LESSON MAKER PRO

Fraction Share Lab

Find the size of a share or the number of shares.

GRADE 5 · MT.5.NF.7

MT.5.NF.7 "Apply and extend previous understandings of division to divide unit fractions by whole numbers and whole numbers by unit fractions by: Expressing division of a unit fraction by a nonzero whole number and computing such quotients..."

NAME _____ DATE _____

TWO KINDS OF DIVISION

When you split a unit fraction into equal shares, multiply its bottom number by the number of shares. When you divide a whole number by a unit fraction, count how many of those fraction-sized parts fit in each whole.

WORKED EXAMPLE

Find $1/5 \div 6$.

1. Start with 1/5 of a whole.
2. Split it into 6 equal shares: $1/(5 \times 6)$.
3. Multiply: $1/(5 \times 6) = 1/30$.

Answer: 1/30

PRACTICE 6 problems

1 Find $1/2 \div 8$.

ANSWER _____

2 Find $2 \div 1/4$.

ANSWER _____

3 Find $1/3 \div 4$.

ANSWER _____

4 Find $4 \div 1/3$.

ANSWER _____

5 Find $1/8 \div 3$.

ANSWER _____

6 Find $3 \div 1/8$.

ANSWER _____

APPLY IT Show your work

1 A fifth-grade class working with a Montana tribal community center shares 1/2 bag of potting soil equally among 4 planters. What fraction of a bag goes in each planter?

WORK SPACE

ANSWER _____

2 At a youth game night at a Montana tribal community center, volunteers have 4 liters of juice. Each small cup holds 1/8 liter. How many cups can they fill?

WORK SPACE

ANSWER _____

CHALLENGE One step up

At a Montana community soccer day, volunteers pour 3 liters of water into 1/4-liter cups. After they serve 8 cups, how many more full cups can they fill? Show the division and subtraction.

WORK SPACE AND ANSWER

ANSWER KEY

Fraction Share Lab

GRADE 5 · MT.5.NF.7

PART 1 · PRACTICE

#	PROBLEM	ANSWER
1	Find 1/2 ÷ 8.	**1/16**
2	Find 2 ÷ 1/4.	**8**
3	Find 1/3 ÷ 4.	**1/12**
4	Find 4 ÷ 1/3.	**12**
5	Find 1/8 ÷ 3.	**1/24**
6	Find 3 ÷ 1/8.	**24**

PART 2 · APPLY IT

1. **1/8 bag** Divide the soil into 4 equal shares: 1/2 ÷ 4 = 1/8 bag per planter.
2. **32 cups** Each liter fills 8 cups, so 4 ÷ 1/8 = 4 × 8 = 32 cups.

CHALLENGE

3 ÷ 1/4 = 12 cups; 12 - 8 = 4 more cups.

Accept equivalent fractions for the sharing problems. For the challenge, look for both the total number of cups and the number left after 8 are served.