



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

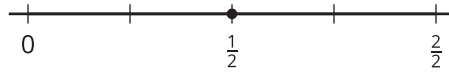
- 16×12



Activity 1

All Lined Up

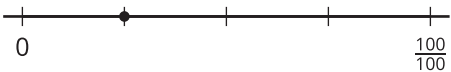
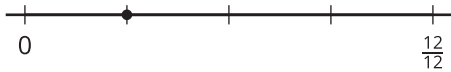
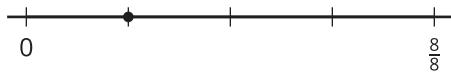
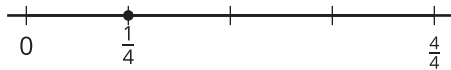
1. These number lines have different labels for the tick mark on the far right.



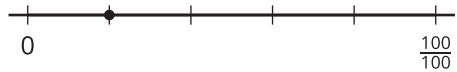
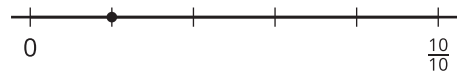
- Explain to your partner why the tick marks on the far right can be labeled with different fractions.
- Label each point with a fraction it represents (other than $\frac{1}{2}$).
- Explain to your partner why the fractions you wrote are equivalent.

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.

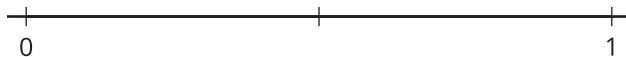
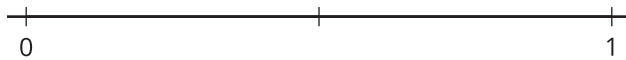


Activity 2

How Far to Run?

- 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.



- 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.

