LESSON MAKER PRO

Groups That Multiply

Count equal groups and write multiplication expressions.

GRADE 3 · 3.OA.A.1

3.OA.A.1 "Illustrate the product of two whole numbers as equal groups by identifying the number of groups and the number in each group and represent as a written expression."

NAME _____ DATE _____

ROWS ARE GROUPS

In an array, each row is an equal group. Count the rows, then count the dots in one row. Write a multiplication expression with the number of groups first and the number in each group second.

WORKED EXAMPLE

How many dots are in the array? Name the equal groups and write a multiplication expression.

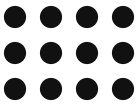


1. Count 2 rows, so there are 2 groups.
2. Count 9 dots in one row, so each group has 9 dots.
3. Write 2 × 9 and find the total: 18.

Answer: 2 groups of 9; 2 × 9 = 18

PRACTICE 6 problems

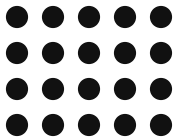
1 Count the array by rows. How many groups are there, and how many dots are in each group? Write a multiplication expression and find the total.



ANSWER _____

_____

2 Count the array by rows. How many groups are there, and how many dots are in each group? Write a multiplication expression and find the total.



ANSWER _____

_____

3 There are 5 stacks with 6 trading cards in each stack. Name the equal groups. Write a multiplication expression and find the total number of cards.

ANSWER _____

_____

4 There are 6 cups with 7 crayons in each cup. Name the equal groups. Write a multiplication expression and find the total number of crayons.

ANSWER _____

_____

5 Count the array by rows. How many groups are there, and how many dots are in each group? Write a multiplication expression and find the total.



ANSWER _____

_____

6 Count the array by rows. How many groups are there, and how many dots are in each group? Write a multiplication expression and find the total.



ANSWER _____

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APPLY IT Show your work

1 At a game night, 4 friends each get 6 game tokens. How many tokens do they get in all? Name the equal groups and write a multiplication expression.

WORK SPACE

ANSWER _____

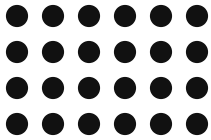
2 For an art project, 5 tables each get 7 sheets of colored paper. How many sheets do the tables get in all? Name the equal groups and write a multiplication expression.

WORK SPACE

ANSWER _____

CHALLENGE One step up

Count this array by rows, then count it by columns. For each way, name the number of groups and the number in each group. Write both multiplication expressions and explain why they have the same product.



WORK SPACE AND ANSWER

ANSWER KEY

Groups That Multiply

GRADE 3 · 3.OA.A.1

PART 1 · PRACTICE

#	PROBLEM	ANSWER
1	Count the array by rows. How many groups are there, and how many dots are in each group? Write a multiplication expression and find the total.	**3 groups of 4; 3 × 4 = 12**
2	Count the array by rows. How many groups are there, and how many dots are in each group? Write a multiplication expression and find the total.	**4 groups of 5; 4 × 5 = 20**
3	There are 5 stacks with 6 trading cards in each stack. Name the equal groups. Write a multiplication expression and find the total number of cards.	**5 groups of 6; 5 × 6 = 30 cards**
4	There are 6 cups with 7 crayons in each cup. Name the equal groups. Write a multiplication expression and find the total number of crayons.	**6 groups of 7; 6 × 7 = 42 crayons**
5	Count the array by rows. How many groups are there, and how many dots are in each group? Write a multiplication expression and find the total.	**7 groups of 4; 7 × 4 = 28**
6	Count the array by rows. How many groups are there, and how many dots are in each group? Write a multiplication expression and find the total.	**10 groups of 3; 10 × 3 = 30**

PART 2 · APPLY IT

1. **4 groups of 6; 4 × 6 = 24 tokens** The 4 friends are the groups, and each group gets 6 tokens. Multiply 4 × 6 to get 24.
2. **5 groups of 7; 5 × 7 = 35 sheets** The 5 tables are the groups, and each group gets 7 sheets. Multiply 5 × 7 to get 35.

CHALLENGE

Rows make 4 groups of 6, so 4 × 6 = 24. Columns make 6 groups of 4, so 6 × 4 = 24. Both ways count the same 24 dots.

Accept equivalent wording for groups and items in each group. In the challenge, the explanation must show that both expressions count the same array.