Unit 2, Lesson 5

Fractions on Number Lines

Let's investigate equivalent fractions on a number line.

Warm-up

Number Talk: A Number Times 12

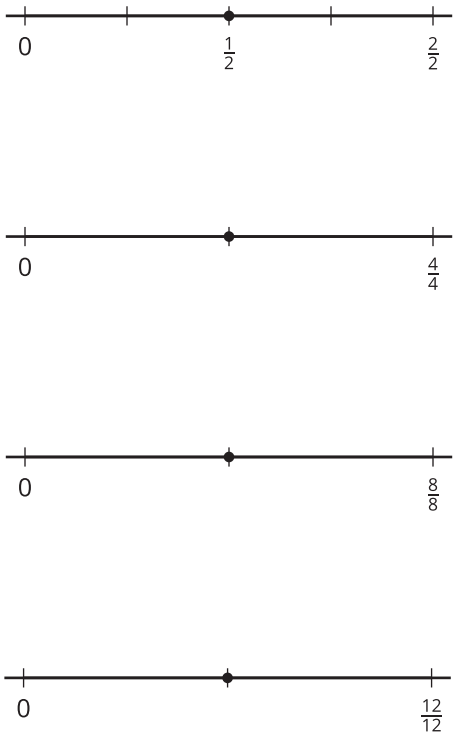
Find the value of each expression mentally.

- 2×12
- 4×12
- 8×12
- 16×12

Activity 1

All Lined Up

1. These number lines have different labels for the tick mark on the far right.



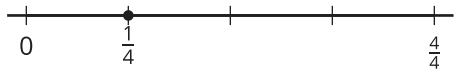
   a. Explain to your partner why the tick marks on the far right can be labeled with different fractions.

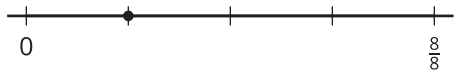
   b. Label each point with a fraction it represents (other than $\frac{1}{2}$).

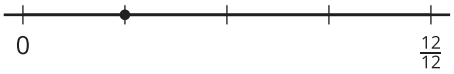
   c. Explain to your partner why the fractions you wrote are equivalent.

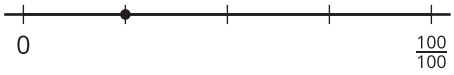
2. Label the point on each number line with a fraction it represents. Use a different fraction for each number line. Be prepared to explain your reasoning.

a.



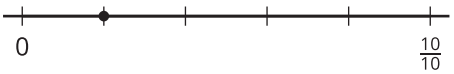


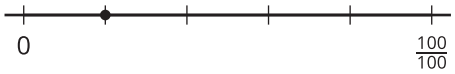




b.







c.





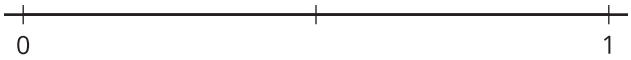


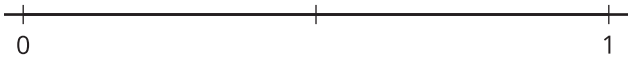
Activity 2

How Far to Run?

1. Han and Kiran plan to go for a run after school.
   - Han says, "Let's run $\frac{3}{4}$ mile. That's how far I run to my soccer practice."
   - Kiran says, "I can only run $\frac{9}{12}$ mile."

   Which distance should they run? Explain your reasoning. Use one or more number lines to show your reasoning.





2. Mai wants to join Han and Kiran on their run. She says, "How about we run $\frac{7}{8}$ mile?"

   Is the distance Mai suggests the same as what her friends wanted to run? Explain or show your reasoning.



