

Grade 6 - Integers and Rational Numbers on the Number Line - Worksheet

Common Core 6.NS.C.5, 6.NS.C.6a, 6.NS.C.6c · maths-pdf.fr/en/

Name: _____ Class: _____ Date: ____/____/____

These 20 problems practice positive and negative numbers (Common Core 6.NS.C.5 and 6.NS.C.6). You will write integers for real situations, find opposites, name and plot points on horizontal and vertical number lines, and locate fractions and decimals.

Grade 6 · Common Core State Standards: **6.NS.C.5, 6.NS.C.6a, 6.NS.C.6c**

Exercise 1 - Diver below sea level

A diver is 25 feet below sea level. Write an integer for her position.

Exercise 2 - Bank account

Mei deposits \$60 and then pays a \$40 bill. Write an integer for the deposit and an integer for the bill.

Exercise 3 - Temperature below zero

The temperature at the school bus stop is 8 degrees below zero Fahrenheit. Write the temperature as an integer.

Exercise 4 - Opposites

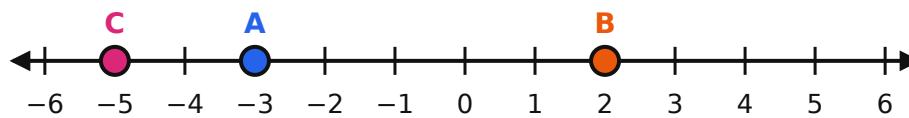
Write the opposite of each number.

- a. 11
- b. -20
- c. 0

Exercise 5 - Opposite of an opposite

Find $-(-9)$.

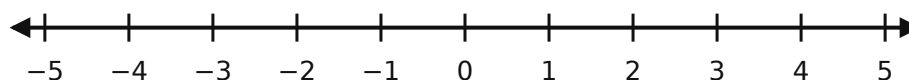
Exercise 6 - Name the integers



Points A, B, and C.

Name the integer shown by each point.

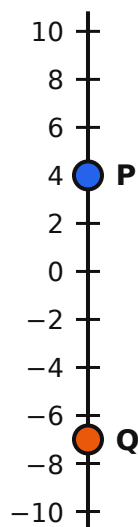
Exercise 7 - Plot integers



Number line.

Plot and label the points -4 , 0 , and 3 on the number line.

Exercise 8 - Read a thermometer



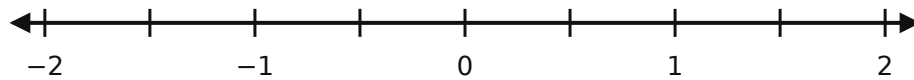
Temperature in degrees Fahrenheit.

The vertical number line is a thermometer in degrees Fahrenheit. Find the temperatures at points P and Q.

Exercise 9 - Elevation

A hiker's trail starts 150 feet below sea level in a valley and ends at the top of a mountain 2,500 feet above sea level. Write an integer for each elevation.

Exercise 10 - Plot fractions



Number line in halves.

Plot $-\frac{1}{2}$ and $1\frac{1}{2}$ on the number line.

Exercise 11 - Locate a decimal

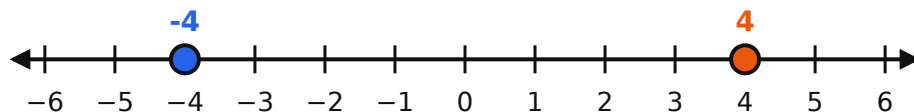
Between which two integers does -2.5 lie? Tell which one is closer to 0.

Exercise 12 - Opposites of rational numbers

Write the opposite of each number.

- a. $-\frac{3}{4}$
- b. 2.6
- c. -0.05

Exercise 13 - Equal distance from zero



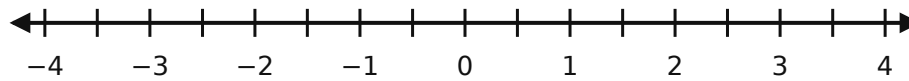
Opposites.

Points at -4 and 4 are on the number line. Explain how the points are related and how far each is from 0.

Exercise 14 - Withdrawal

Aisha withdraws \$35 from her savings account. Which integer represents the withdrawal, and what would the integer 0 mean in this situation?

Exercise 15 - Plot opposites



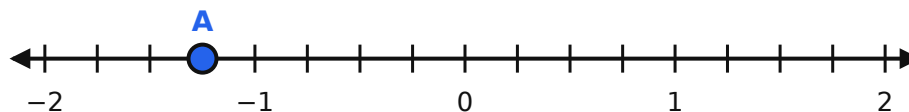
Number line.

Plot -3.5 and its opposite.

Exercise 16 - Write a situation

Describe a real-world situation that the integer -10 could represent. Then describe a situation for $+10$ in the same context.

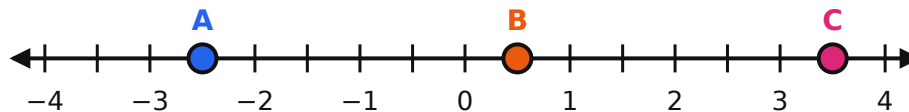
Exercise 17 - Read a fraction



Point A on a number line in fourths.

Write the rational number shown by point A as a mixed number and as a decimal.

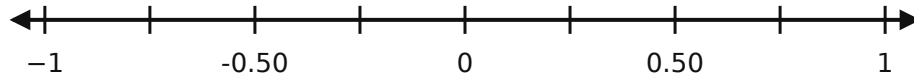
Exercise 18 - Three points



Points A, B, and C.

Write the number shown by each point as a decimal.

Exercise 19 - Fractions and decimals



Number line in fourths.

Plot $\frac{3}{4}$ and -0.75 on the number line. Explain how the two numbers are related.

Exercise 20 - Opposite temperatures

On Monday the low temperature was -4 degrees Fahrenheit. On Tuesday the temperature was the opposite of Monday's. Write Tuesday's temperature and tell which day was colder.