## Grade 4 Unit 3

Lesson 11
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## 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?
A.

$$
2-\frac{3}{5}
$$

C.

$$
1 \frac{3}{5}-\frac{1}{5}
$$

B.

$$
\frac{10}{5}-\frac{3}{5}
$$

D.

$$
\frac{10}{5}-1
$$

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

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.

| $9 \frac{4}{8}-\frac{7}{8}$ |  |
| :---: | :---: |
| first number | second number |
| $9 \frac{4}{8}$ | $\frac{7}{8}$ |
| $8+1+\frac{4}{8}$ |  |
| $8+\frac{8}{8}+\frac{4}{8}$ |  |
| $8+\frac{12}{8}$ |  |
|  | $8+\frac{12}{8}-\frac{7}{8}$ |
| $8+\frac{5}{8}$ |  |
| $8 \frac{5}{8}$ |  |

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

$$
\begin{array}{l|l}
9 \frac{4}{8} & 5 \frac{1}{8}
\end{array}
$$

$$
9+\frac{4}{8}
$$

$$
5+\frac{1}{8}
$$

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

$$
\begin{array}{l|l}
5 \frac{1}{8} & 3 \frac{5}{8} \\
5+\frac{1}{8} & 3+\frac{5}{8}
\end{array}
$$

