LESSON MAKER PRO

Fraction Piece Power

Find how many unit fractions fit in a whole number.

GRADE 5 · 5.NF.B.7b

CCSS.Math.Content.5.NF.B.7b "Interpret division of a whole number by a unit fraction, and compute such quotients. For example, create a story context for 4 ÷ (1/5), and use a visual fraction model to show the quotient..."

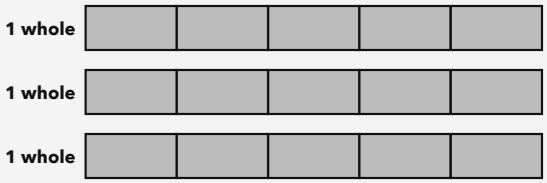
NAME _____ DATE _____

COUNT THE EQUAL PIECES

To divide a whole number by a unit fraction, find how many pieces of that size fit in the whole amount. Multiply the whole number by the denominator. You can check by multiplying your quotient by the unit fraction.

WORKED EXAMPLE

Use the model to find the quotient.



1. Each whole has 5 fifths.
2. 3 wholes have 3 × 5 = 15 fifths.
3. Check: 15 × 1/5 = 3.

Answer: 3 ÷ 1/5 = 15

PRACTICE 4 problems

1 6 ÷ 1/2 = ___

ANSWER _____

2 8 ÷ 1/4 = ___

ANSWER _____

3 9 ÷ 1/9 = ___

ANSWER _____

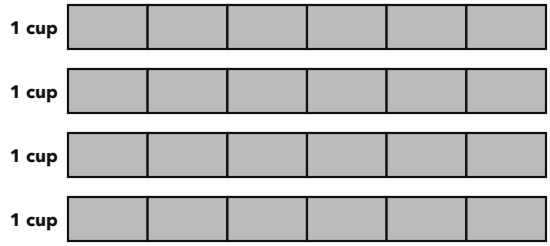
4 Compare 7 ÷ 1/8 and 8 ÷ 1/7. Write >, <, or =. Show both quotients.

ANSWER _____

_____

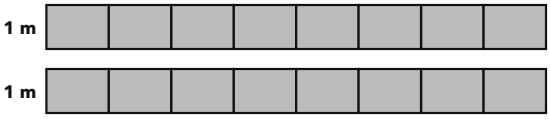
APPLY IT Show your work

1 The bars show a 4-cup batch of smoothie. Each small section fills one sample cup. How many sample cups can be filled?



ANSWER _____

2 The bars show 2 meters of cord for keychains. Each small section makes one keychain. How many keychains can be made?



ANSWER _____

CHALLENGE One step up

A game club has 10 meters of ribbon. Each prize badge needs 1/12 meter. How many badges can be made? Explain with a multiplication check.

WORK SPACE AND ANSWER

ANSWER KEY

Fraction Piece Power

GRADE 5 · 5.NF.B.7b

PART 1 · PRACTICE

#	PROBLEM	ANSWER
1	6 ÷ 1/2 = ___	**12**
2	8 ÷ 1/4 = ___	**32**
3	9 ÷ 1/9 = ___	**81**
4	Compare 7 ÷ 1/8 and 8 ÷ 1/7. Write >, <, or =. Show both quotients.	**7 ÷ 1/8 = 56; 8 ÷ 1/7 = 56, so =**

PART 2 · APPLY IT

1. **24 sample cups** There are 6 equal sections in each cup and 4 cups. Compute 4 × 6 = 24.
2. **16 keychains** There are 8 equal sections in each meter and 2 meters. Compute 2 × 8 = 16.

CHALLENGE

120 badges; 120 × 1/12 = 10

Accept equivalent multiplication checks. For the comparison problem, students should show both quotients are 56.