

Zero Line Flip

Use opposites to locate integers around zero.

GRADE 6 • 6.NR.3.3

6.NR.3.3 "Recognize and explain that opposite signs of integers indicate locations on opposite sides of zero on the number line; recognize and explain that the opposite of the opposite of a number is the number itself."

NAME _____

DATE _____

OPPOSITES AROUND ZERO

For any nonzero integer, a number and its opposite are the same distance from zero on opposite sides of the number line. Zero is its own opposite, so it is not on either side of zero. Taking the opposite twice gives the original number.

WORKED EXAMPLE

Find the opposite of the opposite of -14.

1. Start with -14.
2. The opposite of -14 is 14.
3. The opposite of 14 is -14.

Answer: -14

PRACTICE 6 problems

1 Write the opposite of 9.

ANSWER _____

2 Write the opposite of -12.

ANSWER _____

3 Find the opposite of the opposite of 5.

ANSWER _____

4 Find the opposite of the opposite of -7.

ANSWER _____

5 Write the integer that is opposite -18.

ANSWER _____

6 What is the opposite of 0?

ANSWER _____

APPLY IT Show your work

- 1** An arcade game shows that Jalen's score changed by -15 points from the start of a round. Priya's score change is the opposite of Jalen's. What is Priya's score change?

WORK SPACE

ANSWER _____

- 2** In a robotics coding game, a robot is at location -8 on a number line. A second robot is at the location opposite the first robot. What is the second robot's location?

WORK SPACE

ANSWER _____

CHALLENGE One step up

CHALLENGE

A student says, "The opposite of the opposite of -23 is 23." Is the student correct? Explain your reasoning.

PART 1 • PRACTICE

#	PROBLEM	ANSWER
1	Write the opposite of 9.	-9
2	Write the opposite of -12.	12
3	Find the opposite of the opposite of 5.	5
4	Find the opposite of the opposite of -7.	-7
5	Write the integer that is opposite -18.	18
6	What is the opposite of 0?	0

PART 2 • APPLY IT

1. **15 points** The opposite of -15 is 15, so Priya's score increased by 15 points.
2. **8** The location opposite -8 is 8 because it is the same distance from zero on the other side.

CHALLENGE

No. The opposite of -23 is 23, and the opposite of 23 is -23.

Accept positive integers written with or without a plus sign. For the challenge, accept any clear explanation that shows two opposites return to the original number.