LESSON MAKER PRO

Fraction Split Lab

Break one fraction into equal-size parts.

GRADE 4 · 4.NF.B.3b

CCSS.Math.Content.4.NF.B.3b "Decompose a fraction into a sum of fractions with the same denominator in more than one way, recording each decomposition by an equation. Justify decompositions, e.g., by using a visual fraction model. Examples: 3/8 = 1/8 + 1/8 + 1/8..."

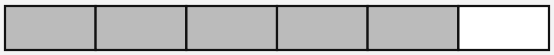
NAME _____ DATE _____

SPLIT EQUAL PARTS

A fraction can be split into groups of equal-size parts. Keep the denominator the same, and make the numerators add to the original numerator.

WORKED EXAMPLE

Look at the shaded bar. Write 5/6 as a sum in two different ways.



1. The bar has 5 shaded sixths.
2. Split 5 into 1 + 4.
3. Split 5 into 2 + 3.

Answer: 5/6 = 1/6 + 4/6; 5/6 = 2/6 + 3/6

PRACTICE 4 problems

1 Write 3/8 as a sum in two different ways.

ANSWER _____

2 Complete the equation: 7/9 = 2/9 + ___/9

ANSWER _____

3 Write two sums for 4/7. Each addend must have denominator 7.

ANSWER _____

4 Complete the equation: 6/10 = ___/10 + 4/10

ANSWER _____

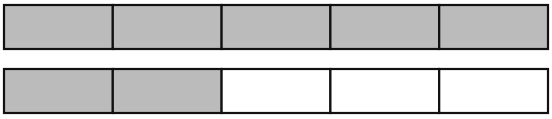
APPLY IT Show your work

1 Ava shaded the part of her banner shown. Write two equations that split the shaded amount into fractions with denominator 8.



ANSWER _____

2 Leo's game download meter is shown. Write two equations that show the amount as a sum of fractions with denominator 5.



ANSWER _____

CHALLENGE One step up

Look at the shaded bar. Write three different equations for the shaded amount. Then tell why each equation is true.



WORK SPACE AND ANSWER

ANSWER KEY

Fraction Split Lab

GRADE 4 · 4.NF.B.3b

PART 1 · PRACTICE

#	PROBLEM	ANSWER
1	Write 3/8 as a sum in two different ways.	**3/8 = 1/8 + 2/8; 3/8 = 1/8 + 1/8 + 1/8**
2	Complete the equation: 7/9 = 2/9 + ___/9	**5/9**
3	Write two sums for 4/7. Each addend must have denominator 7.	**4/7 = 1/7 + 3/7; 4/7 = 2/7 + 2/7**
4	Complete the equation: 6/10 = ___/10 + 4/10	**2/10**

PART 2 · APPLY IT

1. **7/8 = 1/8 + 6/8; 7/8 = 3/8 + 4/8** The bar shows 7 shaded eighths. Each pair of numerators adds to 7.
2. **1 2/5 = 5/5 + 2/5; 1 2/5 = 3/5 + 4/5** The meter shows 7 fifths, which is 1 2/5. Both sums have numerators that add to 7.

CHALLENGE

11/12 = 1/12 + 10/12; 11/12 = 2/12 + 9/12; 11/12 = 3/12 + 8/12. Each pair of numerators adds to 11, and every fraction is in twelfths.

Accept any correct decomposition with the same denominator and numerators that total the original numerator. For mixed numbers, accept equivalent sums such as improper fractions with the stated denominator.