LESSON MAKER PRO

Fraction Split Lab

Draw fraction bars, then write equal sums.

GRADE 4 · MA.4.FR.2.1

MA.4.FR.2.1 "Decompose a fraction, including mixed numbers and fractions greater than one, into a sum of fractions with the same denominator in multiple ways. Demonstrate each decomposition with objects, drawings and equations."

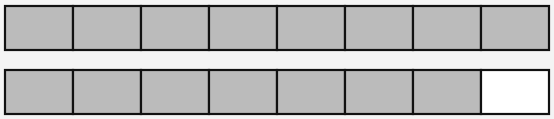
NAME _____ DATE _____

SPLIT SAME-SIZE PARTS

When you split a fraction, each addend keeps the same denominator. Split the numerator into smaller parts. One whole can be written as a fraction with matching numerator and denominator.

WORKED EXAMPLE

Decompose 15/8 in two ways.



1. The model shows 1 whole and 7/8.
2. Write 1 whole as 8/8.
3. 8/8 + 7/8 = 15/8.
4. Another split is 6/8 + 9/8 = 15/8.

Answer: 15/8 = 8/8 + 7/8 = 6/8 + 9/8

PRACTICE 4 problems

1 Write two sums for 5/6.

ANSWER _____

2 Write two sums for 9/5.

ANSWER _____

3 Write two sums for 11/4.

ANSWER _____

4 Write two sums for 2 3/7.

ANSWER _____

APPLY IT Show your work

1 A robot-building team uses 10/3 meters of wire. Draw a bar model. Write two same-denominator sums for the amount of wire.

WORK SPACE

ANSWER _____

2 Jada mixes 13/10 cups of yogurt for a snack video. Draw a bar model. Write two same-denominator sums for the yogurt.

WORK SPACE

ANSWER _____

CHALLENGE One step up

Write 3 5/9 as two different sums of exactly three fractions with denominator 9. In one sum, use a fraction greater than one.

WORK SPACE AND ANSWER

ANSWER KEY

Fraction Split Lab

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PART 1 · PRACTICE

#	PROBLEM	ANSWER
1	Write two sums for 5/6.	**5/6 = 1/6 + 4/6; 5/6 = 2/6 + 3/6**
2	Write two sums for 9/5.	**9/5 = 5/5 + 4/5; 9/5 = 7/5 + 2/5**
3	Write two sums for 11/4.	**11/4 = 4/4 + 7/4; 11/4 = 6/4 + 5/4**
4	Write two sums for 2 3/7.	**2 3/7 = 14/7 + 3/7; 2 3/7 = 9/7 + 8/7**

PART 2 · APPLY IT

1. **10/3 = 3/3 + 7/3; 10/3 = 4/3 + 6/3** Convert the whole meter to 3/3. Split 10 thirds into two groups in two ways.
2. **13/10 = 10/10 + 3/10; 13/10 = 6/10 + 7/10** The amount is 13 tenths. Split 13 tenths into two addends with denominator 10.

CHALLENGE

3 5/9 = 9/9 + 9/9 + 14/9; 3 5/9 = 11/9 + 12/9 + 9/9

Accept any equivalent decomposition whose addends have the stated denominator and total the original amount. For bar drawings, accept equal-size parts that match each fraction equation.