Lesson 3: Stories with Fractions

- Let's add and subtract mixed numbers.

Warm-up: Number Talk: One Whole, Many Names

Find the value of each expression mentally.

- $1 - \frac{8}{10}$

- $1\frac{4}{10} - \frac{8}{10}$

- $2\frac{4}{10} - \frac{8}{10}$

- $10\frac{5}{10} - \frac{8}{10}$

3.1: Relay Race at Recess

Students in the fourth-grade class had a relay race during recess. Each team had four runners. Each runner ran the length of the school playground.

Here are the times of the runners for two teams.

runner	Diego's team, time (seconds)	Jada's team, time (seconds)
1	$10\frac{25}{100}$	$11\frac{9}{10}$
2	$11\frac{40}{100}$	$9\frac{8}{10}$
3	$9\frac{7}{10}$	$9\frac{84}{100}$
4	$10\frac{5}{100}$	$10\frac{60}{100}$

1. Which team won the relay race? Show your reasoning.

2. How much faster is the winning team than the other team? Show your reasoning.

3. The record time for the playground relay race was 40.27 seconds. Did the winning team beat this record time? Show your reasoning.

3.2: You Be the Author

Think of three situations as described here. After each problem is written, trade papers with a partner to compare your problems and check your solutions.

1. A problem that can be solved by addition and has $9\frac{2}{5}$ as an answer

2. A problem that can be solved by subtraction and has $\frac{32}{100}$ as an answer

3. A problem that could be solved by writing the equation: $9 - \rule{2cm}{0.4pt} = 3\frac{3}{5}$