

Lesson 56 MEASURES

Area of rectangles – rows by columns links to multiplication

WHAT THIS LESSON TEACHES

To find the area of a rectangle, multiply the number of squares in a row by the number of rows. The answer is in square units, such as square centimetres (cm^2).

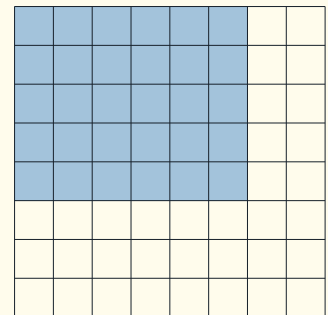
→ A 4 cm by 3 cm rectangle: $4 \times 3 = 12 \text{ cm}^2$.

→ 3 rows of 5 squares: $3 \times 5 = 15$ squares.

MODEL THIS ON THE BOARD

AREA BY ROWS × COLUMNS

- ① The shaded rectangle has **5** equal rows of squares.
- ② Each row has **6** squares.
- ③ Multiply rows by columns: $5 \times 6 = 30$.



DISCUSSION STARTER

REFLECT Do you prefer counting every square or multiplying rows by columns? When does each help?

ANSWER KEY

a) 18

b) 8

c) 14

Q1: 12 cm^2

a) **Always** — Multiplying rows by columns always gives the total number of unit squares.

b) **Always** — Both methods count the same squares, so they always match.

c) **Sometimes** — It could be another square unit, but cm^2 is one common choice.

d) **Always** — Whole rows of whole squares always give a whole-number area.

EXTENSION SHEET · STRETCH ANSWERS

S1: 55 cm^2

S2: 55 cm^2

S3: 36 cm^2

S4: 77 cm^2

S5: 12 cm^2

Investigation: Fence the biggest garden — open-ended; scan pupils' working for valid solution paths rather than a single answer.