

Grade 6 · Integers, Opposites and Absolute Value · Worksheet

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

Name: _____ Date: ____/____/____ Score: _____

This worksheet has 20 problems on positive and negative numbers, opposites, number lines, ordering, and absolute value, aligned to Common Core 6.NS.C.5, 6.NS.C.6a, and 6.NS.C.7. The first fourteen problems build the skills with integers and rational numbers.

The last six problems are word problems about a parking garage, elevation, mini-golf scores, temperature, and bank balances. Use a number line whenever you need to compare.

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

Problem 1: Integers in context

Write an integer to represent each situation.

- a. A temperature of 8 degrees below zero
- b. A deposit of \$25 into a bank account
- c. A cave that is 40 feet below sea level
- d. A football team gains 6 yards

Problem 2: Integers in More Situations

Write an integer to represent each situation.

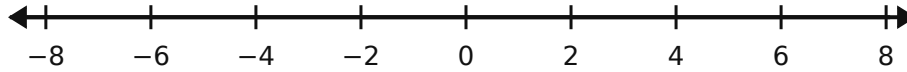
- a. A hot-air balloon floats 15 feet above the ground.
- b. Sofia owes her brother \$12.
- c. A team loses 4 points in a game.
- d. The temperature rises 9 degrees.

Problem 3: Find the opposite

Write the opposite of each number.

- a. 7
- b. -12

- c. 0
- d. -3.5



Use the number line to find opposites.

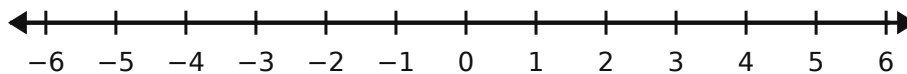
Problem 4: Opposites of More Numbers

Write the opposite of each number.

- a. 18
- b. -26
- c. 0.8
- d. $-3\frac{1}{4}$

Problem 5: Graph on a number line

Graph the numbers -4 , 2 , and -1 on the number line.

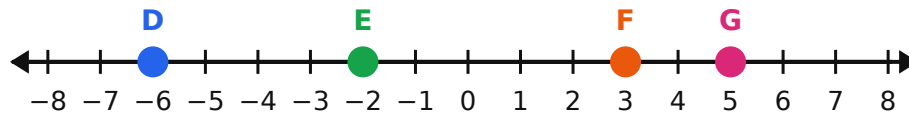


Graph the three numbers here.

Problem 6: Reading a Number Line

Write the number shown by each labeled point.

- a. Point D
- b. Point E
- c. Point F
- d. Point G



Points D, E, F, and G.

Problem 7: Absolute value

Find each absolute value.

- a. $|-9|$
- b. $|6|$
- c. $|0|$
- d. $|-4.5|$

Problem 8: More Absolute Values

Find each absolute value.

- a. $|-28|$
- b. $|15|$
- c. $|-0.6|$
- d. $|-3\frac{1}{2}|$

Problem 9: Compare numbers

Write $<$, $>$, or $=$ to make each statement true.

- a. -3 $[\text{?}][\text{?}]$ 2
- b. -7 $[\text{?}][\text{?}]$ -4
- c. 0 $[\text{?}][\text{?}]$ -5
- d. -2.5 $[\text{?}][\text{?}]$ -2.25

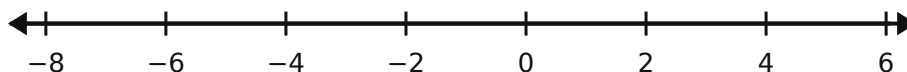
Problem 10: Compare with Symbols

Write $<$ or $>$ to make each statement true.

- a. -8 $[\text{?}][\text{?}]$ -10
- b. 0 $[\text{?}][\text{?}]$ -0.1
- c. $|-6|$ $[\text{?}][\text{?}]$ 4
- d. -7 $[\text{?}][\text{?}]$ $|-2|$

Problem 11: Order integers

Write the integers 4, -7, 0, -2, 5 in order from least to greatest. Use the number line to help.



Place the numbers on the line to order them.

Problem 12: Order Six Integers

Write the integers 9, -3, -10, 6, 0, -1 in order from least to greatest.

Problem 13: Order rational numbers

Write the numbers $-\frac{1}{2}$, 0.75, -1.5, $\frac{1}{4}$ in order from least to greatest.

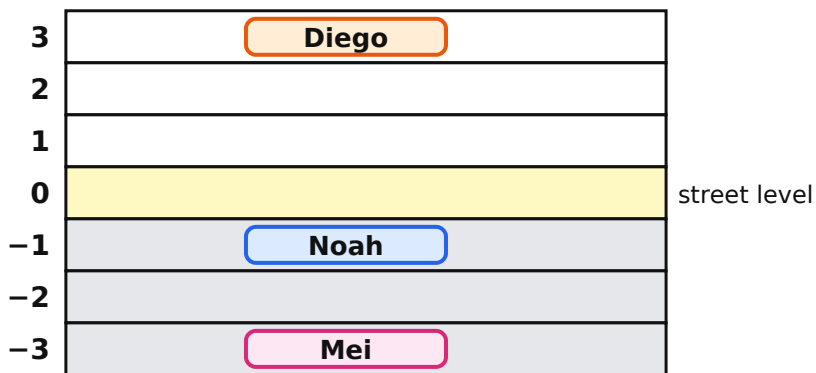
Problem 14: Order from Greatest to Least

Write the numbers 2.5, $-2\frac{1}{4}$, $\frac{1}{2}$, -0.75 in order from greatest to least.

Problem 15: Parking Garage Levels

A parking garage has levels numbered from 3 down to -3. Level 0 is street level. Mei parked on level -3, Noah on level -1, and Diego on level 3.

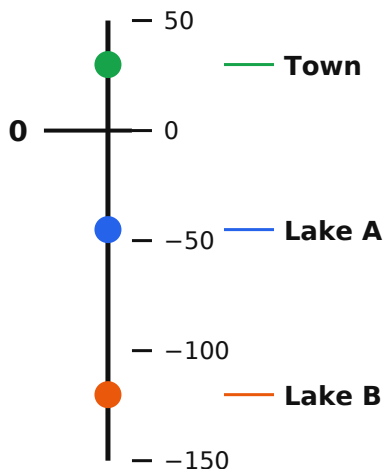
- Write the three names in order from the lowest level to the highest level.
- Which two cars are the same distance from street level? Explain.



Cars in the parking garage.

Problem 16: Hiking elevations

Mei studies three places on a trail map. Lake A is at -45 feet, Lake B is at -120 feet, and the town is at 30 feet. Write the places in order from lowest to highest elevation. Then find which place is farthest from sea level.



Elevations on a trail map.

Problem 17: Mini-Golf Scores

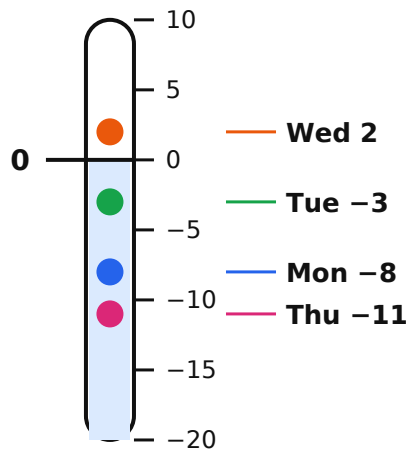
In a mini-golf game, each score shows strokes compared with par, and the lowest score wins. Priya scored -3 , Liam scored 2 , Sofia scored -5 , and Jamal scored 0 .

- Write the names in order from the best score to the worst score.
- Whose score is farthest from 0 ?
- Explain why -5 is a better score than -3 , even though $|-5| > |-3|$.

Problem 18: Winter temperatures

The morning low temperatures were -8°F on Monday, -3°F on Tuesday, 2°F on Wednesday, and -11°F on Thursday.

- Find the coldest day.
- Write the temperatures in order from least to greatest.
- Explain why -11°F is colder than -8°F .

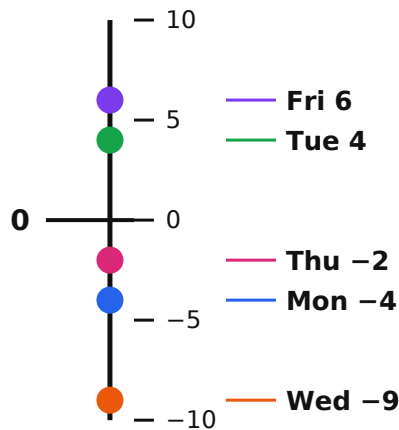


Morning low temperatures.

Problem 19: Weekly Low Temperatures

Ethan recorded the daily low temperatures: Monday -4°F , Tuesday 4°F , Wednesday -9°F , Thursday -2°F , and Friday 6°F .

- Which day was the coldest?
- Write the temperatures in order from least to greatest.
- Which two days have temperatures with the same absolute value? Are the temperatures equal?
- Which day had a low closest to 0°F ?



Daily low temperatures in $^{\circ}\text{F}$.

Problem 20: Account balances

Ethan's account balance is -35 dollars, Aisha's is -20 dollars, and Noah's is 15 dollars.

- Write the balances in order from least to greatest.
- Write the absolute value of Ethan's balance and of Aisha's balance, and state who owes

more money.

c. Explain why $-35 < -20$ even though $|-35| > |-20|$.