Illustrative Mathematics

Grade 4 Unit 3 Lesson 11 CC BY 2021 Illustrative Mathematics®

Unit 3 Lesson 11: Subtract Fractions Flexibly

WU Which One Doesn't Belong: Fractional Values (Warm up)

Student Task Statement

Which one doesn't belong?

Α.

C.

B. $2 - \frac{3}{5}$ D. $1\frac{3}{5} - \frac{1}{5}$ D. $\frac{10}{5} - \frac{3}{5}$ D. $\frac{10}{5} - \frac{3}{5}$

1 Friendship Bracelets

Student Task Statement



Clare, Elena, and Andre are making macramé friendship bracelets. They'd like their bracelets to be $9\frac{4}{8}$ inches long. For each question, explain or show your reasoning.

- 1. Clare started her bracelet first and has only $\frac{7}{8}$ inch left until she finishes it. How long is her bracelet so far?
- 2. So far, Elena's bracelet is $5\frac{1}{8}$ inches long and Andre's is $3\frac{5}{8}$ inches long. How many more inches do they each need to reach $9\frac{4}{8}$ inches?
- 3. How much longer is Elena's bracelet than Andre's at the moment?

2 Multiple Ways to Subtract

Student Task Statement

Here are four expressions that you may have written about the friendship bracelets.

$$9\frac{4}{8} - \frac{7}{8} \qquad 9\frac{4}{8} - 5\frac{1}{8} \qquad 9\frac{4}{8} - 3\frac{5}{8} \qquad 5\frac{1}{8} - 3\frac{5}{8}$$

1. Here is one way to find the value of the first expression. Analyze the calculation. Talk to your partner about why $9\frac{4}{8}$ is written as different sums.



2. Here are some unfinished calculations. Complete them to find the value of each difference.

a.

$9\frac{4}{8} - 5\frac{1}{8}$		
first number	second number	
$9\frac{4}{8}$	$5\frac{1}{8}$	
$9 + \frac{4}{8}$	$5 + \frac{1}{8}$	

b.

$9\frac{4}{8} - 3\frac{5}{8}$		
first number	second number	
$9\frac{4}{8}$	$3\frac{5}{8}$	
$8 + 1 + \frac{4}{8}$	$3 + \frac{5}{8}$	
$8 + \frac{8}{8} + \frac{4}{8}$		
$8 + \frac{12}{8}$		

c.

$5\frac{1}{8} - 3\frac{5}{8}$		
first number	second number	
$5\frac{1}{8}$	$3\frac{5}{8}$	
$5 + \frac{1}{8}$	$3 + \frac{5}{8}$	