Multiplying 3-Digit Numbers with 2-Digit Numbers

Using Paper and Pencil

Example 1

621 × 32 =

Explanation

Step 1: Line up the place values.

```
    6 2 1
×    3 2
```

Step 2: To calculate the **first partial product**: Multiply 621 × 2 = 1242.

```
    6 2 1
×    3 2
  1 2 4 2
```

Start the first partial product at the ones' place.

Step 3: To calculate the **second partial product**: Multiply 621 × 3 = 1863.

```
    6 2 1
×    3 2
  1 2 4 2
1 8 6 3 0
```

Start the second partial product at the tens' place.

Write a place holding 0 at the ones place.

Step 4: **Add** the partial products.

```
    6 2 1
×    3 2
  1 2 4 2
+ 1 8 6 3
  1 9 8 7 2
```

Therefore 621 × 32 = 19872.

When multiplying numbers that end with zero(s), remove the zero (0) and multiply. Then place the zero(s) back to the product.

Example 2

Find the product. 208 × 40 =

⬤ Explanation

```
    2 0 8
  ×   4 0
  ─────────
  8 3 2 0
```
← **Place 0 back to the product.**

Therefore 208 × 40 = 8320.