LESSON MAKER PRO

Rows Reveal Division

Use arrays to show what division means.

GRADE 5 · 5.NOS.B.5.d

5.NOS.B.5.d "Represent and explain the computation by connecting rectangular arrays, area models, and/or equations to the meaning of division."

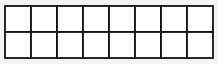
NAME _____ **DATE** _____

THE BIG IDEA

An array has equal rows. To find how many squares are in each row, divide the total number of squares by the number of rows.

WORKED EXAMPLE

This array has 16 squares. How many squares are in each row?



1. Count 2 equal rows.
2. Divide: 16 / 2 = 8.

Answer: 8 squares per row

PRACTICE 4 problems

1 An array has 42 tiles in 6 rows. How many tiles are in each row? Write a division equation.

ANSWER _____

2 An array has 45 tiles, with 9 tiles in each row. How many rows are there? Write a division equation.

ANSWER _____

3 An array has 66 squares in 11 rows. How many squares are in each row?

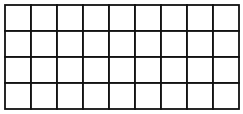
ANSWER _____

4 An array has 63 tiles, with 9 tiles in each row. How many rows are there?

ANSWER _____

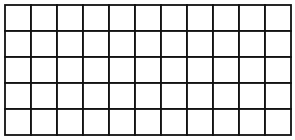
APPLY IT Show your work

1 A club puts 36 stickers on this chart. How many stickers are in each row? Write a division equation.



ANSWER _____

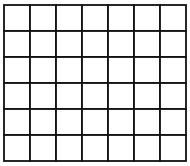
2 A game shop sets 55 cards in the array shown. How many cards are in each row? Write a division equation.



ANSWER _____

CHALLENGE One step up

This array has 42 badges. Regroup them into rows of 14. How many new rows will there be? Explain using the original rows.



WORK SPACE AND ANSWER

ANSWER KEY

Rows Reveal Division

GRADE 5 · 5.NOS.B.5.d

PART 1 · PRACTICE

#	PROBLEM	ANSWER
1	An array has 42 tiles in 6 rows. How many tiles are in each row? Write a division equation.	**7 tiles; 42 / 6 = 7**
2	An array has 45 tiles, with 9 tiles in each row. How many rows are there? Write a division equation.	**5 rows; 45 / 9 = 5**
3	An array has 66 squares in 11 rows. How many squares are in each row?	**6 squares**
4	An array has 63 tiles, with 9 tiles in each row. How many rows are there?	**7 rows**

PART 2 · APPLY IT

1. **9 stickers; 36 / 4 = 9** The chart has 4 equal rows. Divide 36 by 4 to find the stickers in each row.
2. **11 cards; 55 / 5 = 11** The array has 5 equal rows. Divide 55 by 5 to find the cards in each row.

CHALLENGE

3 new rows. Each new row joins two original rows of 7 badges, so 6 original rows make 3 new rows. Also, 42 / 14 = 3.

Accept a correct division equation with the quotient and divisor in either order when it matches the meaning of the rows. For the challenge, accept any explanation that connects the new rows to the array.