LESSON MAKER PRO

Parts in Action

Use models to add and subtract fractions and decimals.

GRADE 5 · 5.N.3.2

5.N.3.2 "Illustrate addition and subtraction of fractions with like and unlike denominators, mixed numbers, and decimals using a variety of mathematical models (e.g., fraction strips, area models, number lines, fraction rods)."

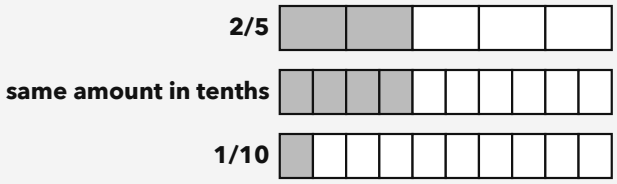
NAME _____ DATE _____

MAKE THE PARTS MATCH

Fraction bars and number lines help you see the size of each part. To add or subtract fractions, rename them with a common denominator. For decimals, line up the place values.

WORKED EXAMPLE

Use the fraction bars to find 2/5 + 1/10.

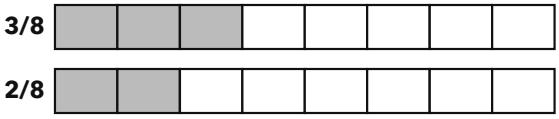


1. Rename 2/5 as 4/10.
2. Add the tenths: 4/10 + 1/10 = 5/10.
3. Simplify: 5/10 = 1/2.

Answer: 1/2

PRACTICE 6 problems

1 Use the bars to find 3/8 + 2/8.



ANSWER _____

2 Use the bars to find 1/3 + 1/6. Rename thirds as sixths.



ANSWER _____

3 Use the bars to find 5/6 - 1/3. Rename thirds as sixths.



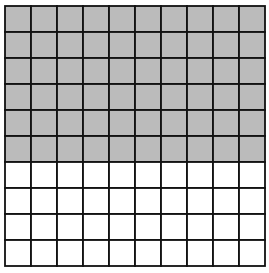
ANSWER _____

4 Start at the marked point on the number line. Move 2 units right to find 1 1/2 + 2.



ANSWER _____

5 The shaded part of the array shows 0.6. Add 0.25 to find 0.6 + 0.25.



ANSWER _____

6 Rename the fractions with a common denominator. Find 3 1/4 - 1 1/2.

ANSWER _____

APPLY IT Show your work

1 At a game night, you have 2 3/4 cups of popcorn. Your friends eat 1 2/3 cups. How many cups are left?

WORK SPACE

ANSWER _____

2 A craft club uses 1.35 meters of ribbon to decorate a backpack and 0.8 meter to decorate a keychain. How many meters of ribbon does the club use in all?

WORK SPACE

ANSWER _____

CHALLENGE One step up

You are tracking a 4 1/2-mile hike. You walk 1 3/4 miles in the morning and 1 2/3 miles after lunch. How much farther must you walk? Write an equation using twelfths and explain your answer.

WORK SPACE AND ANSWER

ANSWER KEY

Parts in Action

GRADE 5 · 5.N.3.2

PART 1 · PRACTICE

#	PROBLEM	ANSWER
1	Use the bars to find 3/8 + 2/8.	**5/8**
2	Use the bars to find 1/3 + 1/6. Rename thirds as sixths.	**1/2**
3	Use the bars to find 5/6 - 1/3. Rename thirds as sixths.	**1/2**
4	Start at the marked point on the number line. Move 2 units right to find 1 1/2 + 2.	**3 1/2**
5	The shaded part of the array shows 0.6. Add 0.25 to find 0.6 + 0.25.	**0.85**
6	Rename the fractions with a common denominator. Find 3 1/4 - 1 1/2.	**1 3/4**

PART 2 · APPLY IT

1. **1 1/12 cups** Rename the fractions as twelfths. Then 2 9/12 - 1 8/12 = 1 1/12.
2. **2.15 meters** Line up the decimal places and add 1.35 + 0.80 = 2.15.

CHALLENGE

1 1/12 miles. The distances walked add to 1 9/12 + 1 8/12 = 3 5/12 miles. Then 4 6/12 - 3 5/12 = 1 1/12 miles remain.

Accept equivalent fractions and decimals, including 0.5 for 1/2. For the challenge, accept any correct equation that uses twelfths and shows the distance walked subtracted from the total.