Lesson 6: Rational Numbers on the Number Line

Problem Set

1. In the space provided, write the opposite of each number.
	1. $\frac{10}{7}$
	2. $-\frac{5}{3}$
	3. $3.82$
	4. $-6\frac{1}{2}$
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.

$$1$$

$$0$$

$$-1$$

* 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.
1. Choose a value for point $P$ that is between $-6$ and $-7$.
	1. What is the opposite of point $P$?
	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 $P$. Show your work, and explain your reasoning.
2. 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.*

* 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.