LESSON MAKER PRO

Fraction Groups

Use division to find how many groups fit.

GRADE 6 · 6.NS.A.4

6.NS.A.4 "Interpret and compute quotients of fractions using visual models and equations to represent problems. a. Use quotients of fractions to analyze and solve problems."

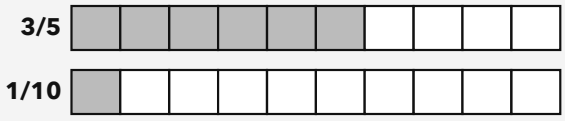
NAME _____ DATE _____

DIVIDE FRACTIONS

To divide by a fraction, multiply by its reciprocal. A fraction bar can also show how many equal-size groups fit into an amount.

WORKED EXAMPLE

How many 1/10-size pieces fit in 3/5?



1. Rewrite 3/5 as 6/10.
2. Six 1/10-size pieces fit in 6/10.
3. Check: 3/5 ÷ 1/10 = 3/5 × 10/1 = 6.

Answer: 6 pieces

PRACTICE 4 problems

1 Find 5/8 ÷ 1/4.

ANSWER _____

2 Find 7/9 ÷ 2/3.

ANSWER _____

3 Find 4/7 ÷ 2/5.

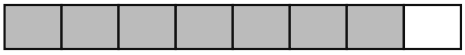
ANSWER _____

4 Find 9/10 ÷ 3/4.

ANSWER _____

APPLY IT Show your work

1 The shaded bar shows the glue in a slime kit. Each batch needs 1/4 cup. How many full batches can you make, and how much glue is left?

7/8 cup 

ANSWER _____

2 A playlist is 3/4 hour long. Each song lasts 1/20 hour. How many songs fit?

WORK SPACE

ANSWER _____

CHALLENGE One step up

A club has 2 1/4 yards of cord. Each keychain uses 3/8 yard. A student says the cord makes 5 keychains. Find the correct number. Use an equation to explain why 5 is not correct.

WORK SPACE AND ANSWER

ANSWER KEY

Fraction Groups

GRADE 6 · 6.NS.A.4

PART 1 · PRACTICE

#	PROBLEM	ANSWER
1	Find 5/8 ÷ 1/4.	**5/2**
2	Find 7/9 ÷ 2/3.	**7/6**
3	Find 4/7 ÷ 2/5.	**10/7**
4	Find 9/10 ÷ 3/4.	**6/5**

PART 2 · APPLY IT

1. **3 full batches; 1/8 cup left** 7/8 ÷ 1/4 = 3 1/2, so there is enough for 3 full batches. Those batches use 3/4 cup, leaving 1/8 cup.
2. **15 songs** 3/4 ÷ 1/20 = 3/4 × 20 = 15.

CHALLENGE

6 keychains. 2 1/4 ÷ 3/8 = 9/4 × 8/3 = 6, so the cord makes one more keychain than the student claimed.

Accept equivalent fractions or mixed numbers for the practice answers. In the glue problem, the answer must give both the number of full batches and the glue left.