

Array Count Quest

Add equal rows to find the total.

GRADE 2 • 2.OA.C.4

CCSS.Math.Content.2.OA.C.4 "Use addition to find the total number of objects arranged in rectangular arrays with up to 5 rows and up to 5 columns; write an equation to express the total as a sum of equal addends."

NAME _____

DATE _____

THE BIG IDEA

An array has rows with the same number of objects. Count the objects in one row, then add that number once for each row.

WORKED EXAMPLE

A garden has 4 rows of 4 flowers. Write an addition equation and find the total number of flowers.

1. Each row has 4 flowers.
2. There are 4 rows.
3. $4 + 4 + 4 + 4 = 16$.

Answer: 16 flowers

PRACTICE 5 problems

- 1** A tray has 2 rows of 3 grapes. Write an addition equation and find the total number of grapes.

ANSWER _____

- 2** A toy shelf has 3 rows of 5 blocks. Write an addition equation and find the total number of blocks.

ANSWER _____

- 3** A sticker page has 5 rows of 2 stars. Write an addition equation and find the total number of stars.

ANSWER _____

- 4** A bowl has 1 row of 5 shells. Write an addition equation and find the total number of shells.

ANSWER _____

- 5** A game board has 3 rows of 3 buttons. Write an addition equation and find the total number of buttons.

ANSWER _____

APPLY IT Show your work

- 1** At a pet show, a display has 2 rows of 5 puppy photos. Write an addition equation and find how many photos are in the display.

WORK SPACE

ANSWER _____

- 2** Noah puts 3 rows of 2 crackers on a picnic tray. Write an addition equation and find how many crackers are on the tray.

WORK SPACE

ANSWER _____

CHALLENGE One step up

CHALLENGE

Mia has 3 rows of 5 toy cars. Leo has 5 rows of 3 toy cars. Do they have different totals? Write an addition equation for each array and explain why.

PART 1 • PRACTICE

#	PROBLEM	ANSWER
1	A tray has 2 rows of 3 grapes. Write an addition equation and find the total number of grapes.	$3 + 3 = 6$ grapes
2	A toy shelf has 3 rows of 5 blocks. Write an addition equation and find the total number of blocks.	$5 + 5 + 5 = 15$ blocks
3	A sticker page has 5 rows of 2 stars. Write an addition equation and find the total number of stars.	$2 + 2 + 2 + 2 + 2 = 10$ stars
4	A bowl has 1 row of 5 shells. Write an addition equation and find the total number of shells.	$5 = 5$ shells
5	A game board has 3 rows of 3 buttons. Write an addition equation and find the total number of buttons.	$3 + 3 + 3 = 9$ buttons

PART 2 • APPLY IT

- $5 + 5 = 10$ photos There are 2 rows with 5 photos in each row. Add $5 + 5$ to get 10.
- $2 + 2 + 2 = 6$ crackers There are 3 rows with 2 crackers in each row. Add $2 + 2 + 2$ to get 6.

CHALLENGE

No. Mia: $5 + 5 + 5 = 15$. Leo: $3 + 3 + 3 + 3 + 3 = 15$. Both have 15 toy cars.

Accept repeated-addition equations that use one equal addend for each row and show the correct total. For the challenge, accept either equation first if both totals are 15 and the student states that the totals are equal.