

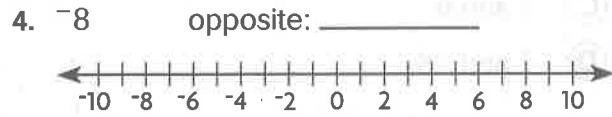
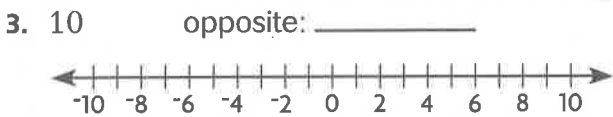
Name _____

Understand Positive and Negative Numbers

COMMON CORE STANDARDS CC.6.NS.5, CC.6.NS.6a

Apply and extend previous understandings of numbers to the system of rational numbers.

Graph the integer and its opposite on a number line.



Name the integer that represents the situation, and tell what 0 represents in that situation.

Situation	Integer	What Does 0 Represent?
5. Michael withdrew \$60 from his checking account.	_____	_____ _____
6. Raquel gained 12 points while playing a video game.	_____	_____ _____
7. Juan went up 25 feet during a climb on a rock climbing wall.	_____	_____ _____

Write the opposite of the opposite of the integer.

8. -20 _____ 9. 4 _____ 10. 95 _____ 11. -63 _____

Problem Solving



12. Dakshesh won a game by scoring 25 points. Randy scored the opposite number of points as Dakshesh. What is Randy's score?

13. When Dakshesh and Randy played the game again, Dakshesh scored the opposite of the opposite of his first score. What is his score?

Lesson Check (CC.6.NS.5, CC.6.NS.6a)

- During their first round of golf, Imani was 7 strokes over par and Peter was 8 strokes below par. What integers represent their scores?
 - 7 and 8
 - 7 and -8
 - -7 and 8
 - -7 and -8
- Which situation could be represented by the integer -30 ?
 - Wyatt rose 30 feet to the surface.
 - Divya gained 30 points in a game.
 - Maci was paid \$30 for her artwork.
 - Ricardo spent \$30 for a coat.

Spiral Review (CC.6.NS.1, CC.6.NS.3, CC.6.NS.4)

- Mr. Nolan's code for his ATM card is a 4-digit number. The digits of the code are the prime factors of 84 listed from least to greatest. What is the code for Mr. Nolan's ATM card? (Lesson 1.2)
 - 2237
 - 2337
 - 2347
 - 2379
- Over a four-year period, a tree grew 2.62 feet. If the tree grows at a constant rate, how many feet did the tree grow each year? (Lesson 1.8)
 - 0.5 feet
 - 0.655 feet
 - 6.62 feet
 - 10.48 feet
- Omarion has $\frac{9}{10}$ of the pages in a book remaining to read for school. He reads $\frac{2}{3}$ of the remaining pages over the weekend. What fraction of the book does Omarion read over the weekend? (Lesson 2.4)
 - $\frac{1}{3}$ book
 - $\frac{3}{5}$ book
 - $\frac{3}{4}$ book
 - $\frac{1}{4}$ book
- Marianne has $\frac{5}{8}$ package of peas. She cooks $\frac{2}{3}$ of those peas for 5 people. If each person is served an equal amount, what fraction of the peas did each person get? (Lesson 2.10)
 - $\frac{1}{4}$ package
 - $\frac{1}{5}$ package
 - $\frac{1}{12}$ package
 - $\frac{2}{15}$ package

Name _____

Compare and Order Integers

COMMON CORE STANDARDS CC.6.NS.7a,
CC.6.NS.7b

Apply and extend previous understandings of numbers to the system of rational numbers.

Compare the numbers. Write $<$ or $>$.

1. -4 $>$ -5 Think: -4 is to the **right** of -5 on the number line,
so -4 is **greater than** -5 .

2. 0 \bigcirc -1

3. 4 \bigcirc -6

4. -9 \bigcirc -8

5. 2 \bigcirc -10

6. -12 \bigcirc -11

7. 1 \bigcirc -10

Order the numbers from least to greatest.

8. $3, -2, -7$

9. $0, 2, -5$

10. $-9, -12, -10$

_____ $<$ _____ $<$ _____

_____ $<$ _____ $<$ _____

_____ $<$ _____ $<$ _____

11. $-2, -3, -4$

12. $1, -6, -13$

13. $5, 7, 0$

_____ $<$ _____ $<$ _____

_____ $<$ _____ $<$ _____

_____ $<$ _____ $<$ _____

Order the numbers from greatest to least.

14. $0, 13, -13$

15. $-11, 7, -5$

16. $-9, -8, 1$

_____ $>$ _____ $>$ _____

_____ $>$ _____ $>$ _____

_____ $>$ _____ $>$ _____

17. $32, 10, -22$

18. $-2, -4, 0$

19. $-25, 19, 26$

_____ $>$ _____ $>$ _____

_____ $>$ _____ $>$ _____

_____ $>$ _____ $>$ _____

Problem Solving **REAL WORLD**

20. Meg and Derek played a game. Meg scored -11 points, and Derek scored 4 points. Write a comparison to show that Meg's score is less than Derek's score.

21. Misha is thinking of a negative integer greater than -4 . What number could she be thinking of?

Lesson Check (CC.6.NS.7a, CC.6.NS.7b)

- Which of the following shows numbers in order from least to greatest?
 - (A) 4, 5, -8
 - (B) 5, 4, -8
 - (C) -8, 4, 5
 - (D) -8, 5, 4
- Which of the following numbers is less than 1 but greater than -2?
 - (A) -4
 - (B) -2
 - (C) 3
 - (D) 0

Spiral Review (CC.6.NS.1, CC.6.NS.3, CC.6.NS.4, CC.6.NS.5)

- What is the least common multiple of 10 and 15? (Lesson 1.3)
 - (A) 5
 - (B) 20
 - (C) 30
 - (D) 150
- The area of a rectangle is $5\frac{4}{5}$ square meters. The width of the rectangle is $2\frac{1}{4}$ meter. Which is the best estimate for the length of the rectangle? (Lesson 2.6)
 - (A) 1 meter
 - (B) 3 meters
 - (C) 10 meters
 - (D) 12 meters
- If Amanda hikes at an average speed of 2.72 miles per hour, how long will it take her to hike 6.8 miles? (Lesson 1.9)
 - (A) 0.4 hour
 - (B) 1.5 hours
 - (C) 2.5 hours
 - (D) 4.08 hours
- Which situation could be represented by the integer -4? (Lesson 3.1)
 - (A) The temperature rose 4 degrees.
 - (B) Rochelle has \$4 left on her gift card.
 - (C) Harold saved \$4 in pennies.
 - (D) Ellen lost 4 points in a game.

Name _____

Rational Numbers and the Number Line

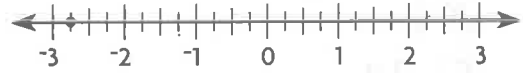
COMMON CORE STANDARDS CC.6.NS.6a,
CC.6.NS.6c

Apply and extend previous understandings of numbers to the system of rational numbers.

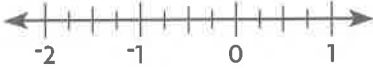
Graph the number on the number line.

1. $-2\frac{3}{4}$

The number is between the integers -3 and -2 .
It is closer to the integer -3 .



2. $-\frac{1}{4}$



3. -0.5



4. 1.75



5. $1\frac{1}{2}$



State whether the numbers are on the same or opposite sides of zero.

6. -2.4 and 2.3

7. $-2\frac{1}{5}$ and -1

8. -0.3 and 0.3

9. 0.44 and $-\frac{2}{3}$

Write the opposite of the number.

10. -5.23

11. $\frac{4}{5}$

12. -5

13. $-2\frac{2}{3}$

Problem Solving **REAL WORLD**

14. The outdoor temperature yesterday reached a low of -4.5°F . Between what two integers was the temperature?

15. Jacob needs to graph $-6\frac{2}{5}$ on a horizontal number line. Should he graph it to the left or right of -6 ?

Lesson Check (CC.6.NS.6a, CC.6.NS.6c)

- Which of the following shows the opposite of 0.2?
 - (A) -0.2
 - (B) $\frac{1}{5}$
 - (C) -2.0
 - (D) $\frac{5}{1}$
- Which number lies between -3 and -4 on a number line?
 - (A) 0
 - (B) -2.8
 - (C) -3.4
 - (D) -4.2

Spiral Review (CC.6.NS.1, CC.6.NS.6c, CC.6.NS.7a)

- To pass a math test, students must correctly answer at least 0.6 of the questions. Donald's score is $\frac{5}{8}$, Karen's score is 0.88, Gino's score is 0.6, and Sierra's score is $\frac{4}{5}$. How many of the students passed the test? (Lesson 2.1)
 - (A) 1
 - (B) 2
 - (C) 3
 - (D) 4
- Jonna mixes $\frac{1}{4}$ gallon of orange juice and $\frac{1}{2}$ gallon of pineapple juice to make punch. Each serving is $\frac{1}{16}$ gallon. How many servings can Jonna make? (Lesson 2.7)
 - (A) 4 servings
 - (B) 8 servings
 - (C) 12 servings
 - (D) 16 servings
- Yemi used these pattern blocks to solve a division problem. He found a quotient of 7. Which division problem was he solving? (Lesson 2.8)
- Which of the following shows integers in order from least to greatest? (Lesson 3.2)
 - (A) $-6, -8, 0, 2$
 - (B) $0, -5, -2, 3$
 - (C) $-8, -7, 0, 3$
 - (D) $-3, -4, -5, -6$



- (A) $3\frac{1}{2} \div \frac{1}{2}$
- (B) $7\frac{1}{2} \div 2$
- (C) $3\frac{1}{2} \div 2$
- (D) $7\frac{1}{2} \div 3$

Name _____

Compare and Order Rational Numbers

COMMON CORE STANDARDS CC.6.NS.7a,
CC.6.NS.7b

Apply and extend previous understandings of numbers to the system of rational numbers.

Compare the numbers. Write $<$ or $>$.

1. $-1\frac{1}{2}$ $\textcircled{<}$ $-\frac{1}{2}$ Think: $-1\frac{1}{2}$ is to the **left** of $-\frac{1}{2}$ on the number line,
so $-1\frac{1}{2}$ is **less than** $-\frac{1}{2}$.

2. 0.1 $\textcircled{\phantom{<}}$ -1.9

3. 0.4 $\textcircled{\phantom{<}}$ $-\frac{1}{2}$

4. $\frac{2}{5}$ $\textcircled{\phantom{<}}$ 0.5

5. -1.1 $\textcircled{\phantom{<}}$ 0

6. $\frac{3}{4}$ $\textcircled{\phantom{<}}$ $\frac{9}{10}$

7. -2.5 $\textcircled{\phantom{<}}$ $-\frac{3}{1}$

Order the numbers from least to greatest.

8. $0.2, -1.7, -1$

9. $-2\frac{3}{4}, -\frac{3}{5}, -1\frac{3}{4}$

10. $-0.5, -1\frac{2}{3}, -2.7$

_____ $<$ _____ $<$ _____ $<$ _____ $<$ _____ $<$ _____

Order the numbers from greatest to least.

11. $-1, -\frac{5}{6}, 0$

12. $1.82, -\frac{2}{5}, \frac{4}{5}$

13. $-2.19, -2.5, 1.1$

_____ $>$ _____ $<$ _____ $>$ _____ $>$ _____ $>$ _____

Write a comparison using $<$ or $>$ to show the relationship between the two values.

14. an elevation of -15 m and an elevation of -20.5 m

15. a balance of $\$78$ and a balance of $-\$42$

16. a score of -31 points and a score of -30 points

Problem Solving **REAL WORLD**

17. The temperature in Cold Town on Monday was 1°C . The temperature in Frosty Town on Monday was -2°C . Which town was colder on Monday?

18. Stan's bank account balance is less than $-\$20.00$ but greater than $-\$21.00$. What could Stan's account balance be?

Lesson Check (CC.6.NS.7a, CC.6.NS.7b)

- Which of the following shows numbers in order from greatest to least?
 - $\frac{1}{2}, -1.2, \frac{3}{5}$
 - $-1.2, \frac{1}{2}, \frac{3}{5}$
 - $-1.2, \frac{3}{5}, \frac{1}{2}$
 - $\frac{3}{5}, \frac{1}{2}, -1.2$
- Which statement is NOT true?
 - $-\frac{1}{8} > -\frac{1}{4}$
 - $-4.8 < 0.01$
 - $-0.23 > -0.2$
 - $-1\frac{7}{8} < -\frac{1}{4}$

Spiral Review (CC.6.NS.1, CC.6.NS.4, CC.6.NS.6a, CC.6.NS.6c)

- For an upcoming field trip, there will be 36 fifth graders and 48 sixth graders. Each van will carry the same number of students, and only students from one grade. If each van will carry the greatest possible number of students, how many vans will be needed? (Lesson 1.5)
 - 6 vans
 - 7 vans
 - 12 vans
 - 14 vans
- While ice skating, Brian spun around $6\frac{1}{4}$ times in $2\frac{1}{2}$ seconds. How many spins did Brian complete in one second? (Lesson 2.9)
 - $1\frac{1}{2}$ spins
 - $2\frac{1}{2}$ spins
 - $12\frac{1}{2}$ spins
 - $15\frac{5}{8}$ spins
- Four students took an exam. Monica's score was $\frac{22}{25}$, Lily's score was $\frac{17}{20}$, Nikki's score was $\frac{4}{5}$, and Sydney's score was $\frac{3}{4}$. Which student had the highest score? (Lesson 2.2)
 - Monica
 - Lily
 - Nikki
 - Sydney
- Which number lies between -2 and -1 on the number line? (Lesson 3.3)
 - $-2\frac{1}{4}$
 - 0
 - $-1\frac{4}{5}$
 - 1

Name _____

Absolute Value

COMMON CORE STANDARD CC.6.NS.7c

Apply and extend previous understandings of numbers to the system of rational numbers.

Find the absolute value.

1. $|7|$ Graph 7 on the number line.

7 is 7 units from 0.

$|7| = \underline{7}$



2. $|-8|$

3. $|16|$

4. $|-100|$

5. $|0|$

6. $|-5,000|$

7. $|-15|$

8. $|\frac{-1}{10}|$

9. $|8.65|$

10. $|4\frac{3}{20}|$

11. $|-0.06|$

Find all numbers with the given absolute value.

12. 12

13. 1.7

14. $\frac{3}{5}$

15. $3\frac{1}{6}$

16. 0

Find the number or numbers that make the statement true.

17. $|\square| = 17$

18. $|\square| = 2.04$

19. $|\square| = 1\frac{9}{10}$

20. $|\square| = \frac{19}{24}$

Problem Solving **REAL WORLD**

21. Which two numbers are 7.5 units away from 0 on a number line?

22. Emilio is playing a game. He just answered a question incorrectly, so his score will change by -10 points. Find the absolute value of -10 .

Lesson Check (CC.6.NS.7c)

- What is the absolute value of $\frac{8}{9}$?
 - $\frac{8}{9}$
 - $-\frac{8}{9}$
 - $\frac{9}{8}$
 - $-\frac{9}{8}$
- Which two numbers have an absolute value of $\frac{4}{5}$?
 - $\frac{4}{5}$ and $\frac{5}{4}$
 - $\frac{4}{5}$ and 0
 - $\frac{4}{5}$ and $-\frac{4}{5}$
 - $-\frac{4}{5}$ and $-\frac{5}{4}$

Spiral Review (CC.6.NS.1, CC.6.NS.3, CC.6.NS.4, CC.6.NS.7b)

- Rachel earned \$89.70 on Tuesday. She spent \$55.89 at the grocery store. How much money does she have left? (Lesson 1.6)
 - \$33.80
 - \$33.81
 - \$34.19
 - \$34.81
- Trygg has $\frac{3}{4}$ package of marigold seeds. He plants $\frac{1}{6}$ of those seeds in his garden and divides the rest equally into 10 flower pots. What fraction of a package of seeds is planted in each flower pot? (Lesson 2.10)
 - $\frac{1}{16}$ package
 - $\frac{1}{8}$ package
 - $\frac{1}{10}$ package
 - $\frac{7}{12}$ package
- Maggie jogged $\frac{7}{8}$ mile on Monday and $\frac{1}{2}$ of that distance on Tuesday. How far did she jog on Tuesday? (Lesson 2.3)
 - $\frac{3}{8}$ mile
 - $\frac{7}{16}$ mile
 - $1\frac{3}{8}$ mile
 - $1\frac{3}{4}$ mile
- Which temperature is hottest? (Lesson 3.4)
 - -32°C
 - -34°C
 - 33°C
 - 31°C

Name _____

Compare Absolute Values

COMMON CORE STANDARD CC.6.NS.7d

Apply and extend previous understandings of numbers to the system of rational numbers.

Solve.

- Jamie scored -5 points on her turn at a trivia game. In Veronica's turn, she scored more points than Jamie. Use absolute value to describe Veronica's score as a loss.
- The low temperature on Friday was -10°F . The low temperature on Saturday was colder. Use absolute value to describe the temperature on Saturday as a temperature below zero.

In this situation, $|-5|$ represents a loss of **5** points. Veronica lost **fewer** than 5 points.

The temperature on Saturday was _____ than 10 degrees below zero.

- The table shows changes in the savings accounts of five students. Which student had the greatest increase in money? By how much did the student's account increase?

Student	Account Change (\$)
Brett	-12
Destiny	-36
Carissa	15
Rylan	10

Compare. Write $<$, $>$, or $=$.

4. -16 $|-16|$

5. 20 $|20|$

6. 3 $|-4|$

7. $|-12|$ $|-11|$

8. $|25|$ $|27|$

9. $|-9|$ $|9|$

Problem Solving

- On Wednesday, Miguel's bank account balance was $-\$55$. On Thursday, his balance was less than that. Use absolute value to describe Miguel's balance on Thursday as a debt.
- During a game, Naomi lost points. She lost fewer than 3 points. Use an integer to describe her possible score.

In this situation, $-\$55$ represents a debt of _____.

On Thursday, Miguel had a debt of _____ than \$55.

Lesson Check (CC.6.NS.7d)

- It is colder than 5°F below zero. Which could be the temperature?
 - -6°F
 - -5°F
 - -4°F
 - 0°F
- Which of the following statements is NOT true?
 - $|-3| = |3|$
 - $|-5| > |3|$
 - $|-17| < 18$
 - $|-4| < 4$

Spiral Review (CC.6.NS.3, CC.6.NS.4, CC.6.NS.6a, CC.6.NS.7c)

- Etta bought 11.5 yards of fabric selling for $\$0.90$ per yard. What was the total cost? (Lesson 1.7)
 - $\$10.35$
 - $\$11.35$
 - $\$12.40$
 - $\$103.50$
- Yen needs to find the product of $\frac{5}{8} \times \frac{24}{25}$. Before he multiplies, he simplifies the factors. Which of the following is an equivalent expression? (Lesson 2.4)
 - $\frac{1}{1} \times \frac{3}{25}$
 - $\frac{5}{8} \times \frac{22}{25}$
 - $\frac{1}{1} \times \frac{3}{5}$
 - $\frac{5}{3} \times \frac{1}{1}$
- What is the opposite of 5? (Lesson 3.1)
 - $\frac{5}{1}$
 - $\frac{1}{5}$
 - -5
 - 0.5
- Which of the following has the least value? (Lesson 3.5)
 - -9
 - $|-9|$
 - 0
 - $\frac{1}{9}$

Name _____

Rational Numbers and the Coordinate Plane

COMMON CORE STANDARD CC.6.NS.6c

Apply and extend previous understandings of numbers to the system of rational numbers.

Write the ordered pair for the point. Give approximate coordinates when necessary.

1. A

2. B

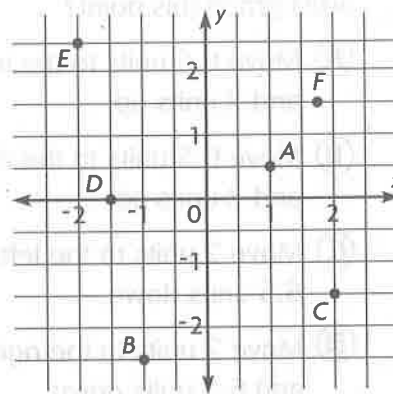
$(1, \frac{1}{2})$

3. C

4. D

5. E

6. F



Graph and label the point on the coordinate plane.

7. $G(-\frac{1}{2}, 1\frac{1}{2})$

8. $H(0, 2.50)$

9. $J(-1\frac{1}{2}, \frac{1}{2})$

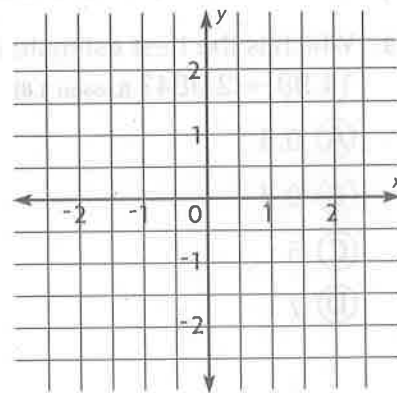
10. $K(1, 2)$

11. $L(-1\frac{1}{2}, -2\frac{1}{2})$

12. $M(1, -0.5)$

13. $N(\frac{1}{4}, 1\frac{1}{2})$

14. $P(1.25, 0)$



Problem Solving

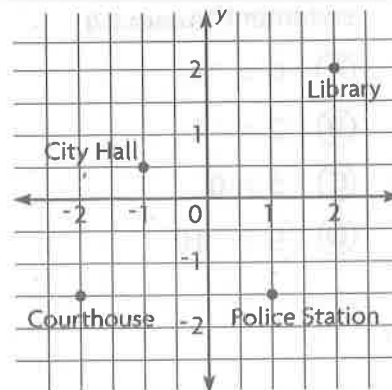
REAL WORLD

Use the map for 15–16.

15. What is the ordered pair for the city hall?

16. The post office is located at $(-\frac{1}{2}, 2)$. Graph and label a point on the map to represent the post office.

Map of Elmwood

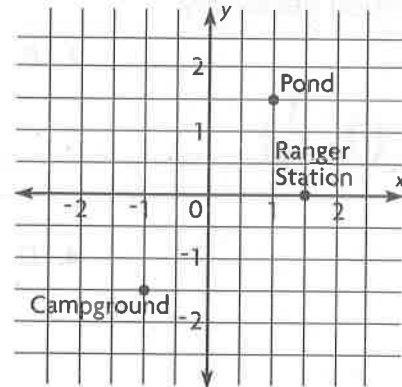


Lesson Check (CC.6.NS.6c)

1. An artist uses a coordinate plane to create a design. As part of the design, the artist wants to graph the point $(-6.5, 2)$. How should the artist graph this point?

- (A) Move 6.5 units to the left of the origin and 2 units up.
- (B) Move 6.5 units to the right of the origin and 2 units up.
- (C) Move 2 units to the left of the origin and 6.5 units down.
- (D) Move 2 units to the right of the origin and 6.5 units down.

2. What are the coordinates of the campground?



- (A) $(-1.5, -1)$
- (B) $(-1.5, 1)$
- (C) $(-1, -1.5)$
- (D) $(1, -1.5)$

Spiral Review (CC.6.NS.1, CC.6.NS.3, CC.6.NS.7a, CC.6.NS.7d)

3. Which is the best estimate of the quotient $14.98 \div 2.984$? (Lesson 1.8)

- (A) 0.5
- (B) 0.7
- (C) 5
- (D) 7

4. Cam has a piece of plywood that is $6\frac{7}{8}$ feet wide. He is going to cut shelves from the plywood that are each $1\frac{1}{6}$ feet wide. Which is the best estimate for the number of shelves Cam can make? (Lesson 2.6)

- (A) 1
- (B) 2
- (C) 4
- (D) 7

5. Which of the following is NOT a true statement? (Lesson 3.2)

- (A) $0 > -3$
- (B) $-2 < -1$
- (C) $-5 > 0$
- (D) $-9 > -10$

6. Which of the following is a true statement? (Lesson 3.6)

- (A) $|-15| = -15$
- (B) $|-12| > -15$
- (C) $|-12| > |15|$
- (D) $|15| > |-15|$

Name _____

Ordered Pair Relationships**COMMON CORE STANDARD** CC.6.NS.6b

Apply and extend previous understandings of numbers to the system of rational numbers.

Identify the quadrant where the point is located.

1. $(10, -2)$ Quadrant: IV 2. $(-5, -6)$ Quadrant: _____ 3. $(3, 7)$ Quadrant: _____

4. $(-4, 9)$ Quadrant: _____ 5. $(8, -1)$ Quadrant: _____ 6. $(-11, 6)$ Quadrant: _____

The two points are reflections of each other across the x - or y -axis. Identify the axis.

7. $(5, 3)$ and $(-5, 3)$ 8. $(-7, 1)$ and $(-7, -1)$ 9. $(-2, 4)$ and $(-2, -4)$

axis: _____

axis: _____

axis: _____

Give the reflection of the point across the given axis.

10. $(-6, -10)$, y -axis

11. $(-11, 3)$, x -axis

12. $(8, 2)$, x -axis

Problem Solving 

13. A town's post office is located at the point
- $(7, 5)$
- on a coordinate plane. In which quadrant is the post office located?
-
-
- _____

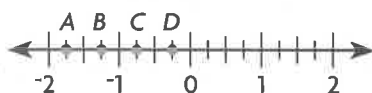
14. The grocery store is located at a point on a coordinate plane with the same
- y
- coordinate as the bank but with the opposite
- x
- coordinate. The grocery store and bank are reflections of each other across which axis?
-
-
- _____

Lesson Check (CC.6.NS.6b)

- In which quadrant does the point $(-4, 15)$ lie?
 - Quadrant I
 - Quadrant II
 - Quadrant III
 - Quadrant IV
- What are the coordinates of the point $(10, -4)$ if it is reflected across the y -axis?
 - $(-10, -4)$
 - $(-10, 4)$
 - $(10, 4)$
 - $(10, -4)$

Spiral Review (CC.6.NS.1, CC.6.NS.3, CC.6.NS.6a, CC.6.NS.6c)

- Alison saves \$29.26 each month. How many months will it take her to save enough money to buy a stereo for \$339.12? (Lesson 1.9)
 - 10
 - 11
 - 12
 - 13
- Tours of the art museum are offered every $\frac{1}{3}$ hr from 10:00 A.M. until closing at 4:00 P.M. How many tours are offered each day? (Lesson 2.7)
 - 6
 - 9
 - 12
 - 18
- Which point is located at $-1\frac{3}{4}$ on the number line? (Lesson 3.3)
- Jermaine graphs a point on the y -axis. Which of these must be true about the ordered pair for the point? (Lesson 3.7)
 - The x -coordinate is 0.
 - The y -coordinate is 0.
 - The x -coordinate is negative.
 - The y -coordinate is negative.



- point A
- point B
- point C
- point D

Name _____

Distance on the Coordinate Plane

COMMON CORE STANDARD CC.6.NS.8

Apply and extend previous understandings of numbers to the system of rational numbers.

Find the distance between the pair of points.

1. $(1, 4)$ and $(-3, 4)$

2. $(7, -2)$ and $(11, -2)$

3. $(6, 4)$ and $(6, -8)$

$$|1| = 1; |-3| = 3;$$

$$1 + 3 = 4$$

4 units

_____ units

_____ units

4. $(8, -10)$ and $(5, -10)$

5. $(-2, -6)$ and $(-2, 5)$

6. $(-5, 2)$ and $(-5, -4)$

_____ units

_____ units

_____ units

Write the coordinates of a point that is the given distance from the given point.

7. 5 units from $(-1, -2)$

8. 8 units from $(2, 4)$

9. 3 units from $(-7, -5)$

$(\square, -2)$

$(2, \square)$

$(-7, \square)$

10. 6 units from $(4, -1)$

11. 10 units from $(-1, 9)$

12. 7 units from $(-3, 2)$

$(4, \square)$

$(\square, 9)$

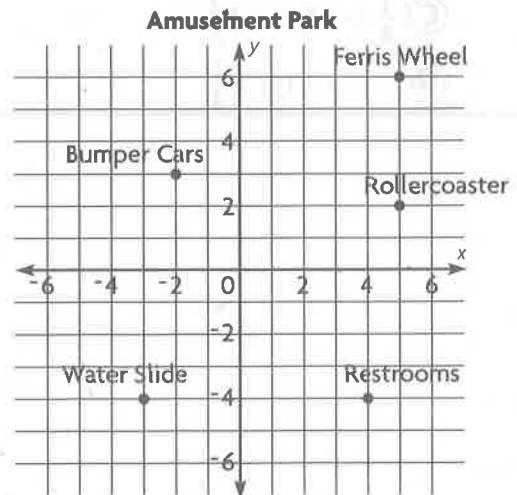
$(\square, 2)$

Problem Solving REAL WORLD

The map shows the locations of several areas in an amusement park. Each unit represents 1 kilometer.

13. How far is the Ferris wheel from the rollercoaster?

14. How far is the water slide from the restrooms?



Lesson Check (CC.6.NS.8)

- What is the distance between the points $(4, -7)$ and $(-5, -7)$?
 - 1 unit
 - 3 units
 - 7 units
 - 9 units
- Which of the following values could be the y -coordinate of the point $(10, \blacksquare)$ that is 13 units from $(10, 6)$?
 - 17
 - 3
 - 1
 - 7

Spiral Review (CC.6.NS.1, CC.6.NS.6b, CC.6.NS.6c, CC.6.NS.7a)

- An apple is cut into 10 pieces. 0.8 of the apple is eaten. Which fraction, in simplest form, represents the amount of apple that is left? (Lesson 2.1)
 - $\frac{1}{10}$
 - $\frac{2}{10}$
 - $\frac{1}{5}$
 - $\frac{2}{5}$
- Which shows numbers in order from greatest to least? (Lesson 3.4)
 - $-1\frac{2}{3} > -1 > \frac{1}{4}$
 - $-1 > \frac{1}{4} > -1\frac{2}{3}$
 - $\frac{1}{4} > -1 > -1\frac{2}{3}$
 - $-1 > -1\frac{2}{3} > \frac{1}{4}$
- A carton contains soup cans weighing a total of 20 pounds. Each can weighs $1\frac{1}{4}$ pounds. How many cans does the carton contain? (Lesson 2.9)
 - 16 cans
 - 18 cans
 - 25 cans
 - 30 cans
- What will be the new coordinates of $(3, -1)$ if it is reflected across the y -axis? (Lesson 3.8)
 - $(-3, -1)$
 - $(3, 1)$
 - $(-3, 1)$
 - $(-1, -3)$

Name _____

Problem Solving • The Coordinate Plane

COMMON CORE STANDARD CC.6.NS.8

Apply and extend previous understandings of numbers to the system of rational numbers.

Read each problem and solve.

1. On a coordinate map of Clifton, an electronics store is located at $(6, -7)$. A convenience store is located 7 units north of the electronics store on the map. What are the map coordinates of the convenience store?

(6, 0)

2. Sonya and Lucas walk from the school to the library. They walk 5 blocks south and 4 blocks west to get to the library. If the school is located at a point $(9, -1)$ on a coordinate map, what are the map coordinates of the library?

3. On a coordinate map, Sherry's house is at the point $(10, -2)$ and the mall is at point $(-4, -2)$. If each unit on the map represents one block, what is the distance between Sherry's house and the mall?

4. Arthur left his job at $(5, 4)$ on a coordinate map and walked to his house at $(5, -6)$. Each unit on the map represents 1 block. How far did Arthur walk?

5. A fire station is located 2 units east and 6 units north of a hospital. If the hospital is located at a point $(-2, -3)$ on a coordinate map, what are the coordinates of the fire station?

6. Xavier's house is located at the point $(4, 6)$. Michael's house is 10 blocks west and 2 blocks south of Xavier's house. What are the coordinates of Michael's house?

7. On a coordinate map, a pizzeria is located at $(9, 3)$. A pizza is being delivered to a house located at $(9, -3)$. Each unit represents 1 mile. How far is the pizzeria from the house?

Lesson Check (CC.6.NS.8)

- The points $(-4, -4)$, $(-4, 4)$, $(4, 4)$, and $(4, -4)$ form a square on a coordinate plane. How long is a side length of the square?
 - 4 units
 - 8 units
 - 10 units
 - 12 units
- Which point is 10 units from $(2, 5)$?
 - $(12, 5)$
 - $(-7, 5)$
 - $(2, -6)$
 - $(2, -10)$

Spiral Review (CC.6.NS.1, CC.6.NS.6c, CC.6.NS.7c, CC.6.NS.8)

- Which of the following shows numbers in order from least to greatest? (Lesson 2.2)
 - $2\frac{1}{5}$, $2\frac{1}{6}$, $2\frac{1}{7}$
 - $2\frac{1}{8}$, $2\frac{1}{4}$, 2.4
 - 2.4 , $2\frac{1}{5}$, 2.6
 - 2.2 , 2.5 , 2.25
- Jan began with $\frac{5}{6}$ pound of modeling clay and used $\frac{1}{5}$ of the clay to make decorative magnets. She divides the remaining clay into 8 equal portions. What is the weight of the clay in each portion? (Lesson 2.10)
 - $\frac{1}{48}$ pound
 - $\frac{1}{12}$ pound
 - $\frac{1}{8}$ pound
 - $\frac{2}{3}$ pound
- What numbers will make the statement true? (Lesson 3.5)

$$\boxed{} = \frac{5}{6}$$
 - $\frac{5}{6}$ and $-\frac{5}{6}$
 - $-\frac{5}{6}$ and $-\frac{6}{5}$
 - $\frac{6}{5}$ and $-\frac{6}{5}$
 - $-\frac{5}{6}$ and $\frac{6}{5}$
- Which two points are 3 units away from the point $(-2, -3)$? (Lesson 3.9)
 - $(-2, 3)$ and $(-2, 6)$
 - $(5, -3)$ and $(-2, 3)$
 - $(-2, 0)$ and $(-1, -3)$
 - $(-5, -3)$ and $(1, -3)$

Name _____

Chapter 3 Extra Practice

Lesson 3.1

Name the integer that represents the situation.

1. lose 3 points 2. 4 questions correct 3. spent \$25 4. dropped 8 degrees

Lesson 3.2 and 3.4

Compare the numbers. Write $<$ or $>$.

5. $7 \bigcirc -9$

6. $-5 \bigcirc -6$

7. $0 \bigcirc -10$

8. $-\frac{1}{2} \bigcirc -0.1$

9. $-\frac{3}{5} \bigcirc -\frac{1}{8}$

10. $8 \bigcirc -9.25$

Lesson 3.3

Graph the number on the horizontal number line.

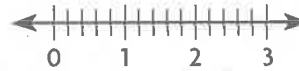
11. $-\frac{2}{3}$



12. $-3\frac{1}{4}$



13. 2.2



Lesson 3.5

Find the absolute value.

14. $|-1|$

15. $|\frac{3}{10}|$

16. $|-0.28|$

Find the number or numbers that make the statement true.

17. $|\square| = 29$

18. $|\square| = 5.3$

19. $|\square| = 224$

Lesson 3.6

Compare. Write $<$, $>$, or $=$.

20. -19 ○ $|-19|$

21. $|-24|$ ○ $|24|$

22. $|-14|$ ○ $|5|$

23. Yesterday, Jamal scored -20 points on a puzzle. Today he scored more points. Use absolute value to describe today's score as a loss.

Today's score is a loss of _____ than 20 points.

24. The surface of the water in a pool is at an elevation greater than -8 feet. Use absolute value to describe the depth of the surface.

The surface is at a depth _____ than 8 feet.

Lesson 3.7

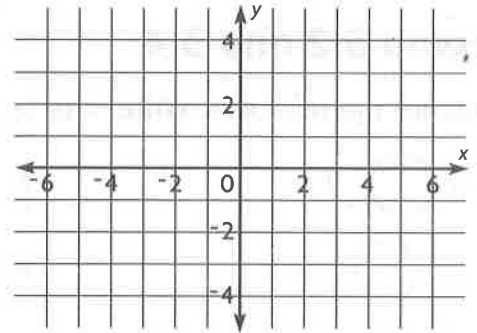
Graph and label the point on the coordinate plane.

25. $A(0, -2)$

26. $B(2, 3\frac{1}{2})$

27. $C(-4\frac{1}{2}, -1)$

28. $D(3, -2.5)$



Lesson 3.8

Give the reflection of the point across the given axis.

29. $(2, -5)$, y -axis

30. $(-1, 4)$, x -axis

31. $(-5, 0)$, y -axis

Lesson 3.9

Find the distance between the pair of points.

32. $(7, -3)$ and $(1, -3)$

33. $(-3, 1)$ and $(-3, -2)$

34. $(-2, 8)$ and $(-7, 8)$

Lesson 3.10

Solve.

35. On a map, the pie shop is located at $(-4, 5)$. To get from the pie shop to the grocery store, go 3 blocks east and 6 blocks south. What are the coordinates of the grocery store?

36. Lena drew a rectangle with vertices at $(-1, 1)$, $(-1, -2)$, $(4, 1)$, and $(4, -2)$. What is the perimeter of the rectangle?