

## Module 3 Topic A Lessons 6 Student Copy

### Exercises

#### Lesson 6

Use what you know about the point  $-\frac{7}{4}$  and its opposite to graph both points on the number line below. The fraction  $-\frac{7}{4}$  is located between which two consecutive integers? Explain your reasoning.



On the number line, each segment will have an equal length of \_\_\_\_\_. The fraction is located between \_\_\_\_\_ and \_\_\_\_\_.

Explanation:

*Exercise #2 Work with your partner & make a poster on white paper to display!*

1. Write a real-world story problem using a rational number and its opposite.
2. Create a horizontal or vertical number line diagram to represent your situation:
  - a. determine an appropriate scale and label the number line.
  - b. write the units of measurement.
  - c. graph the rational number and its opposite that represent the situation.
3. Describe what points 0 and the opposite number represent on the number line.
4. Name a rational number to the left and right of the rational number you initially chose.

## Homework

### Lesson 6

1. In the space provided, write the opposite of each number.

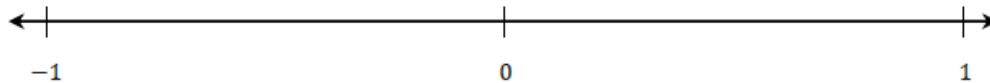
a.  $\frac{10}{7}$

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.