Illustrative Mathematics

Grade 4 Unit 3 Lesson 9 CC BY 2021 Illustrative Mathematics®

Unit 3 Lesson 9: Differences of Fractions

WU True or False: Sums of Tenths (Warm up)

Student Task Statement

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

- $\frac{1}{10} + \frac{2}{10} + \frac{3}{10} = 1$
- $1 + \frac{7}{10} = \frac{3}{10} + \frac{4}{10} + \frac{10}{10}$
- $\frac{5}{10} + 1 = \frac{6}{10}$
- $\frac{2}{10} + \frac{10}{10} = 1 + \frac{1}{5}$

1 Jump to Subtract

Student Task Statement

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.

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

3. Use a number line to represent each difference and to find its value.



2 What's the Difference?

Student Task Statement

Use a number line to represent each difference and to find its value.





3 Make a Jump, Subtraction Edition (Optional)

Student Task Statement

Here are four number lines, each with a point on it. Label each point with a fraction it represents.



The point you labeled is your target.

- 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.