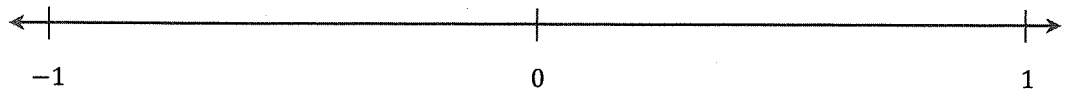
Problem Set

1. In the space provided, write the opposite of each number.
   a. $\frac{10}{7}$
   b. $-\frac{5}{3}$
   c. 3.82
   d. $-6\frac{1}{2}$

2. Choose a non-integer between 0 and 1. Label it point A and its opposite point B on the number line. Write values below the points.



   a. To draw a scale that would include both points, what could be the length of each segment?
   b. In words, create a real-world situation that could represent the number line diagram.

3. Choose a value for point P that is between -6 and -7.
   a. What is the opposite of point P?
   b. Use the value from part (a), and describe its location on the number line in relation to zero.
   c. Find the opposite of the opposite of point P. 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 $\frac{1}{3}$ block past Jill's house.

   Jeffrey and Olivia are in the park $\frac{4}{3}$ blocks south of the pizza shop.

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

   a. Describe an appropriate scale to show all the points in this situation.
   b. What number represents the location of Jenny's Jazzy Jewelry Shop? Explain your reasoning.