



# 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.

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

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

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

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



## Activity 1

### Relay Race at Recess

A fourth-grade class runs a relay race during recess. Each team has 4 runners. Each runner runs the length of the school playground.

Here are the times of the runners for 2 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 wins 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.



## Activity 2

### You Be the Author

Write a problem that represents each of these situations. 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 can be solved by writing the equation:  $9 - \underline{\hspace{1cm}} = 3\frac{3}{5}$

