

Array Add-Up

Use equal addends to count rows.

GRADE 2 • 2.NR.3.2

2.NR.3.2 "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 _____

COUNT EACH ROW

An array has objects in straight rows and columns. Count the objects in one row, then add that same number for each row. Your addition equation shows the total.

WORKED EXAMPLE

A tray has 4 rows of 5 star stamps. How many star stamps are there?

1. There are 4 rows.
2. Each row has 5 star stamps.
3. Add $5 + 5 + 5 + 5 = 20$.

Answer: 20 star stamps

PRACTICE 5 problems

- 1** A toy shelf has 2 rows of 3 trains. Write an addition equation. How many trains are there?

ANSWER _____

- 2** A snack plate has 3 rows of 2 apple slices. Write an addition equation. How many apple slices are there?

ANSWER _____

- 3** A game has 3 rows of 3 beanbags. Write an addition equation. How many beanbags are there?

ANSWER _____

- 4** A pet bowl has 2 rows of 1 treat. Write an addition equation. How many treats are there?

ANSWER _____

- 5** A bracelet has 3 rows of 1 bead. Write an addition equation. How many beads are there?

ANSWER _____

APPLY IT Show your work

- 1** Lina puts animal stickers in 3 rows. Each row has 2 stickers. How many stickers does Lina have? Write an addition equation.

WORK SPACE

ANSWER _____

- 2** Noah sets out 3 rows of 3 cups for a pretend cafe. How many cups does Noah set out? Write an addition equation.

WORK SPACE

ANSWER _____

CHALLENGE One step up

CHALLENGE

A toy garage has 3 rows of 2 cars. Sam writes $3 + 3 = 6$. Is Sam correct? Explain what Sam's equation counts. Then write an equation that counts the rows.

PART 1 • PRACTICE

#	PROBLEM	ANSWER
1	A toy shelf has 2 rows of 3 trains. Write an addition equation. How many trains are there?	$3 + 3 = 6$; 6 trains
2	A snack plate has 3 rows of 2 apple slices. Write an addition equation. How many apple slices are there?	$2 + 2 + 2 = 6$; 6 apple slices
3	A game has 3 rows of 3 beanbags. Write an addition equation. How many beanbags are there?	$3 + 3 + 3 = 9$; 9 beanbags
4	A pet bowl has 2 rows of 1 treat. Write an addition equation. How many treats are there?	$1 + 1 = 2$; 2 treats
5	A bracelet has 3 rows of 1 bead. Write an addition equation. How many beads are there?	$1 + 1 + 1 = 3$; 3 beads

PART 2 • APPLY IT

- $2 + 2 + 2 = 6$; 6 stickers** There are 2 stickers in each of 3 rows. Add 2 three times to get 6.
- $3 + 3 + 3 = 9$; 9 cups** There are 3 cups in each of 3 rows. Add 3 three times to get 9.

CHALLENGE

Yes. Sam's equation counts 2 columns of 3 cars. The row equation is $2 + 2 + 2 = 6$.

Accept an equivalent equal-addends equation that counts columns instead of rows, such as $2 + 2 + 2 = 6$ or $3 + 3 = 6$. Students should give the correct total and use equal addends.