LESSON MAKER PRO

Fraction Groups

Use bars and equations to divide fractions.

GRADE 6 · 6.NOS.A.1.b

6.NOS.A.1.b "Use and connect concrete and visual fraction models (e.g., linear, regional/area, and set models) and equations to divide."

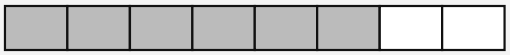
NAME _____ DATE _____

COUNT EQUAL PARTS

A fraction bar can show how many groups fit in a shaded amount. Rewrite the fractions using equal-size parts, then divide the part counts. A leftover may be part of a group.

WORKED EXAMPLE

How many 1/8 pieces fit in 3/4? Use the bar.



1. 3/4 = 6/8.
2. Each group uses 1 eighth.
3. 6/8 ÷ 1/8 = 6.

Answer: 6 pieces

PRACTICE 4 problems

1 Sketch a bar. Solve 2/5 ÷ 1/10.

ANSWER _____

2 Sketch a bar. Solve 4/7 ÷ 2/7.

ANSWER _____

3 Sketch a bar. Solve 7/10 ÷ 1/5.

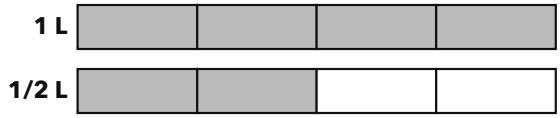
ANSWER _____

4 Sketch a bar. Solve 9/10 ÷ 3/10.

ANSWER _____

APPLY IT Show your work

1 A club has 1 1/2 L of juice. Each cup holds 1/4 L. Use the bars to find how many cups the club can fill. Write an equation.



ANSWER _____

2 You have 2/3 yard of ribbon. Each badge needs 2/9 yard. How many badges can you make? Sketch a strip and write an equation.

WORK SPACE

ANSWER _____

CHALLENGE One step up

Use the bars to solve 5/6 ÷ 2/3. Explain what the leftover part means.



WORK SPACE AND ANSWER

ANSWER KEY

Fraction Groups

GRADE 6 · 6.NOS.A.1.b

PART 1 · PRACTICE

#	PROBLEM	ANSWER
1	Sketch a bar. Solve 2/5 ÷ 1/10.	**4**
2	Sketch a bar. Solve 4/7 ÷ 2/7.	**2**
3	Sketch a bar. Solve 7/10 ÷ 1/5.	**3 1/2**
4	Sketch a bar. Solve 9/10 ÷ 3/10.	**3**

PART 2 · APPLY IT

1. **6 cups; 1 1/2 ÷ 1/4 = 6** The bars show 6 shaded fourths. Each cup takes 1 fourth.
2. **3 badges; 2/3 ÷ 2/9 = 3** Rewrite 2/3 as 6/9. Three groups of 2/9 fit in 6/9.

CHALLENGE

5/6 ÷ 2/3 = 1 1/4. Four sixths make one group, and the leftover sixth is 1/4 of a group.

Accept equivalent fractions or decimals for nonwhole answers. In the challenge, accept any explanation that identifies the leftover 1/6 as one-fourth of 2/3.