LESSON MAKER PRO

Fraction Grouping

Find how many fractional groups fit.

GRADE 6 · MT.6.NS.1

MT.6.NS.1 "Represent, interpret, and compute quotients of fractions and solve problems in context involving division of fractions by fractions."

NAME _____ DATE _____

DIVIDE BY A FRACTION

A quotient can tell you how many groups of one size fit in another amount. To divide by a fraction, multiply by its reciprocal.

WORKED EXAMPLE

How many 1/6 pieces fit in 5/6?



1. Divide: 5/6 ÷ 1/6.
2. Multiply by the reciprocal: 5/6 × 6/1.
3. Simplify: 5.

Answer: 5 pieces

PRACTICE 4 problems

1 2/3 ÷ 1/9 = ___

ANSWER _____

2 3/8 ÷ 1/4 = ___

ANSWER _____

3 7/12 ÷ 2/3 = ___

ANSWER _____

4 9/10 ÷ 3/4 = ___

ANSWER _____

APPLY IT Show your work

1 A 3/4-hour gaming session is split into 1/8-hour rounds. How many rounds fit?

WORK SPACE

ANSWER _____

2 A jug holds 7/8 L of juice. Each cup holds 1/4 L. How many cups can the juice fill?

WORK SPACE

ANSWER _____

CHALLENGE One step up

You have 11/12 m of cord. Each keychain takes 1/8 m. How many whole keychains can you make, and how much cord is left?

WORK SPACE AND ANSWER

ANSWER KEY

Fraction Grouping

GRADE 6 · MT.6.NS.1

PART 1 · PRACTICE

#	PROBLEM	ANSWER
1	2/3 ÷ 1/9 = ___	**6**
2	3/8 ÷ 1/4 = ___	**3/2**
3	7/12 ÷ 2/3 = ___	**7/8**
4	9/10 ÷ 3/4 = ___	**6/5**

PART 2 · APPLY IT

1. **6 rounds** Divide 3/4 by 1/8 to get 6.
2. **3 1/2 cups** Divide 7/8 by 1/4 to get 7/2, or 3 1/2 cups.

CHALLENGE

7 whole keychains; 1/24 m left

Accept equivalent fractions or mixed numbers for the practice quotients. For the challenge, 11/12 ÷ 1/8 = 7 1/3, so only 7 whole keychains can be made.