



# 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.

- $10 \times 6$
- $10 \times 12$
- $10 \times 24$
- $5 \times 24$



## Activity 1

### Pointed Discussion

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



$$\frac{70}{100}$$



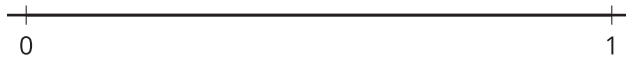
$$\frac{7}{10}$$



$$\frac{3}{5}$$

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



## Activity 2

### How Do You Know?

Around the room you will find 6 posters, each showing either 2 or 3 fractions.

With your group, visit at least 2 posters: one with 2 fractions and one with 3 fractions.

For the poster with 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. Try to find a fraction that hasn't already been written by someone else.

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

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

For the poster with 3 fractions:

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

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

\_\_\_\_\_ and \_\_\_\_\_ are equivalent fractions.

