

Lesson 7-1 • Group 2

Reinforce Understanding

7.1 Small Group • Group 2

I can use integers to represent quantities in everyday life, explain what 0 means in each situation, and name the opposite of an integer on the number line, explain what each part stands for, and build one for a situation I have not seen before.

Worked model

A submarine sits 47 meters below the surface of the water. Write an integer for its depth, then name the opposite.

1. Decide the direction. Below the surface is less than 0, so the integer is negative.
2. Write the integer with a negative sign. depth = -47
3. The opposite sits the same distance from 0 on the other side. 47
4. Check on a number line: one point is left of 0, one is right, both 47 units away.

Answer: The depth is -47 meters and its opposite is 47.

Practice

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

1. Write the opposite of each integer.

Complete the table. Show how you found each value.

Integer	Opposite
-15	
8	
0	
-100	

Show your work

2. Graph these integers: -9, 9, 0, -4, 6

Mark and label each value on the number line.

Show your thinking

3. At 6 a.m. in Reykjavik the temperature was -12°C . At 2 p.m. it was the opposite of the 6 a.m. temperature, and at 11 p.m. it was the opposite of the 2 p.m. temperature. What were the temperatures at 2 p.m. and 11 p.m.?

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

- A. -12°C and 12°C
- B. 0°C and 12°C
- C. 12°C and -12°C
- D. 12°C and 24°C

Show your work
