Unit 3 Lesson 8: Addition of Fractions

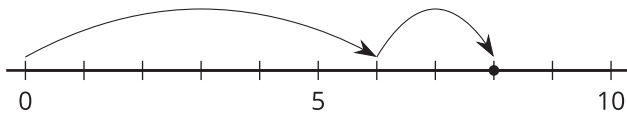## WU Notice and Wonder: A Fraction on a Number Line (Warm up)

Student Task Statement

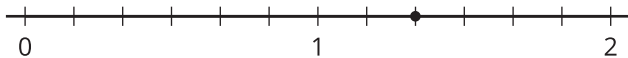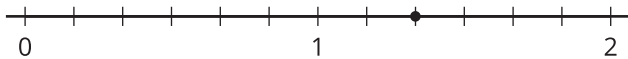What do you notice? What do you wonder?
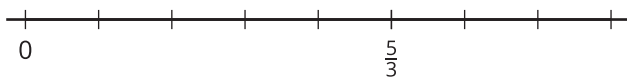
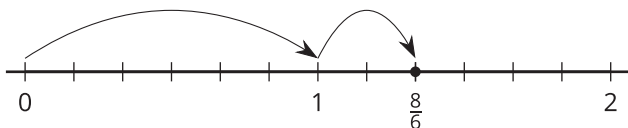## 1 Sum of Jumps

Images for Launch

Student Task Statement

1.   a. On each number line, draw two "jumps" to show how to use sixths to make a sum of $\frac{8}{6}$. Then, write an equation to represent each combination of jumps.
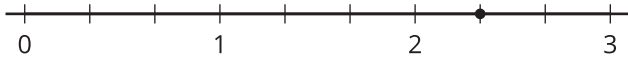

   b. Noah draws the following diagram and writes: $\frac{8}{6} = \frac{6}{6} + \frac{2}{6}$ and $\frac{8}{6} = 1 + \frac{2}{6}$. Which equation is correct? Explain your reasoning.

2.   a. On each number line, draw "jumps" to show how to use thirds to make a sum of $\frac{7}{3}$. Then, write an
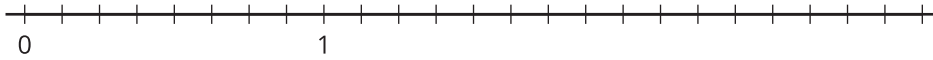
equation to represent each combination of jumps.

b. Write $\frac{7}{3}$ as a sum of a whole number and a fraction.
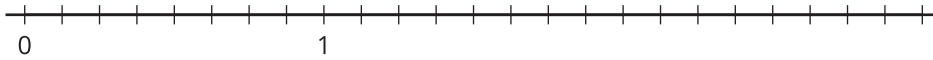
2 What is the Sum?

Student Task Statement

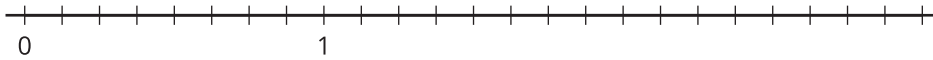1. Use a number line to represent each addition expression and to find its value.
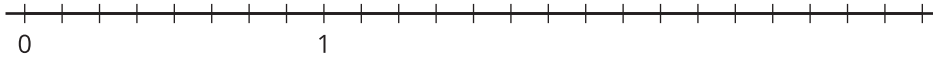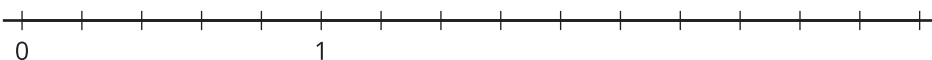
   a. $\frac{5}{8} + \frac{2}{8}$

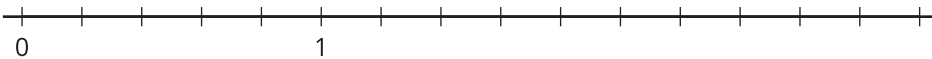   b. $\frac{1}{8} + \frac{9}{8}$

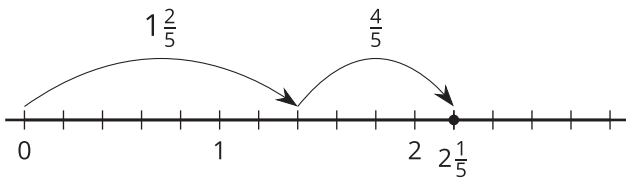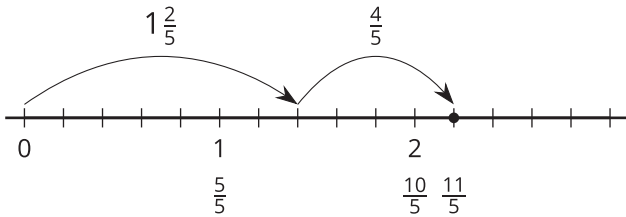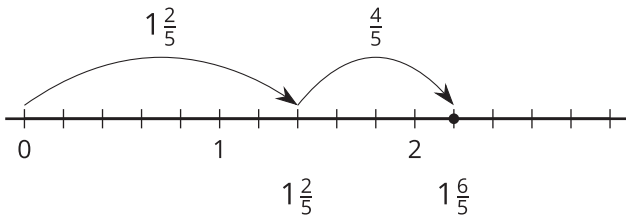   c. $\frac{11}{8} + \frac{9}{8}$

   d. $2\frac{1}{8} + \frac{4}{8}$

2. Priya says the sum of $1\frac{2}{5}$ and $\frac{4}{5}$ is $1\frac{6}{5}$. Kiran says the sum is $\frac{11}{5}$. Tyler says it is $2\frac{1}{5}$. Do you agree with any of them? Explain or show your reasoning. Use one or more number lines if you find them helpful.

Activity Synthesis

A number line from 0 with two jumps: first jump $1\frac{2}{5}$ landing at $1\frac{2}{5}$, second jump $\frac{4}{5}$ landing at $1\frac{6}{5}$ (just past 2).

A number line from 0 with two jumps: first jump $1\frac{2}{5}$ landing at $\frac{5}{5}$, second jump $\frac{4}{5}$ landing between $\frac{10}{5}$ and $\frac{11}{5}$.

A number line from 0 with two jumps: first jump $1\frac{2}{5}$, second jump $\frac{4}{5}$ landing at $2\frac{1}{5}$.

3 Make Two Jumps (Optional)

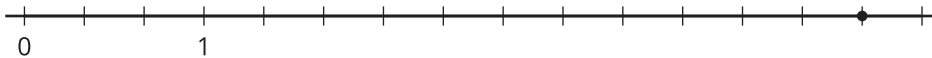### Student Task Statement

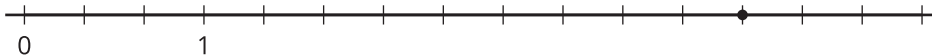Here are four number lines, each with a point on it.
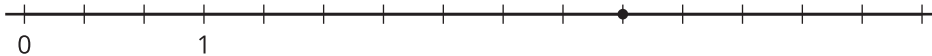
1.
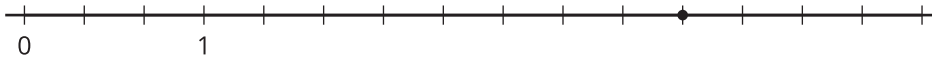
2.

3.

4.

For each number line, label the point. This is your target. Make two forward jumps to get from 0 to the target.

- Pick a card from the set given to you. Use the fraction on it for your first jump. Draw the jump and label it with the fraction.
- From there, draw the second jump to reach the target. What fraction do you need to add? Label the jump with the fraction.

- Write an equation to represent the sum of your two fractions.