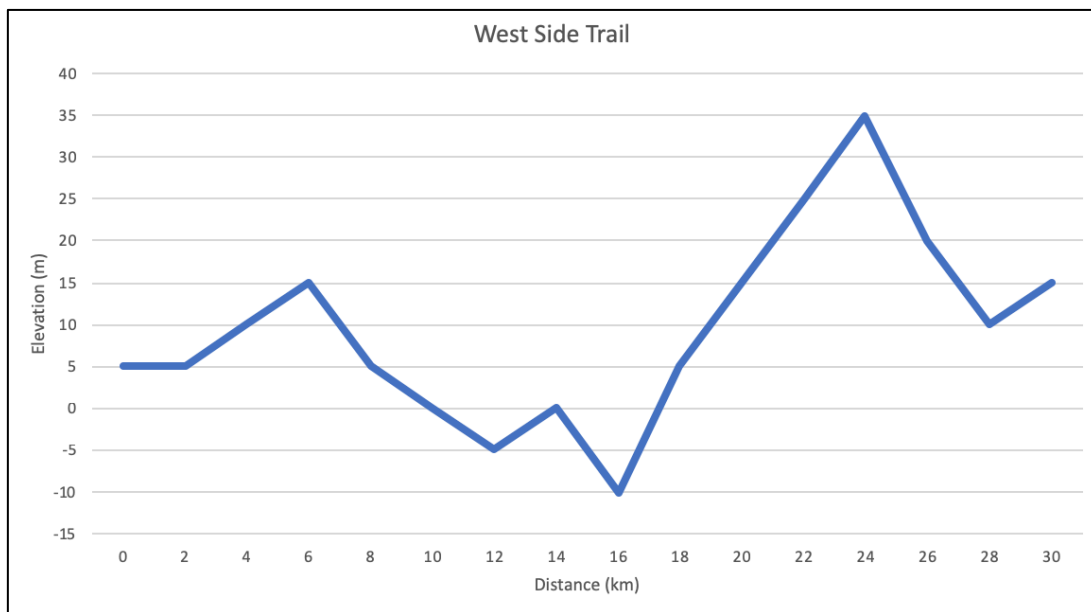
b. $4 - (-5)$

e. $(-5) + (-4)$

c. $(-7) - (+4)$

f. $8 + (+4)$

6. Georgia and Paul went for a mountain bike ride on the West Side Trail. The graph below shows the elevation profile of the trail. Use the graph to answer the following questions.



- a. What is the elevation at the 8km mark of the trail? _____
- b. At what km mark on the trail is the elevation -10 metres? _____
- c. What is the maximum elevation of the trail? _____
- d. What is the elevation of the lowest point of the trail? _____
- e. What is the change in elevation between kilometre 6 and kilometre 12? Write an equation to solve the question.
- f. What is the change in elevation between kilometre 16 and kilometre 24? Write an equation to solve the question.

7. Write out the following multiplications as repeated additions or subtractions, then solve.
Reminder: The first number of the multiplication is repeated the number of times of the second number.

Ex. $(-4) \times (+2)$

This means that we have the number -4 that will be added two times (+2).

$$\begin{aligned} &+(-4) + (-4) \\ &-4 - 4 \\ &= -8 \end{aligned}$$

Ex. $(-5) \times (-3)$

This means that we have the number -5 that will be subtracted three times (-3).

$$\begin{aligned} &-(-5) - (-5) - (-5) \\ &+5 + 5 + 5 \\ &= +15 \end{aligned}$$

a. $(+6) \times (+4)$

c. $(-3) \times (-4)$

b. $(-10) \times (+3)$

d. $(+8) \times (-2)$

8. Add a positive or a negative sign into the equation to make the multiplication true.

Ex. $(- 1) \times (+ 3) = (- 6)$

d. $(\square) 2) \times (- 7) = (+ 14)$

a. $(\square) 4) \times (- 8) = (- 32)$

e. $(- 15) \times (\square) 3) = (- 45)$

b. $(+ 5) \times (+ 6) = (\square) 30)$

f. $(+ 4) \times (- 12) = (\square) 48)$

c. $(- 9) \times (- 3) = (\square) 27)$

g. $(- 25) \times (\square) 3) = (+ 75)$

9. Multiply. *Hint: Figure out if the answer will be a positive or a negative, then multiply the numbers.*

a. $(+5) \times (-7)$

d. $(+8) \times (+6)$

b. $(-30) \times (-2)$

e. $(-4) \times (-10)$

c. $(-9) \times (+9)$

f. $(+11) \times (-3)$

10. Divide. *Reminder: The rules for dividing with integers are the same as for multiplying with integers: first, figure out if the answer will be a positive or a negative, then divide the numbers.*

a. $(+20) \div (-5)$

d. $(-75) \div (+3)$

b. $(-12) \div (-2)$

e. $(+18) \div (-6)$

c. $(+36) \div (+6)$

f. $(-56) \div (-7)$

11. Match the word problem with the expression that describes the situation.

a. Lana withdrew \$50 from her bank account every week for 4 weeks. How much did she withdraw in total? _____

d. Serenity spent a total of \$50 on coffee over a period of 4 weeks. How much did she spend per week (she spent the

b. Li ran a 50m sprint 4 times in a row. How far did he run in total? _____

c. Tanjeet had a fishing lure 50 feet below the surface of the lake and then he lowered the line by 4 more feet. How far below the surface is the fishing lure now? _____

same amount each week)? _____

i. $(+50) \times (+4)$

ii. $(-50) \div (+4)$

iii. $(-50) \times (+4)$

iv. $(-50) + (-4)$

12. Without completing the multiplications and divisions, determine whether the answer will be positive or negative. *Reminder: An even number of negatives will result in a positive answer; an odd number of negatives will result in a negative answer.*

Ex. $(+4)(-2)(-1)$ +

a. $(-3)(-5)(-2)$

b. $(+6)(-1)(+10)$

c. $(-3)(-3) \div (2)$

d. $(-2)(-2)(-3)(+1)$

e. $(-10) \div (+2)(+1)(-1)$

f. $(-5)(-1)(+2)(+2)(-1)$

g. $(+20) \div (-5) \div (-2) \div (+1)$

13. First determine whether the result will be positive or negative, then calculate the answer.

a. $(+4)(-3)(-1)$

d. $(100) \div (-2)(1)(-1)$

b. $(-25) \div (-5)(-2)$

e. $(-5)(-1)(-2)(-2)(-1)$

c. $(+8) \div (-2) \div (+2)$

f. $(+40) \div (+10)(-2) \div (-4)$