## Multiply 4-digits by 2-digits



1 Complete the multiplication.

|   |   |   | 1 |     |   |  |
|---|---|---|---|-----|---|--|
|   | 2 | 5 | 9 | - 1 | 4 |  |
|   | 2 | 4 | 6 | 8   | 0 |  |
|   |   | 1 | 2 | 3   | 4 |  |
| × |   |   |   | 2   | 1 |  |
|   |   | 1 | 2 | 3   | 4 |  |
|   |   |   |   |     |   |  |

- 2 Tommy is calculating 1,234 × 26
  - a) Complete his working out.

|   |    | 1  | 2  | 3  | 4 |  |
|---|----|----|----|----|---|--|
| × |    |    |    | 2  | 6 |  |
|   |    | 7, | 42 | 02 | 4 |  |
|   | 2  | 4  | 6  | 8  | 0 |  |
|   | 3  | 2  | 0  | 90 | 4 |  |
|   | -1 | (  |    |    |   |  |

**b)** Fill in the grid to check Tommy's working is accurate. You may use place value counters to help.

| ×  | 1,000  | 200   | 30  | 4  |  |
|----|--------|-------|-----|----|--|
| 20 | 20,600 | 4,000 | 600 | 80 |  |
| 6  | 6,000  | 1,200 | 180 | 24 |  |



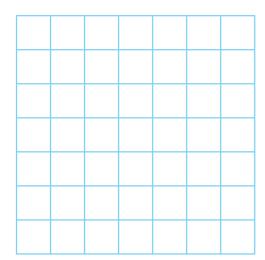
Rosie is calculating 2,541 × 42
Here is Rosie's working.

a) Rosie has made two mistakes. What are they?

She hasn't correctly exchanged.

She has multiplied by 4 not 40

b) What is the correct answer?



106,722

4 Work out the multiplications.

a) 
$$4,284 \times 23$$

|   | 4 | 2  | 8  | 4 |  |   | 2 | ١ | 4 | 2 |   |  |  |
|---|---|----|----|---|--|---|---|---|---|---|---|--|--|
| X |   |    | 2  | 3 |  | X |   |   | Ч | 6 |   |  |  |
| 1 | 2 | 28 | ຸຣ | 2 |  | ] | 2 | 8 | 5 | 2 |   |  |  |
| 8 |   | 6  |    |   |  | 8 | 5 | 6 | ક |   |   |  |  |
| 9 | 8 | 5  | 3  | 2 |  | 9 | 8 | 5 | 3 | 2 | , |  |  |
|   | 1 | 1  |    |   |  |   | ١ | 1 |   |   |   |  |  |

What do you notice?



A machine makes 2,734 boxes every hour.

The machine works for 3 hours each day.

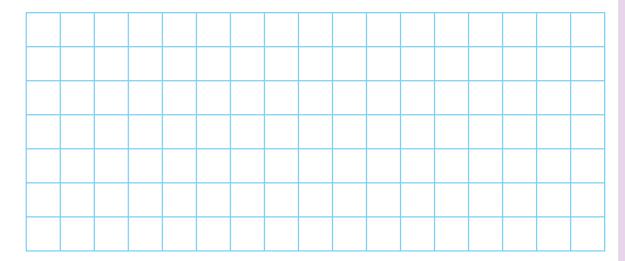
a) How many boxes will it make in 12 days?

98,424

**b)** Compare methods with a partner. Were there any other ways you could have worked out the answer?



6 Work out  $378 \times 7 \times 12$ Show your method clearly.



31,752

| 7 | 1 2        | 3         | 4        | 5     | 6    |         |      |                       |
|---|------------|-----------|----------|-------|------|---------|------|-----------------------|
|   |            |           |          |       |      |         | ×    |                       |
|   | a) Using o | ıll the d | iait car | ds cr | ente | 4 diffe | rent | calculations and work |

a) Using all the digit cards, create 4 different calculations and work out the answer to each.

Various answers.

- **b)** Write your answers in ascending order.
- c) What is the smallest product that can be made?

31,928

8 Amir scores 4,680 points in a computer game for 12 games in a row.

Whitney scores 2,512 points every game for 24 games.

Who scores more points?

Whitner

Amir: 56,160

Whitney: 60,288

How many more?

4,128

