Unit 6, 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:

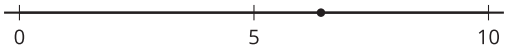
too low	about right	too high

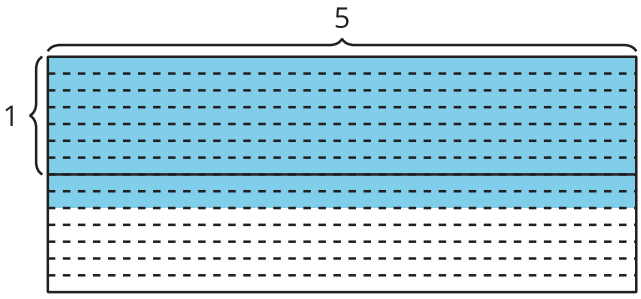
Activity 1

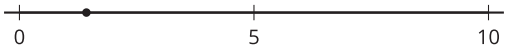
Match the Diagram

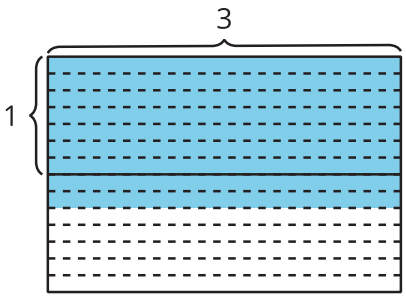
1. Match each expression to a number line and a diagram.

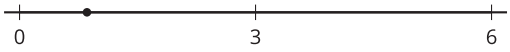
$\frac{2}{7} \times 3$ $\frac{9}{7} \times 3$ $\frac{2}{7} \times 5$ $\frac{9}{7} \times 5$

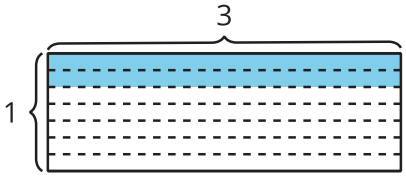


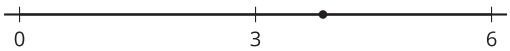


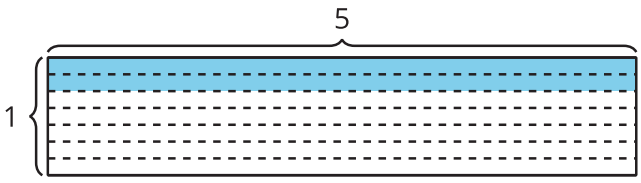












2. Write $<$ or $>$ in each blank to make the inequality true.

   a. $\frac{2}{7} \times 3 ____ 3$

   b. $\frac{9}{7} \times 3 ____ 3$

   c. $\frac{2}{7} \times 5 ____ 5$

   d. $\frac{9}{7} \times 5 ____ 5$

Activity 2

Who Ran Farther?

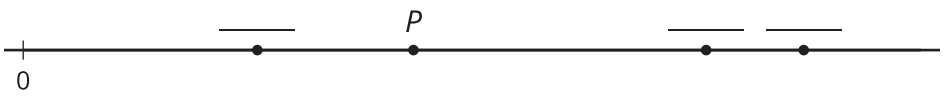
- Priya ran to her grandmother's house.
- Jada ran twice as far as Priya.
- Han ran $\frac{6}{7}$ as far as Priya.
- Clare ran $\frac{14}{8}$ as far as Priya.
- Mai ran $\frac{3}{5}$ times as far as Priya.

1. Which students ran farther than Priya? _____

2. Which students did not run as far as Priya? _____

3. List the runners in order, from the shortest distance to the longest distance. Explain or show your reasoning.

4. Point *P* represents how far Priya ran. Find the distance of each runner on the number line. Write the runner's initial in the blank. One runner does not have a point on the number line.



5. Label the distance for the missing runner on the number line.