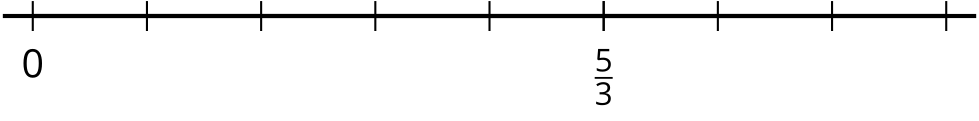
## Lesson 8: Addition of Fractions

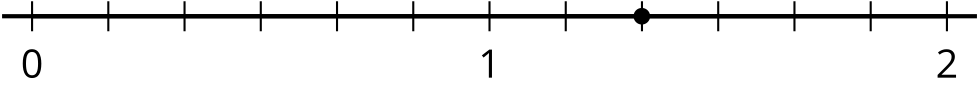
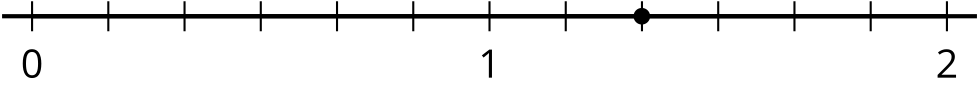
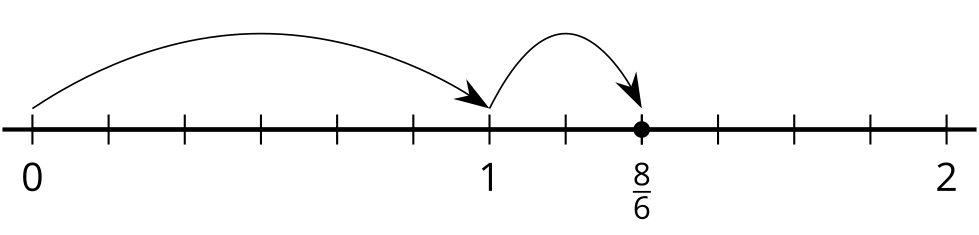
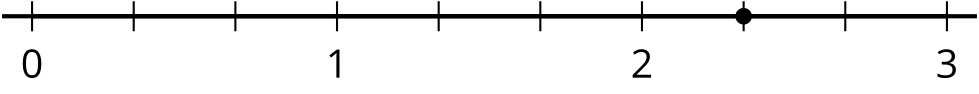
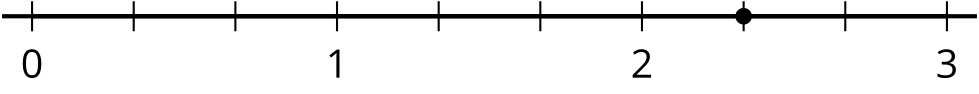
* Let’s explore sums of fractions on a number line.

### Warm-up: Notice and Wonder: A Fraction on a Number Line

What do you notice? What do you wonder?

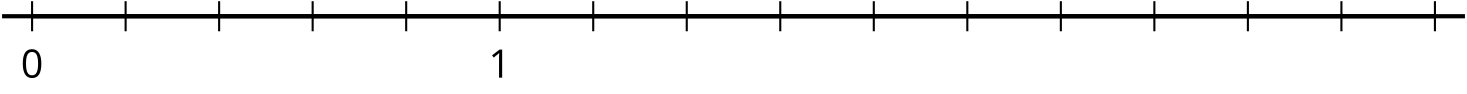
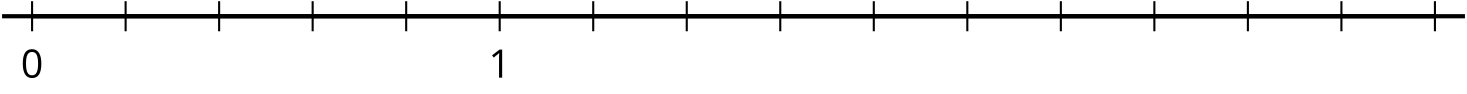
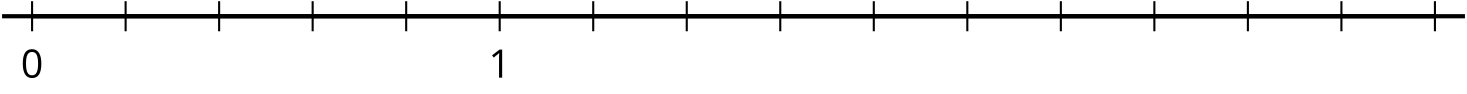


### 8.1: Sum of Jumps

* 1. On each number line, draw two “jumps” to show how to use sixths to make a sum of . Then, write an equation to represent each combination of jumps.
  + 
  + 
  1. Noah draws the following diagram and writes: and . Which equation is correct? Explain your reasoning.
  + 
  1. On each number line, draw “jumps” to show how to use thirds to make a sum of . Then, write an equation to represent each combination of jumps.
  + 
  + 
  1. Write as a sum of a whole number and a fraction.

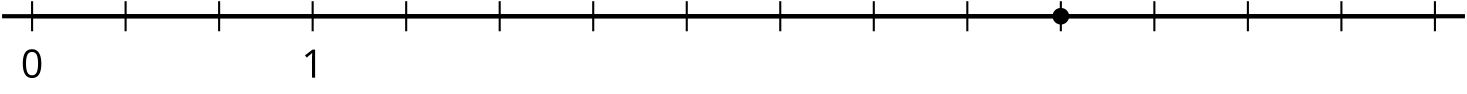
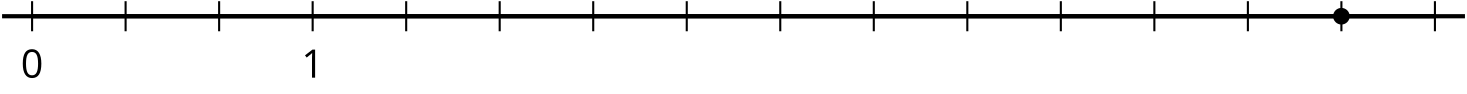
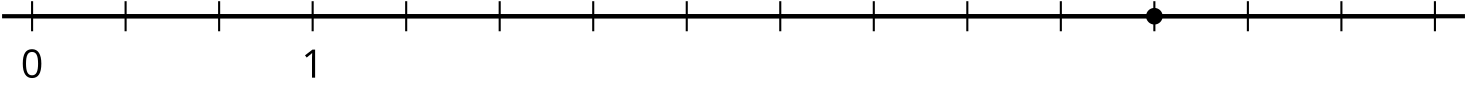
### 8.2: What is the Sum?

1. Use a number line to represent each addition expression and to find its value.
   * 
   * 
   * 
   * 
2. Priya says the sum of and is . Kiran says the sum is . Tyler says it is . Do you agree with any of them? Explain or show your reasoning. Use one or more number lines if you find them helpful.

* 
* 
* 

### 8.3: Make Two Jumps

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.



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