

Multiplying 3- and 4-digit numbers

367×26

| | | | |
|----|------|------|-----|
| x | 300 | 60 | 7 |
| 20 | 6000 | 1200 | 140 |
| 6 | 1800 | 360 | 42 |

$$\begin{array}{r} 6000 \\ 1200 \\ 1800 \\ 360 \\ 140 \\ + 42 \\ \hline 9542 \end{array}$$

You can write the addition as column addition. You could still add some parts in your head to make your column addition shorter.

1 434×27

| | | | |
|----|-----|----|---|
| x | 400 | 30 | 4 |
| 20 | | | |
| 7 | | | |

2 586×26

| | | | |
|----|-----|----|---|
| x | 500 | 80 | 6 |
| 20 | | | |
| 6 | | | |

3 967×24

| | | | |
|----|-----|----|---|
| x | 900 | 60 | 7 |
| 20 | | | |
| 4 | | | |

4 849×23

| | | | |
|----|-----|----|---|
| x | 800 | 40 | 9 |
| 20 | | | |
| 3 | | | |

5 4231×23

| | | | | |
|----|------|-----|----|---|
| x | 4000 | 200 | 30 | 1 |
| 20 | | | | |
| 3 | | | | |

6 5484×26

| | | | | |
|----|------|-----|----|---|
| x | 5000 | 400 | 80 | 4 |
| 20 | | | | |
| 6 | | | | |

7 3657×28

| | | | | |
|----|------|-----|----|---|
| x | 3000 | 600 | 50 | 7 |
| 20 | | | | |
| 8 | | | | |

8 9578×27

| | | | | |
|----|------|-----|----|---|
| x | 9000 | 500 | 70 | 8 |
| 20 | | | | |
| 7 | | | | |

THINK

What are the missing numbers in this multiplication?

| | | | |
|---|------|------|----|
| x | ? | ? | ? |
| ? | 8000 | 1400 | 60 |
| ? | 3200 | 560 | 24 |

I am confident with multiplying 3- and 4-digit numbers using the grid method.

Perform these multiplications.

1 482×16

3 346×27

2 567×23

4 907×29

When we multiply by 10 we move the digits one place to the left. Here we multiplied by 10, then by 5, then added the answers together.

$$\begin{array}{r} 5416 \\ \times \quad 15 \\ \hline 54160 \\ 27080 \\ \hline 81240 \end{array}$$

You can use place value, adding and short multiplication to help you.



5 3627×13

7 5624×26

6 2446×14

8 7894×24

THINK

Look at this multiplication. Work out what digit each letter represents.

$$\begin{array}{r} A B C D \\ \times \quad 16 \\ \hline 44530 \\ 26^2 7^3 1^1 8 \end{array}$$

I am confident with multiplying 3- and 4-digit numbers by 2-digit numbers.