Differences of Fractions

Let's explore differences of fractions on a number line.

True or False: Sums of Tenths

Decide if each statement is true or false. Be prepared to explain your reasoning.

- $\frac{1}{10} + \frac{2}{10} + \frac{3}{10} = 1$

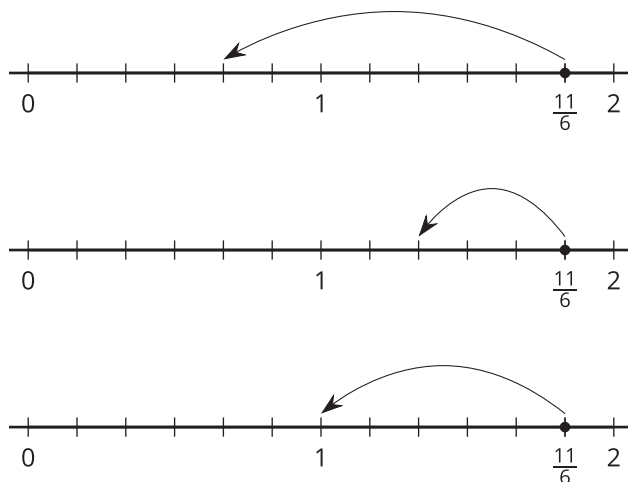- $1 + \frac{7}{10} = \frac{3}{10} + \frac{4}{10} + \frac{10}{10}$

- $\frac{5}{10} + 1 = \frac{6}{10}$
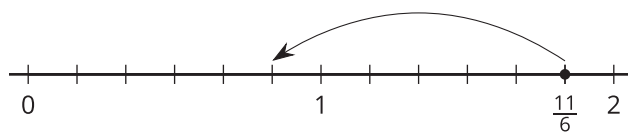
- $\frac{2}{10} + \frac{10}{10} = 1 + \frac{1}{5}$

Jump to Subtract

1. To subtract different fractions from $\frac{11}{6}$, Noah draws jumps on number lines.

a. The first diagram shows how he finds $\frac{11}{6} - \frac{7}{6}$. What is the value of $\frac{11}{6} - \frac{7}{6}$?

b. Write an equation to show the difference represented by each of Noah's diagrams.

2. Here is another diagram Noah draws:

Which equations could the diagram represent? Explain your reasoning.

$\frac{11}{6} - \frac{6}{6} = \frac{5}{6}$

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$\frac{11}{6} - 1 = \frac{5}{6}$
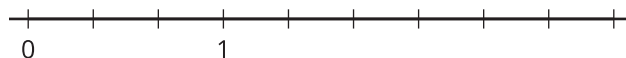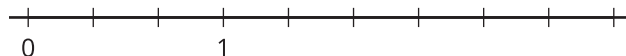
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$1\frac{5}{6} - 1 = \frac{5}{6}$

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3. Use a number line to represent each difference and find its value.
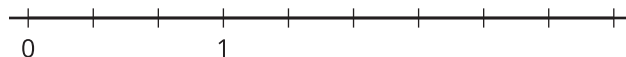
a. $\frac{8}{3} - \frac{2}{3}$

b. $\frac{8}{3} - \frac{4}{3}$
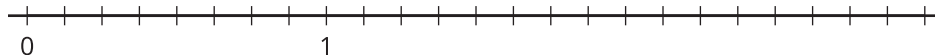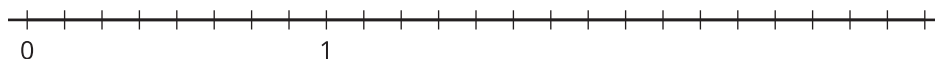

c. $\frac{8}{3} - 1$

What's the Difference?

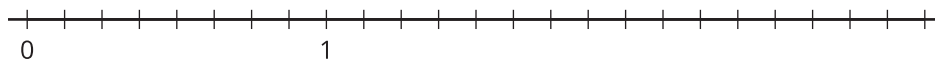Use a number line to represent each difference and find its value.
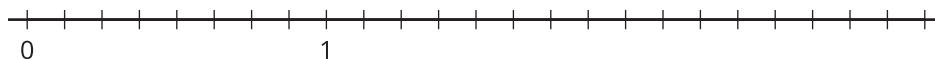
1. $\frac{13}{8} - \frac{2}{8}$
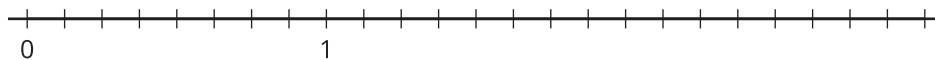
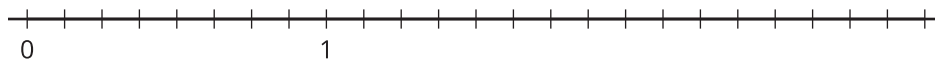2. $\frac{13}{8} - \frac{6}{8}$

3. $\frac{13}{8} - 1$

4. $1\frac{5}{8} - \frac{7}{8}$

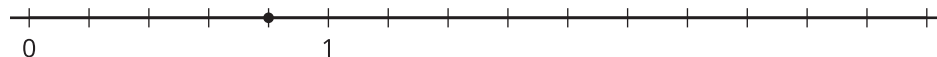5. $1\frac{5}{8} - 1$

6. $1\frac{5}{8} - 1\frac{4}{8}$

Jump Back

Here are 4 number lines, each with a point on it. Label each point with the fraction it represents.
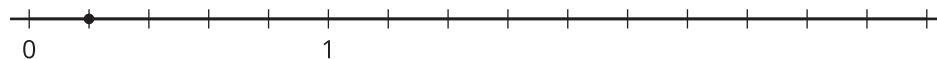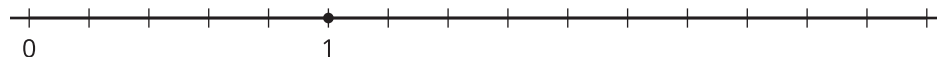
1.

2.

3.

4.

The points you labeled are your targets. Follow these directions for each number line:

- Pick a card from the set given to you. Locate and label the fraction on the number line.
- From that point, draw one or more jumps to reach the target. What do you need to subtract? Label each jump you draw.
- Write an equation to represent the difference of your two fractions.