Equivalent Fractions on a Number Line

Let's find fractions at the same location.

Warm-up

Notice and Wonder: Running on a Trail

What do you notice? What do you wonder?

Tyler ran part of the length of a trail.
Han ran part of the length of the same trail.

Activity 1

Running Part of a Trail

Some students ran on the same trail at a park. Decide if each pair of students ran the same distance.

You can use number lines if they are helpful to you.

1. Elena ran $\frac{3}{6}$ of the trail.

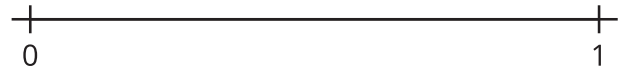   Han ran $\frac{1}{2}$ of the trail.

2. Jada ran $\frac{1}{4}$ of the trail.

   Kiran ran $\frac{2}{8}$ of the trail.

3. Lin ran $\frac{2}{3}$ of the trail.
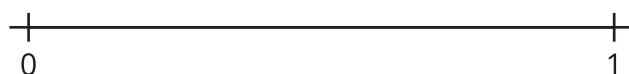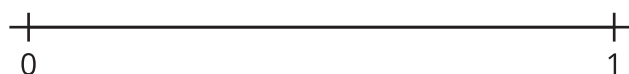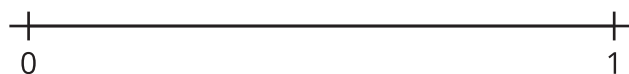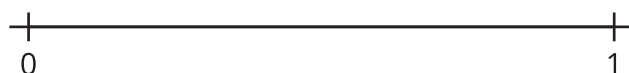
Mai ran $\frac{5}{6}$ of the trail.

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+——————————————————————————————————+
0                                  1
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0                                  1
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Activity 2

Locate and Pair

1. Locate and label the following numbers on a number line. You can use more than 1 number line if you wish.

$$\frac{1}{2}, \frac{1}{3}, \frac{1}{4}, \frac{2}{3}, \frac{2}{6}, \frac{3}{8}, \frac{3}{4}, \frac{4}{6}, \frac{4}{8}, \frac{6}{8},$$
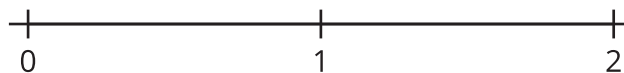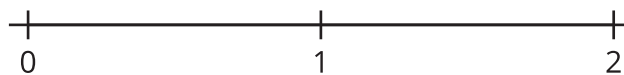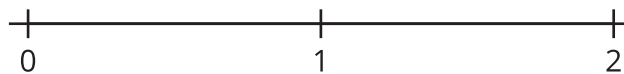$$\frac{7}{8}$$

2. Use your labels to find 4 pairs of fractions that are equivalent. Write equations to represent them.

_____ = _____   _____ = _____   _____ = _____   _____ = _____

If you have time: Use the number lines to generate as many equivalent fractions as you can.

Rolling for Equivalent Fractions

1. Roll 6 number cubes. If you roll any 5s, they count as a wild card and can be any number you'd like.

2. Can you put the numbers you rolled in the boxes to make a statement that shows equivalent fractions? Work with your partner to find out.

3. If you cannot, re-roll as many number cubes as you'd like. You can re-roll your number cubes twice.

4. If you can make equivalent fractions, record your statement and show or explain how you know the fractions are equivalent. You get 1 point for each pair of equivalent fractions you write.

Round 1:

$$\frac{\square}{\square} = \frac{\square}{\square}$$

Show or explain how your fractions are equivalent.

Round 2:

$$\frac{\square}{\square} = \frac{\square}{\square}$$

Show or explain how your fractions are equivalent.

Round 3:

$$\frac{\boxed{}}{\boxed{}} = \frac{\boxed{}}{\boxed{}}$$

Show or explain how your fractions are equivalent.

Round 4:

$$\frac{\boxed{}}{\boxed{}} = \frac{\boxed{}}{\boxed{}}$$

Show or explain how your fractions are equivalent.

Round 5:

$$\frac{\boxed{}}{\boxed{}} = \frac{\boxed{}}{\boxed{}}$$

Show or explain how your fractions are equivalent.

Round 6:

$$\frac{\boxed{}}{\boxed{}} = \frac{\boxed{}}{\boxed{}}$$

Show or explain how your fractions are equivalent.

Round 7:

$$\frac{\square}{\square} = \frac{\square}{\square}$$

Show or explain how your fractions are equivalent.

Round 8:

$$\frac{\square}{\square} = \frac{\square}{\square}$$

Show or explain how your fractions are equivalent.