

Lesson 6.1

Review & Refresh

1. In a cave, there are 5 signs posted that show the elevation in feet.
 - a. Which checkpoint is the deepest?
 - b. Which checkpoint is closest to the surface?
 - c. Between which checkpoints is the least amount of change?

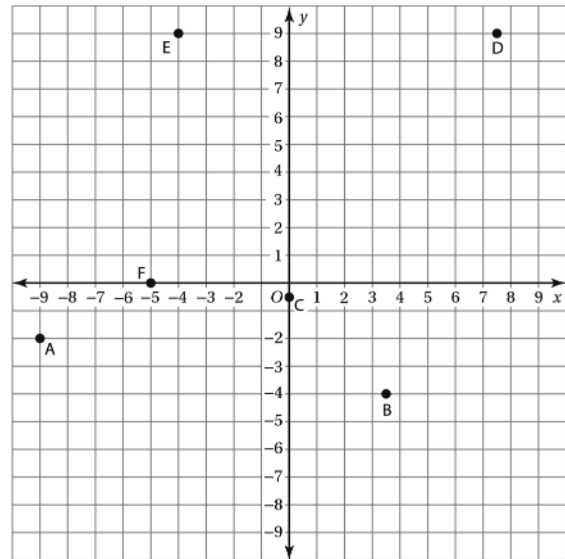
Checkpoint	Elevation (ft)
1	-24
2	-75
3	-36
4	-44
5	-29

Find the sum.

2. $9 + (-8)$
3. $-6 + 10$
4. $-12 + (-8)$
5. $-16 + |-14|$
6. $17 + (-19) + 8$
7. $-15 + (-13) + 4$

Write an ordered pair corresponding to the point.

8. Point *A*
9. Point *B*
10. Point *C*
11. Point *D*
12. Point *E*
13. Point *F*
14. A city was drawn in a coordinate plane. The shape of the city is a rectangle. Three of the coordinates are (5, 10), (5, 40), and (10, 10).
 - a. Find the fourth coordinate.
 - b. Find the perimeter.
 - c. Find the area.



Lesson
6.1**Review & Refresh** (continued)**Evaluate the expression.**

15. $|-9| - |3| + |-8|$

16. $|-12 - 4 + 8|$

17. $|-14 + 7| - |3 - 5|$

18. $|-10| + |-9 + 3| - |8 - 12|$

19. The temperature at 6:00 A.M. is -4°C . The temperature rises 9°C during the day until 5:00 P.M. What is the temperature at 5:00 P.M.?

Find the distance between the points.

20. $(-3, 5), (-8, 5)$

21. $(-6, 5.5), (-6, -1)$

22. An oxygen atom has 8 positively charged protons and 8 negatively charged electrons. Find the charge of the atom.

Lesson
6.1**Self-Assessment**

Use the scale to rate your understanding of the learning target and the success criteria.

1 I don't understand yet.	2 I can do it with help.	3 I can do it on my own.	4 I can teach someone else.
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	Rating	Date
6.1 Adding Integers		
Learning Target: Find sums of integers.	1 2 3 4	
I can explain how to model addition of integers on a number line.	1 2 3 4	
I can find sums of integers by reasoning about absolute values.	1 2 3 4	
I can explain why the sum of a number and its opposite is 0.	1 2 3 4	

Lesson
6.2**Review & Refresh**

1. The table shows the population change of a town in the thousands, years after 2010.

a. Plot the points on a coordinate plane.

Year	Population Change
1	+1
2	+1.5
3	-0.5
4	+0.5
5	+1
6	-0.5
7	-1
8	-2
9	-1.5

b. What do positive and negative mean in the context of the problem?

2. Your first two transactions in a month are deposits of \$62 and \$49. The next transactions are withdrawals of \$39 and \$42. What is the amount of change for the account?
3. A submarine was 380 feet below sea level. What is its new position if it descends another 140 feet?

Find the sum or the difference.

4. $6 - 12$ 5. $11 - (-5)$ 6. $-7 - 8$
7. $|-15| + (-9)$ 8. $-9 + 4$ 9. $14 + (-16) + (-9)$
10. $-9 - 15$ 11. $10 - 14$ 12. $-7 - (-13)$
13. $12 + (-3)$ 14. $-7 + (-12)$ 15. $-7 + 18 + (-4)$

Lesson
6.2
Review & Refresh (continued)

16. A child draws a park in a coordinate plane in the shape of a rectangle. Three of the coordinates are $(-100, -90)$, $(-100, 80)$, and $(100, 80)$?
- Find the fourth coordinate.
 - Find the perimeter.
 - Find the area.
17. In a football game, a team gains 7 yards on first down. The team loses 5 yards on second down and 12 yards on third down. What was the net gain or loss?

Find the distance between the points.

18. $(4, -2)$, $(4, 9)$ 19. $(-1, 6)$, $(-1, -3)$

20. Bromine has a boiling point of 58°C and a melting point of -7°C . What is the temperature difference of the melting point and the boiling point?

Lesson
6.2
Self-Assessment

Use the scale to rate your understanding of the learning target and the success criteria.

- 1 I don't understand yet. 2 I can do it with help. 3 I can do it on my own. 4 I can teach someone else.

	Rating	Date
6.2 Subtracting Integers		
Learning Target: Find differences of integers.	1 2 3 4	
I can explain how subtracting integers is related to adding integers.	1 2 3 4	
I can explain how to model subtraction of integers on a number line.	1 2 3 4	
I can find differences of integers by reasoning about absolute values.	1 2 3 4	

Lesson
6.3**Review & Refresh****Find the sum or the difference.**

1. $0 + (-13)$

2. $-12 + (-8)$

3. $11 + 9 + (-13)$

4. $7 - 9$

5. $12 - (-4)$

6. $-14 - (-10)$

7. You have a monthly charge of \$45 for a cell phone plan. What integer represents the transaction for the year?

Find the product.

8. $6(-5)$

9. $-9(-10)$

10. $(-8)(-6)$

11. $(-12)0$

12. $(-3)(-8)$

13. $(-9)9$

14. Two golfers complete a round of golf. One golfer has a score of +8. The other golfer has a score of -4. How many more shots did the first golfer take?

Evaluate the expression.

15. -6^2

16. $(-9)^2$

17. $-3(-4)(-5)$

18. $(-5)^2 \cdot 7$

19. $3 \cdot (-4)^3$

20. After the first round of a game, you had -50 points. You score 80 points the next round. How many points do you now have?

Lesson
6.3
Review & Refresh (continued)

Draw the polygon with the given vertices in a coordinate plane.

21. $K(-4, 4)$, $L(-4, -4)$, $M(4, -4)$, $N(4, 4)$

22. $D(-2, 3)$, $E(-1, 1)$, $F(0, -5)$

23. Mt. Everest is 29,028 feet above sea level. The Dead Sea is 1312 feet below sea level. What is the difference in the elevations?

24. A movie theater loses \$800 each week for 12 weeks. How much money has it lost?

25. A toy is marked down \$50. The next week the toy is marked up \$35. What is the change in price?

Lesson
6.3
Self-Assessment

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	Rating	Date
6.3 Multiplying Integers		
Learning Target: Find products of integers.	1 2 3 4	
I can explain the rules for multiplying integers.	1 2 3 4	
I can find products of integers with the same sign.	1 2 3 4	
I can find products of integers with the different signs.	1 2 3 4	

Lesson
6.4**Review & Refresh****Find the product or the quotient, if possible.**

1. $8 \div (-4)$

2. $-9(12)$

3. $(-2) \div 0$

4. $(-12)(-11)$

5. $-\frac{28}{4}$

6. $14(-3)$

7. $(-100) \div (-5)$

8. $-10(-8)$

9. $\frac{-54}{-6}$

10. $6(-2)(-7)$

11. $\frac{|-56|}{-8}$

12. $4(-8)(0)$

13. You start the day with \$28. You spend \$7 on lunch and \$15 on a present.
How much money do you have left?

Find the sum or the difference.

14. $14 + (-17)$

15. $9 - (-9)$

16. $-8 + (-7) + (-6)$

17. $-4 - 16$

18. $-16 + 8 + 12$

19. $-12 - (-8)$

20. The table shows the change in gas prices in cents for 5 days.
What is the change in the price from Monday to Friday?

Day	Monday	Tuesday	Wednesday	Thursday	Friday
Change	-8	+15	-3	-5	-1

Evaluate the expression.

21. -3^3

22. $-4 \cdot 2^3$

23. $-8^2 \cdot 10$