

Grade 6 · Integers, Opposites and Absolute Value · Test Answer Key

Common Core 6.NS.C.5, 6.NS.C.6a, 6.NS.C.7 · mathovore.fr

This answer key shows the full solution for each test question and explains how the 20 points are awarded. Partial credit is given when a student reasons correctly about position or distance but makes one sign error.

Grade 6 Common Core: 6.NS.C.5 · 6.NS.C.6a · 6.NS.C.7

Question 1: Integers in context (2 points)

- a) Below sea level is negative: -65 .
- b) A withdrawal decreases the balance: -40 .

Scoring: 1 point for each correct integer with the correct sign.

Question 2: Opposites (2 points)

- a) 14.
- b) The opposite of 9 is -9 , and the opposite of -9 is 9.

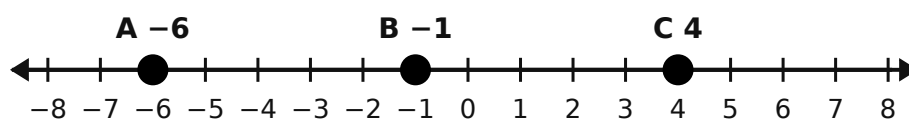
Scoring: 1 point for each correct answer.

Question 3: Read a number line (3 points)

Read each point from 0, with left being negative and right being positive.

- a) -6 b) -1 c) 4**

Scoring: 1 point for each correct number.



$A = -6, B = -1, C = 4.$

Question 4: Compare numbers (2 points)

a) -9 is farther left than -6 : $-9 < -6$.

b) $-\frac{1}{2} = -0.5$: $-0.5 = -\frac{1}{2}$.

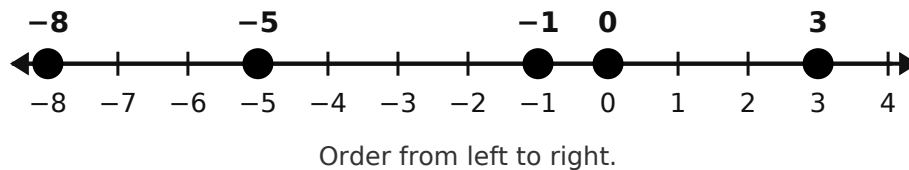
Scoring: 1 point for each correct symbol.

Question 5: Order integers (2 points)

The negative numbers in order from the left are -8 , -5 , -1 . Then 0, then 3.

-8 , -5 , -1 , 0, 3

Scoring: 2 points for a fully correct order; 1 point if exactly one number is out of place.



Question 6: Absolute value (2 points)

a) -17 is 17 units from 0: $|-17| = 17$.

b) The number -12 is 12 units from 0: -12 .

Scoring: 1 point for each correct answer.

Question 7: Winter temperatures (3 points)

a) The least temperature is -22 : **Fairbanks**.

b) $-22 < -7$ (or $-7 > -22$).

c) The distances from 0 are $|-22| = 22$, $|-7| = 7$, and $|68| = 68$. The smallest is 7: **Chicago**.

Scoring: 1 point for each part.

Question 8: Order rational numbers (2 points)

Write $\frac{1}{2} = 0.5$. The negative numbers are $-2.5 < -1.25$. The positive numbers are $0.3 < 0.5$.

$-2.5, -1.25, 0.3, \frac{1}{2}$

Scoring: 1 point for converting or comparing correctly; 1 point for the final order.

Question 9: Elevation (2 points)

a) $|-150| = 150$ and $|90| = 90$. **The submarine** is farther from sea level.

b) $-150 < 90$ (or $90 > -150$).

Scoring: 1 point for each part.

Total
20 points