Rows and columns: answers and notes

What your child practised: using arrays to multiply, writing it with ×, and seeing that multiplication can be done in any order.

Page 1 · Warm up

First picture: **yes** (2 rows of 4). Second picture: **no** (the rows have 4, 2 and 3).

Page 2 · Try it together

2 rows of 5: **10** · 5 rows of 2: **10**
4 rows of 5: **20** · 5 rows of 4: **20**. The drawing will vary.

Page 2 · A. Look at each array

2 rows of **5**, 2 × 5 = **10**
4 rows of **2**, 4 × 2 = **8**
3 rows of **10**, 3 × 10 = **30**

Page 3 · B. Draw the array

4 rows of 5: **20** · 5 rows of 2: **10**

Page 3 · C. Two multiplications

2 rows of 10: **2 × 10 = 20** and **10 × 2 = 20**
3 rows of 2: **3 × 2 = 6** and **2 × 3 = 6**

Page 3 · D. Fill the gaps

5 × 2 = 2 × **5** · 10 × 4 = **4** × 10 · 2 × 7 = 7 × **2**

Challenge: No, Ava isn't right. 4 rows of 5 is 5 + 5 + 5 + 5 = **20** (4 × 5 = 20). She added the number of rows to the number in one row. Count along each row together in 5s: "5, 10, 15, 20".

Watch out for

- **Adding instead of multiplying** (4 rows of 5 as 9). Point to each row and add one 5 for each: 5 + 5 + 5 + 5.
- **Rows that aren't equal** when drawing. Drawing on squared paper, or lining up dots under each other, helps.
- **Thinking the answer changes when the array turns.** Turn a real array and count again: same things, same total.

Going further (5 minutes, no paper)

- **Array spotting:** egg boxes, ice cube trays, windows, buttons on a remote. Say "rows of" for each.
- **Turn and say:** say a multiplication like 5 × 10. Your child says the turned one: 10 × 5.
- **In the game:** Chapter 5, The × and ÷ signs, writes multiplying and dividing with signs.