Multiply a 3-digit number by a 2-digit number

White Rose MATHS

1 Complete the multiplications.

a) 13 × 3 = ☐

13 × 30 = ☐

b) 130 × 2 = ☐

130 × 20 = ☐

c) 25 × 4 = ☐

25 × 40 = ☐

d) 204 × 4 = ☐

204 × 40 = ☐

2 Complete the multiplications.

a)

```
        2   3   1
  ×         1   3
  ─────────────────
        6   9   3    (231 × 3)
    2   3   1   0    (231 × 10)
  ┌───┬───┬───┬───┐
  └───┴───┴───┴───┘
```

b)

```
        5   1   2
  ×         2   4
  ─────────────────
    2₂  0   4   8
  1₁  0   2   4   0
  ┌───┬───┬───┬───┬───┐
  └───┴───┴───┴───┴───┘
```

(☐ × ☐)

(☐ × ☐)

3 Brett is calculating 216 × 23

```
              2   1   6
      ×           2   3
    ───────────────────
      6   4₁  8   0
          4   3₁  2
    ───────────────────
      6   9₁  1   2
```

What mistake has Brett made?

What is the correct answer?

☐

4 Complete the multiplications.

a) 142 × 31 = ☐

b) 337 × 46 = ☐

c) 214 × 53 = ☐

d) 24 × 183 = ☐

5 Some children are asked to work out 308 × 19

a) Which is the best estimate to use to check their answers?

Circle your choice and work out the answer to your estimate.

300 × 10   **300 × 20**   **310 × 20**   **300 × 19**

estimate answer = ☐

Explain the reasons for your choice.

b) Here are answers given by three children.

Nijah 28,028   **Filip** 5,852   **Scott** 2,080

From your estimate, who do you think is correct? _____

c) Work out the correct answer.

☐

d) What mistakes might the others have made?

6 A football pitch is 128 m long and 52 m wide.
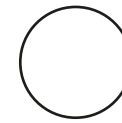
a) What is the area of the pitch?

☐

b) A field is 25,000 m²
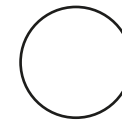
How many football pitches could fit on it?

☐

7 Write >, < or = to complete each statement.

a) 146 × 64 ◯ 164 × 46   **b)** 135 × 53 ◯ 153 × 35

What do you notice?

Does this always happen?

8 Miss Rose is ordering some pencils.
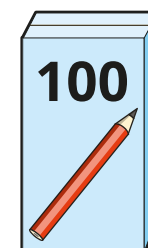
She orders 17 of pack A, 14 of pack B and 4 of pack C.

Pack A   **Pack B**   **Pack C**

20   **100**

a) How many pencils does Miss Rose order?

☐

b) Each pencil costs 16p.

How much does Miss Rose spend on pencils?

☐

White Rose
MATHS