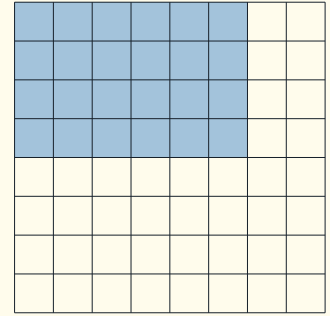


ARRAY AS ROWS $\times$ COLUMNS

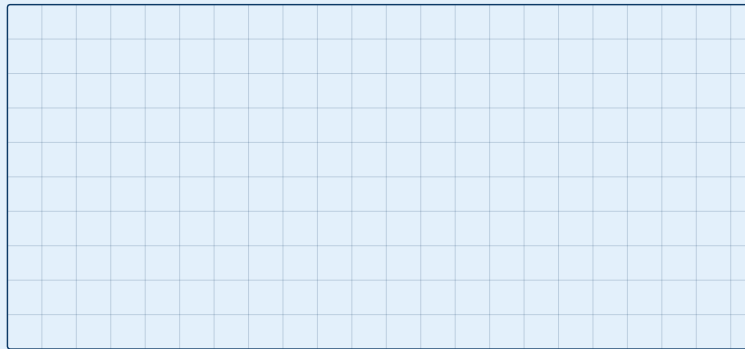
- 1 The shaded array has 4 rows with 6 squares in each row.
- 2 Read the rows as repeated addition: $6 + 6 + 6 + 6$.
- 3 That is the same as the multiplication $4 \times 6 = 24$.



WARM-UP

Use the squared working space to draw and read arrays of buns.

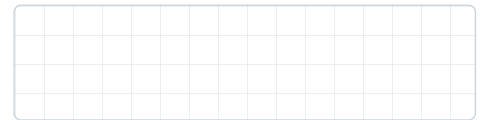
Patterns



1. Draw a 4-by-6 array of dots, then write it as $6 + 6 + 6 + 6$ and as 4×6 .
2. Draw a 3-by-5 array of buns, then turn it to draw a 5-by-3 array beside it and count both totals.
3. Draw a 3-by-8 array of dots and write its repeated addition and its multiplication underneath.

PRACTICE

- 1 A baker lays out 2 rows of buns with 6 buns in each row. Write it as a repeated addition and as a multiplication.



ALWAYS, SOMETIMES, NEVER

Always, sometimes or never true? Write A, S or N.

- a. An array of 3 rows of 5 buns holds the same total as $5 + 5 + 5$. ☐
- b. Turning an array on its side changes how many objects are inside it. ☐
- c. In an array every row holds the same number of objects. ☐
- d. The total of an array can be written as a multiplication. ☐

REFLECT

Did the array or the grid make the parts of the product clearer for you?