

Tenths to Hundredths

Rename, add, and explain fractions with 10 and 100.

GRADE 4 • 4.NR.5.1

4.NR.5.1 "Demonstrate and explain the concept of equivalent fractions with denominators of 10 and 100, using concrete materials and visual models. Add two fractions with denominators of 10 and 100."

NAME _____

DATE _____

SAME AMOUNT, NEW NAME

A 10 by 10 hundred grid has 100 small squares. One full column has 10 squares, so $1/10 = 10/100$. To add tenths and hundredths, rename the tenths as hundredths, then add the numerators.

WORKED EXAMPLE

Find $4/10 + 35/100$.

1. Rename $4/10$ as $40/100$.
2. Write $40/100 + 35/100$.
3. Add the numerators: $40 + 35 = 75$.

Answer: $75/100$

PRACTICE 6 problems

1 Complete the equivalent fraction: $6/10 = \underline{\hspace{1cm}}/100$

ANSWER _____

2 Complete the equivalent fraction: $80/100 = \underline{\hspace{1cm}}/10$

ANSWER _____

3 Find $2/10 + 19/100$.

ANSWER _____

4 Find $47/100 + 3/10$.

ANSWER _____

5 Rename $9/10$ as hundredths. Then find $9/10 + 8/100$.

ANSWER _____

6 Find $63/100 + 2/10$.

ANSWER _____

APPLY IT Show your work

- 1** At a robotics club, Jada earns $\frac{5}{10}$ of the possible points in the first challenge. She earns $\frac{28}{100}$ of the possible points in the second challenge. What fraction of the possible points does she earn altogether?

WORK SPACE

ANSWER _____

- 2** A game progress bar shows that Leo has finished $\frac{34}{100}$ of a level. He finishes $\frac{6}{10}$ more of the level. What fraction of the level has Leo finished?

WORK SPACE

ANSWER _____

CHALLENGE One step up

CHALLENGE

A music app shows that a song is $\frac{7}{10}$ downloaded. It downloads $\frac{14}{100}$ more, then $\frac{9}{100}$ more. What fraction of the song is downloaded? Show an equation that explains your reasoning.

PART 1 • PRACTICE

#	PROBLEM	ANSWER
1	Complete the equivalent fraction: $6/10 = \underline{\hspace{1cm}}/100$	60/100
2	Complete the equivalent fraction: $80/100 = \underline{\hspace{1cm}}/10$	8/10
3	Find $2/10 + 19/100$.	39/100
4	Find $47/100 + 3/10$.	77/100
5	Rename $9/10$ as hundredths. Then find $9/10 + 8/100$.	98/100
6	Find $63/100 + 2/10$.	83/100

PART 2 • APPLY IT

1. **78/100** Rename $5/10$ as $50/100$. Add $50/100 + 28/100$ to get $78/100$.
2. **94/100** Rename $6/10$ as $60/100$. Add $34/100 + 60/100$ to get $94/100$.

CHALLENGE

93/100; $7/10 = 70/100$, and $70/100 + 14/100 + 9/100 = 93/100$.

Accept equivalent fraction names when they represent the same amount, such as $6/10$ for $60/100$. For addition, students should rename tenths as hundredths before adding.