LESSON MAKER PRO

Tenths to Hundredths

Rename, model, and add 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."

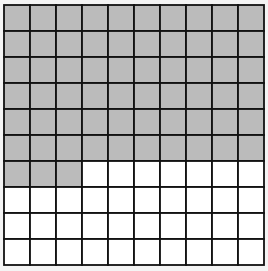
NAME _____ DATE _____

SAME-SIZE PARTS

A tenth is equal to 10 hundredths, so rename tenths as hundredths before adding. When fractions have the same denominator, add the numerators and keep the denominator.

WORKED EXAMPLE

Find 4/10 + 23/100.

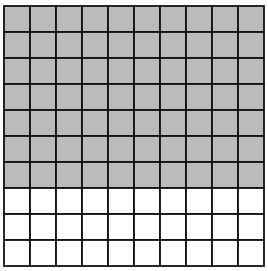


1. Rename 4/10 as 40/100.
2. Add 40/100 + 23/100.
3. The model shows 63 shaded hundredths.

Answer: 63/100

PRACTICE 6 problems

1 What fraction of the grid is shaded? Write it as tenths and as hundredths.



ANSWER _____

_____

2 Write 30/100 as a fraction with a denominator of 10.

ANSWER _____

3 Find 6/10 + 17/100.

ANSWER _____

4 Find 52/100 + 3/10.

ANSWER _____

5 Find 9/10 + 8/100.

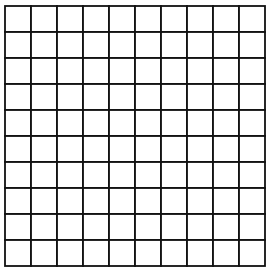
ANSWER _____

6 Find 34/100 + 5/10.

ANSWER _____

APPLY IT Show your work

1 A game is one whole with 100 levels. Your teacher supplies base-ten pieces: one flat is the whole, one rod is a tenth, and one small cube is a hundredth. Model 3/10 with rods and trade for hundredths. On this grid, shade those 3/10 and 46/100 other levels. Explain the trade and find the completed fraction.



2 Noah paints 8/10 of a poster for the school art show. Later, he paints 15/100 more of the poster. What fraction of the poster is painted?

CHALLENGE One step up

Mina says that 8/10 + 27/100 = 35/100 because 8 + 27 = 35. Explain Mina's error. Then find the correct sum.

ANSWER KEY

Tenths to Hundredths

GRADE 4 · 4.NR.5.1

PART 1 · PRACTICE

#	PROBLEM	ANSWER
1	What fraction of the grid is shaded? Write it as tenths and as hundredths.	**7/10 = 70/100**
2	Write 30/100 as a fraction with a denominator of 10.	**3/10**
3	Find 6/10 + 17/100.	**77/100**
4	Find 52/100 + 3/10.	**82/100**
5	Find 9/10 + 8/100.	**98/100**
6	Find 34/100 + 5/10.	**84/100**

PART 2 · APPLY IT

1. **Three rods equal 30 small cubes: 3/10=30/100. Add 46 other cubes for 76/100; shade 76 distinct cells.** Supply one flat, three rods and at least 76 small cubes. Three rods equal 30 small cubes. Students then add 46 other hundredths: 30+46=76, so 76/100 is complete. Check the concrete trade and 76 nonoverlapping shaded cells.
2. **95/100** Rename 8/10 as 80/100. Then add 80/100 + 15/100.

CHALLENGE

Mina must rename 8/10 as 80/100 before adding. 80/100 + 27/100 = 107/100 = 1 7/100.

Accept equivalent answers such as 1 7/100 or 107/100 for the challenge. For addition, students should rename tenths as hundredths before adding. Supply one flat, three rods and at least 76 small cubes for the teacher-supported base-ten task. Require students to show the equivalence with the pieces and grid, not merely convert symbols.