Lesson 6: Rational Numbers on the Number Line

Problem Set

1. In the space provided, write the opposite of each number.
2. Choose a non-integer between and . Label it point and its opposite point on the number line. Write values below the points.
   1. To draw a scale that would include both points, what could be the length of each segment?
   2. In words, create a real-world situation that could represent the number line diagram.
3. Choose a value for point that is between and .
   1. What is the opposite of point ?
   2. Use the value from part (a), and describe its location on the number line in relation to zero.
   3. Find the opposite of the opposite of point . Show your work, and explain your reasoning.
4. Locate and label each point on the number line. Use the diagram to answer the questions.

*Jill lives one block north of the pizza shop.*

*Janette’s house is block past Jill’s house.*

*Jeffrey and Olivia are in the park blocks south of the pizza shop.*

*Jenny’s Jazzy Jewelry Shop is located halfway between the pizza shop and the park.*

* 1. Describe an appropriate scale to show all the points in this situation.
  2. What number represents the location of Jenny’s Jazzy Jewelry Shop? Explain your reasoning.