

## Lesson 9: Explain Equivalence

- Let's talk about how we know whether two fractions are equivalent.

### Warm-up: Number Talk: Familiar Numbers

Find the value of each expression mentally.

- $10 \times 6$

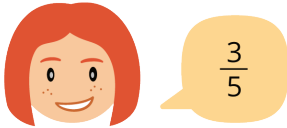
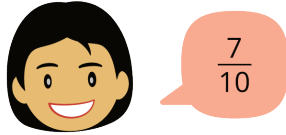
- $10 \times 12$

- $10 \times 24$

- $5 \times 24$

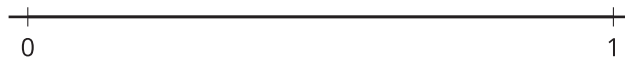
## 9.1: Pointed Discussion

Andre, Lin, and Clare are representing  $\frac{70}{100}$  on a number line.



- Andre said, "Oh, no! We'll need to partition the line into 100 equal parts and count 70 parts just to mark one point!"
- Lin said, "What if we mark  $\frac{7}{10}$  instead? We could partition the line into just 10 parts and count 7 parts."
- Clare said, "What if we partition the line into 5 parts and mark  $\frac{3}{5}$ ?"

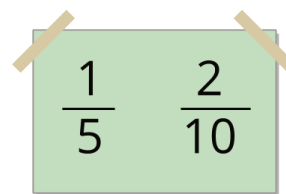
Do you agree with any of them? Explain or show your reasoning.



## 9.2: How Do You Know?

Around the room you will find six posters, each showing either two or three fractions.

With your group, visit at least two posters: one with two fractions and one with three fractions.



For the set of 2 fractions:

- Explain or show how you know the fractions are equivalent.
- Write a new equivalent fraction on a sticky note and add it to the poster. Think of a fraction that hasn't already been written by someone else.

We visited poster \_\_\_\_\_, which shows \_\_\_\_\_ and \_\_\_\_\_.

New equivalent fraction: \_\_\_\_\_

For the set of 3 fractions:

- Identify 2 fractions that are equivalent. Explain your reasoning.

We visited poster \_\_\_\_\_, which shows \_\_\_\_\_, \_\_\_\_\_, and \_\_\_\_\_.