LESSON MAKER PRO

How Many Pieces?

Divide wholes into unit fractions.

GRADE 5 · 5.NOS.D.16.c

5.NOS.D.16.c "Use visual fraction models and equations to interpret division of a whole number by a unit fraction and compute quotients."

NAME _____ DATE _____

COUNT THE PIECES

A unit fraction is one equal part of a whole. To find how many parts fit in several wholes, multiply the number of wholes by the number of parts in one whole.

WORKED EXAMPLE

How many 1/4-size pieces are in 3 wholes?

1 whole 

1. The bar shows 4 fourths in 1 whole.
2. In 3 wholes, there are 3 x 4 = 12 fourths.

Answer: 3 / 1/4 = 12

PRACTICE 4 problems

1 How many 1/5-size pieces are in 2 wholes? Write a division equation.

ANSWER _____

2 How many 1/2-size pieces are in 6 wholes? Write a division equation.

ANSWER _____

3 How many 1/8-size pieces are in 7 wholes? Write a division equation.

ANSWER _____

4 How many 1/9-size pieces are in 5 wholes? Write a division equation.

ANSWER _____

APPLY IT Show your work

1 Maya has 4 meters of ribbon. Each bracelet uses 1/6 meter. How many bracelets can she make?

1 meter 

ANSWER _____

2 A video editor has 8 minutes of clips. Each clip lasts 1/10 minute. How many clips are there?

WORK SPACE

ANSWER _____

CHALLENGE One step up

A 6-meter roll of tape is cut into 1/8-meter strips. Nine strips are used. How many strips remain? Write equations to show your steps.

1 meter 

WORK SPACE AND ANSWER

ANSWER KEY

How Many Pieces?

PART 1 · PRACTICE

#	PROBLEM	ANSWER
1	How many 1/5-size pieces are in 2 wholes? Write a division equation.	**2 / 1/5 = 10**
2	How many 1/2-size pieces are in 6 wholes? Write a division equation.	**6 / 1/2 = 12**
3	How many 1/8-size pieces are in 7 wholes? Write a division equation.	**7 / 1/8 = 56**
4	How many 1/9-size pieces are in 5 wholes? Write a division equation.	**5 / 1/9 = 45**

PART 2 · APPLY IT

1. **24 bracelets** The bar shows 6 sixths in 1 meter. So 4 / 1/6 = 4 x 6 = 24.
2. **80 clips** Each minute holds 10 clips, so 8 / 1/10 = 8 x 10 = 80.

CHALLENGE

6 / 1/8 = 48 strips; 48 - 9 = 39 strips remain.

Accept equivalent multiplication equations that show the number of unit-fraction pieces in each whole. For the challenge, accept any correct equations showing both the total strips and the strips remaining.