LESSON MAKER PRO

Fraction Pieces Multiply

Build fractions from equal parts

GRADE 4 · 4.NF.B.16.a

4.NF.B.16.a "Model and explain how a non-unit fraction can be represented by a whole number times the unit fraction."

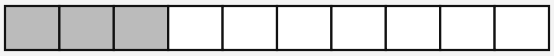
NAME _____ DATE _____

COUNT THE PARTS

A unit fraction is one equal part of a whole. To write a fraction as multiplication, count the unit fractions and multiply that count by the unit fraction.

WORKED EXAMPLE

Write the shaded fraction as a whole number times a unit fraction.



1. The whole has 10 equal parts, so each part is 1/10.
2. Count 3 shaded parts.
3. Write 3 copies of 1/10 as 3 x 1/10.

Answer: 3/10 = 3 x 1/10

PRACTICE 6 problems

1 Write the shaded fraction as a whole number times a unit fraction.



ANSWER _____

2 Use the bar to write 4/6 as a whole number times a unit fraction.



ANSWER _____

3 Write the shaded fraction. How many unit fractions are shaded?



ANSWER _____

_____

4 Write 7/9 as a whole number times a unit fraction. What does the whole number count?

ANSWER _____

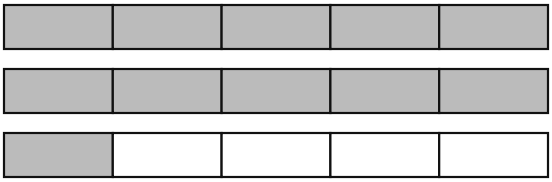
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5 Write a multiplication equation for the shaded part of the bar.



ANSWER _____

6 The bars show a fraction greater than one whole. Write the fraction and a multiplication equation.



ANSWER _____

_____

APPLY IT Show your work

1 At the skate park, Ari rides 6 sections of a path. Each section is 1/8 mile long. What fraction of a mile does Ari ride? Write a multiplication equation.

WORK SPACE

ANSWER _____

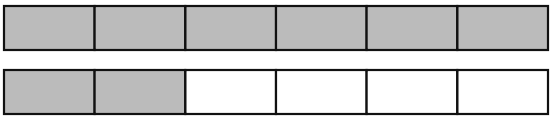
2 For a school fair, Jo cuts 9 strips of ribbon. Each strip is 1/4 meter long. How many meters of ribbon does Jo have in all? Write a multiplication equation and a fraction.

WORK SPACE

ANSWER _____

CHALLENGE One step up

Maya says the bars show 6 x 1/8. Is she correct? Write the correct multiplication equation and explain why.



WORK SPACE AND ANSWER

ANSWER KEY

Fraction Pieces Multiply

GRADE 4 · 4.NF.B.16.a

PART 1 · PRACTICE

#	PROBLEM	ANSWER
1	Write the shaded fraction as a whole number times a unit fraction.	**2/4 = 2 x 1/4**
2	Use the bar to write 4/6 as a whole number times a unit fraction.	**4/6 = 4 x 1/6**
3	Write the shaded fraction. How many unit fractions are shaded?	**6/7; six unit fractions of size 1/7**
4	Write 7/9 as a whole number times a unit fraction. What does the whole number count?	**7/9 = 7 x 1/9. The 7 counts the parts of size 1/9.**
5	Write a multiplication equation for the shaded part of the bar.	**9/12 = 9 x 1/12**
6	The bars show a fraction greater than one whole. Write the fraction and a multiplication equation.	**11/5 = 11 x 1/5**

PART 2 · APPLY IT

1. **6/8 mile; 6 x 1/8 = 6/8** Ari rides six sections of 1/8 mile each, so multiply 6 by 1/8.
2. **9/4 meters; 9 x 1/4 = 9/4** Nine strips of 1/4 meter make 9 copies of 1/4 meter.

CHALLENGE

No. The bars show 8/6 = 8 x 1/6 because eight parts of size 1/6 are shaded.

Accept multiplication equations with the factors in either order. For fractions greater than one whole, students should count shaded parts across all bars.