

Lesson 7-3 • Group 2

Reinforce Understanding

7.3 Small Group • Group 2

I can find the absolute value of a rational number — an integer, fraction, or decimal — as its distance from zero, explain why the method works, and use it on a problem I have not seen before.

Worked model

One freezer logged -23 degrees and another logged 17 degrees. Which reading sits closer to 0?

1. Absolute value measures distance from 0, so the sign does not matter here.
2. Distance from 0 for the first reading: $-23 = 23$
3. Distance from 0 for the second reading: $17 = 17$
4. Compare the two distances; the shorter distance sits closer to 0.

Answer: $|-23|$

Practice

Complete each exercise. Show the reasoning that supports your answer.

1. Plot these integers and circle pairs that have the same absolute value: $-6, 6, -2, 2, -4, 4$

Mark and label each value on the number line.

Show your thinking

2. Complete the table with each integer's absolute value and its opposite.

Complete the table. Show how you found each value.

Integer	Absolute Value	Opposite
-7		
4		
-12		
0		
9		

Show your work

3. On a frosty morning at the mountain cache, the thermometer reads -8 degrees. What is the absolute value of -8 ?

Circle the letter of the best answer. Show how you know.

- A. -8
- B. 0
- C. 8
- D. 16

Show your work
