LESSON MAKER PRO

Fraction Stories

Use bars and equations to solve fraction problems.

GRADE 4 · 4.NOS.E.12.d

4.NOS.E.12.d "Solve problems in context involving addition and subtraction of fractions using visual fraction models and equations to represent the problem."

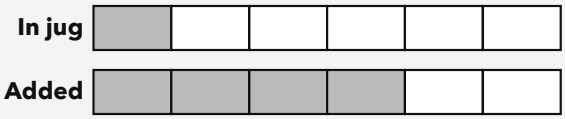
NAME _____ DATE _____

SAME-SIZE PARTS

Fraction bars show equal parts of one whole. When the parts are the same size, add or subtract the shaded parts and keep the denominator.

WORKED EXAMPLE

A jug has 1/6 L of juice. Add 4/6 L. How much juice is in the jug?



1. Count the shaded parts in both bars: 1 + 4 = 5.
2. Keep sixths: 1/6 + 4/6 = 5/6.

Answer: 5/6 L

PRACTICE 4 problems

1 A banner has 3/8 painted. Paint 2/8 more. How much is painted? Sketch bars and write an equation.

ANSWER _____

2 A ribbon is 7/10 m long. Cut off 3/10 m. How much remains? Sketch bars and write an equation.

ANSWER _____

3 A puzzle is 1/4 finished. Finish 2/4 more. How much is finished? Sketch bars and write an equation.

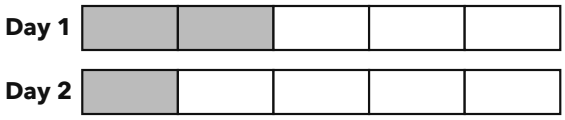
ANSWER _____

4 A jar holds 9/12 cup of beads. Spill 4/12 cup. How much remains? Sketch bars and write an equation.

ANSWER _____

APPLY IT Show your work

1 Mia decorated a game board over two days. Use the bars to find how much she decorated in all. Write an equation.



ANSWER _____

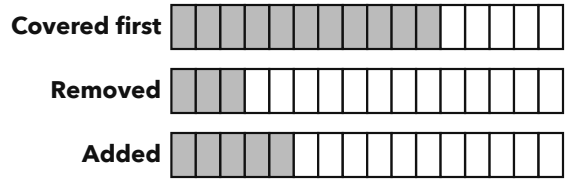
2 Sam uses some clay to make a game piece. Use the bars to find how much of the pack is left. Write an equation.



ANSWER _____

CHALLENGE One step up

A poster has colored paper added, removed, then added again, as shown. What fraction is covered now? Write two equations.



WORK SPACE AND ANSWER

ANSWER KEY

Fraction Stories

GRADE 4 · 4.NOS.E.12.d

PART 1 · PRACTICE

#	PROBLEM	ANSWER
1	A banner has 3/8 painted. Paint 2/8 more. How much is painted? Sketch bars and write an equation.	**Bars show 3/8 and 2/8 shaded. 3/8 + 2/8 = 5/8 of the banner.**
2	A ribbon is 7/10 m long. Cut off 3/10 m. How much remains? Sketch bars and write an equation.	**Bars show 7/10 and 3/10 shaded. 7/10 - 3/10 = 4/10 m.**
3	A puzzle is 1/4 finished. Finish 2/4 more. How much is finished? Sketch bars and write an equation.	**Bars show 1/4 and 2/4 shaded. 1/4 + 2/4 = 3/4 of the puzzle.**
4	A jar holds 9/12 cup of beads. Spill 4/12 cup. How much remains? Sketch bars and write an equation.	**Bars show 9/12 and 4/12 shaded. 9/12 - 4/12 = 5/12 cup.**

PART 2 · APPLY IT

1. **2/5 + 1/5 = 3/5 of the board** The bars show 2/5 on day 1 and 1/5 on day 2. Add the fifths.
2. **7/9 - 2/9 = 5/9 of a pack** The bars show 7/9 of a pack at the start and 2/9 used. Subtract the ninths.

CHALLENGE

11/16 - 3/16 = 8/16; 8/16 + 5/16 = 13/16 of the poster.

Accept equivalent fractions, such as 2/5 for 4/10. Student sketches should divide each bar into equal parts and show the fractions used in the equation.