

Lesson 5: The Opposite of a Number's Opposite

Classwork

Exercises

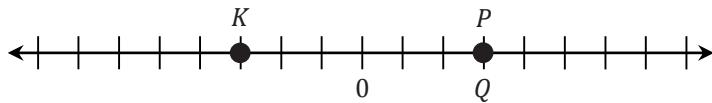
Get into groups of 2, grab a set of playing cards. Complete the table using the cards in your group.

Person	Card (a)	Opposite of Card ($-a$)	Opposite of Opposite of Card $-(-a)$

1. Write the opposite of the opposite of -10 as an equation.
2. In general, the opposite of the opposite of a number is the _____.
3. Provide a real-world example of this rule. Show your work.

Problem Set

1. Read each description carefully, and write an equation that represents the description.
 - a. The opposite of negative seven
 - b. The opposite of the opposite of twenty-five
 - c. The opposite of fifteen
 - d. The opposite of negative thirty-six
2. Jose graphed the opposite of the opposite of 3 on the number line. First, he graphed point P on the number line 3 units to the right of zero. Next, he graphed the opposite of P on the number line 3 units to the left of zero and labeled it K . Finally, he graphed the opposite of K and labeled it Q .



3. Is his diagram correct? Explain. If the diagram is not correct, explain his error, and correctly locate and label point Q .
4. Write the relationship between the points:

P and K _____

K and Q _____

P and Q _____

3. Read each real-world description. Write the integer that represents the opposite of the opposite. Show your work to support your answer.
 - a. A temperature rise of 15 degrees Fahrenheit
 - b. A gain of 55 yards
 - c. A loss of 10 pounds
 - d. A withdrawal of \$2,000

4. Write the integer that represents the statement. Locate and label each point on the number line below.
 - a. The opposite of a gain of 6
 - b. The opposite of a deposit of \$10
 - c. The opposite of the opposite of 0
 - d. The opposite of the opposite of 4
 - e. The opposite of the opposite of a loss of 5

