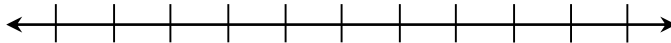


Lesson 1: Positive and Negative Numbers on the Number Line— Opposite Direction and Value

Classwork

Exercises

Complete the diagrams. Count by ones to label the number lines.



1. Plot your point on both number lines.
2. Show and explain how to find the opposite of your number on both number lines.
3. Mark the opposite on both number lines.

Problem Set

1. Create a scale in order to graph the numbers -12 through 12 on a number line. What does each tick mark represent?
2. Choose an integer between -5 and -10 . Label it R on the number line created in Problem 3, and complete the following tasks.
 - a. What is the opposite of R ? Label it Q .
 - b. State a positive integer greater than Q . Label it T .
 - c. State a negative integer greater than R . Label it S .
 - d. State a negative integer less than R . Label it U .
 - e. State an integer between R and Q . Label it V .
3. Will the opposite of a positive number always, sometimes, or never be a positive number? Explain your reasoning.
4. Will the opposite of zero always, sometimes, or never be zero? Explain your reasoning.
5. Will the opposite of a number always, sometimes, or never be greater than the number itself? Explain your reasoning. Provide an example to support your reasoning.