

## **Lesson 17: Interpret Diagrams**

• Let's compare products without multiplying.

## Warm-up: Estimation Exploration: Fraction of a Whole Number

$$\frac{5}{3} \times 9,625$$

Record an estimate that is:

| too low | about right | too high |
|---------|-------------|----------|
|         |             |          |



## 17.1: Match the Diagram

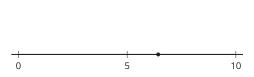
1. Match the expressions and diagrams.

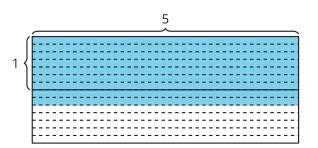
$$\frac{2}{7} \times 3$$

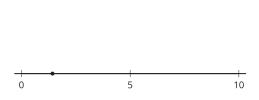
$$\frac{9}{7} \times 3$$

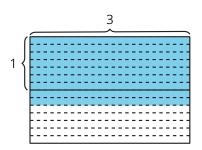
$$\frac{2}{7} \times 5$$

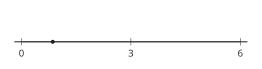
$$\frac{9}{7} \times 5$$

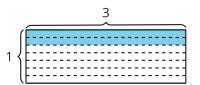




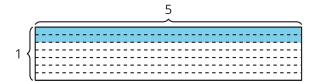














2. Write < or > in each blank to make the inequality true.

a. 
$$\frac{2}{7} \times 3$$
 \_\_\_\_\_3

b. 
$$\frac{9}{7} \times 3 _{---} 3$$

c. 
$$\frac{2}{7} \times 5 _{---} 5$$

d. 
$$\frac{9}{7} \times 5 _{---} 5$$



## 17.2: Who Ran Farther?

- Priya ran to her grandmother's house.
- Jada ran twice as far as Priya.
- Han ran  $\frac{6}{7}$  as far as Priya.
- Clare ran  $\frac{14}{8}$  as far as Priya.
- Mai ran  $\frac{3}{5}$  times as far as Priya.
- 1. Which students ran farther than Priya?\_\_\_\_\_
- 2. Which students did not run as far as Priya?\_\_\_\_\_
- 3. List the runners in order from shortest distance run to longest. Explain or show your reasoning.
- 4. The point P represents how far Priya ran. Write the initial of each student in the blank that shows how far they ran. One of the students will be missing.



5. Label the distance for the missing student on the number line above.