Arrays: rows and columns of objects

How do you count things set out in equal rows and columns?

WORDS TO KNOW

Array: things set out in equal rows and equal columns.

Column: a line going up and down. A row goes across.

KEY IDEAS

1. Add one row at a time

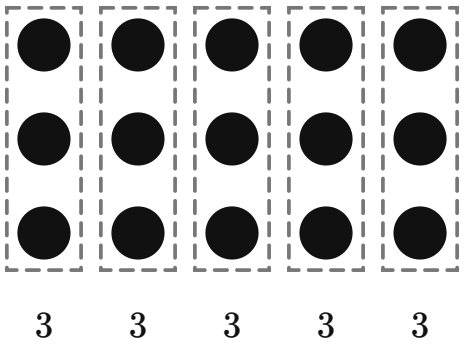
Count the things in one row. Every row holds that same number.

> Add one row's number once for each row.

2. Rows and columns give the same total

Each thing sits in one row and one column. So both ways count it once.

> Add the rows or the columns. You get the same total.



WATCH OUT

- **Calling unequal rows an array.** Rows of 6, 1 and 5 are not an array.
- **Counting an empty spot.** A gap holds nothing, so take it away.

WORKED EXAMPLES

Example 1. Blocks sit in 5 rows of 7. Count them by columns.

1. There are 7 columns of 5. Count by fives: 5, 10, 15, 20, 25, 30, 35.

Answer: 35 blocks.

Example 2. Seeds fill 4 rows of 10. Three do not grow. How many plants?

1. Count by tens, one number per row: 10, 20, 30, 40. Three spots are empty: $40 - 3 = 37$.

Answer: 37 plants.

Free sample from math.wiki for classroom use. Do not post. math.wiki