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.

- 10×6

- 10×12

- 10×24

- 5×24

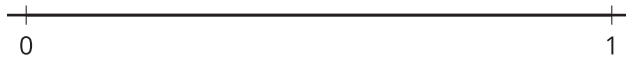## Pointed Discussion

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

- 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 $\frac{3}{5}$?"

$\frac{70}{100}$

$\frac{7}{10}$

$\frac{3}{5}$

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

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+————————————————————+
0                    1
```

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+————————————————————+
0                    1
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+————————————————————+
0                    1
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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.