

Number Line

Number & Operations · Grade 6

Score: _____ / 12

★ Hard · 12 Questions

Solve each problem. Show your work in the space provided. Write your answer on the line.

1. A number line includes negative numbers.

What number is 4 units to the LEFT of 2?

Answer: _____

2. On a number line, which is greater: -5 or -1 ?

Answer: _____

3. Order from least to greatest:

$-4, 2, -7, 0, 5$

Answer: _____

4. On a number line, what is the distance between -3 and 4 ?

Answer: _____

5. On a number line, -8 and 8 are shown.

What is the distance between them?

Answer: _____

6. A number line has marks at -10 , -5 , 0 , 5 , 10 .
Where would you plot -3 ? Describe its location.

Answer: _____

7. On a number line, what integer is closest to -4.7 ?

Answer: _____

8. What is the midpoint of -6 and 10 on a number line?

Answer: _____

9. True or false: On a number line, -100 is farther from 0 than 50 is from 0 .

Answer: _____

10. A number line shows -2.5 and 1.5 .
Find the number exactly in the middle.

Answer: _____

11. If you start at 3 on a number line and jump -7 , where do you land?

Answer: _____

- 12.** List all integers between -3 and 3 , inclusive.

Answer: _____

Answer Key

Number Line — Hard

1. **-2**

$2 - 4 = -2$. Moving left past 0 gives negative numbers.

2. **-1 is greater (it is closer to 0 and to the right of -5).**

On a number line, numbers to the right are greater. -1 is to the right of -5 , so $-1 > -5$.

3. **-7, -4, 0, 2, 5**

Negatives come first (more negative = further left): $-7 < -4 < 0 < 2 < 5$.

4. **7 units**

Distance = $|-3 - 4| = |-7| = 7$, or count the steps: $-3 \rightarrow -2 \rightarrow -1 \rightarrow 0 \rightarrow 1 \rightarrow 2 \rightarrow 3 \rightarrow 4 = 7$ steps.

5. **16 units**

Distance = $8 - (-8) = 8 + 8 = 16$ units.

6. **Between -5 and 0, 3 steps to the left of 0 (closer to 0 than to -5).**

-3 is 3 units left of 0 and 2 units right of -5 . It sits between -5 and 0, closer to 0.

7. **-5**

-4.7 is between -5 and -4 . It is 0.3 away from -5 and 0.7 away from -4 . Closest integer: -5 .

8. **2**

Midpoint = $(-6 + 10) \div 2 = 4 \div 2 = 2$.

9. **True. $|-100| = 100 > |50| = 50$.**

Distance from 0 uses absolute value. $|-100| = 100$, $|50| = 50$. $100 > 50$, so True.

10. **-0.5**

Midpoint = $(-2.5 + 1.5) \div 2 = (-1) \div 2 = -0.5$.

11. -4

$$3 + (-7) = 3 - 7 = -4.$$

12. -3, -2, -1, 0, 1, 2, 3

Start at -3 and count up to 3: -3, -2, -1, 0, 1, 2, 3. That's 7 integers.
