

# Lesson 12: 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.

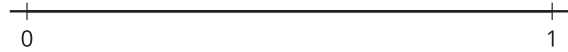


## 12.1: Running Part of a Trail

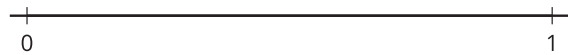
Some students are running on a trail at a park. Decide if each pair of students ran the same distance.

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

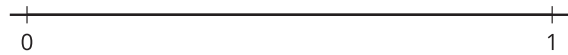
1. Elena ran  $\frac{3}{6}$  of the trail.



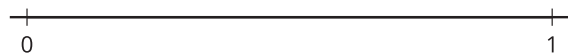
Han ran  $\frac{1}{2}$  of the trail.



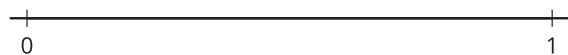
2. Jada ran  $\frac{1}{4}$  of the trail.



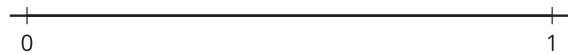
Kiran ran  $\frac{2}{8}$  of the trail.



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



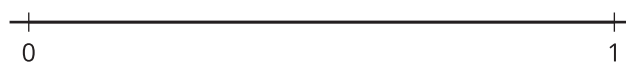
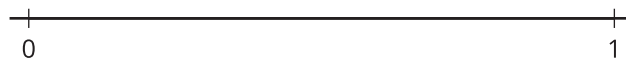
Mai ran  $\frac{5}{6}$  of the trail.



## 12.2: Locate and Pair

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

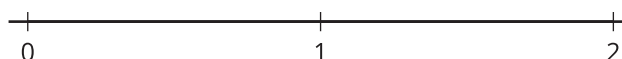
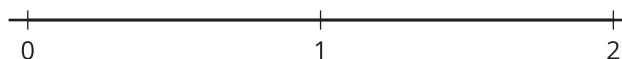
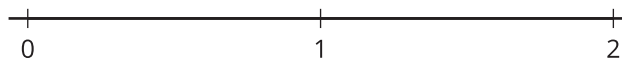
$\frac{1}{2}, \frac{1}{3}, \frac{1}{4}, \frac{2}{3}, \frac{2}{6}, \frac{3}{8}, \frac{3}{4}, \frac{4}{6}, \frac{4}{8}, \frac{6}{8}, \frac{7}{8}$



2. 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.



## 12.3: Rolling for Equivalent Fractions

1. Roll 6 number cubes. If you roll any fives, 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:

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

Show or explain how your fractions are equivalent.

Round 4:

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

Show or explain how your fractions are equivalent.

Round 5:

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

Show or explain how your fractions are equivalent.

Round 6:

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

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.