

Today, we are going to revise multiplication.

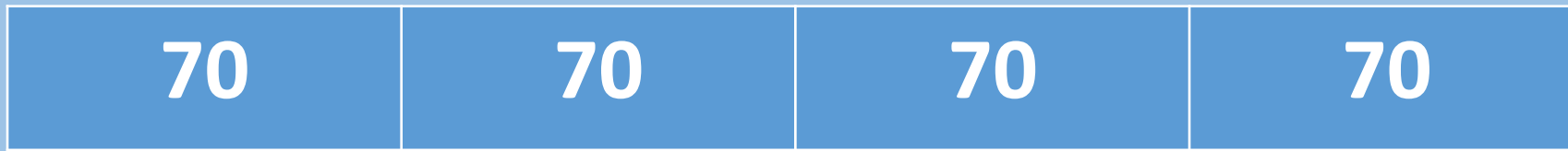
- Multiply a two-digit number by a one-digit number
- Short multiplication

Quick Quiz

- Practice your times tables knowledge the daily ten
- Select your preferred times table and your preferred level.
- Do three tests, reduce your time as you go along eg 10 seconds, then 5 seconds then 3!
- Go to: [topmarks.co.uk/maths-games/dailyten](https://www.topmarks.co.uk/maths-games/dailyten)

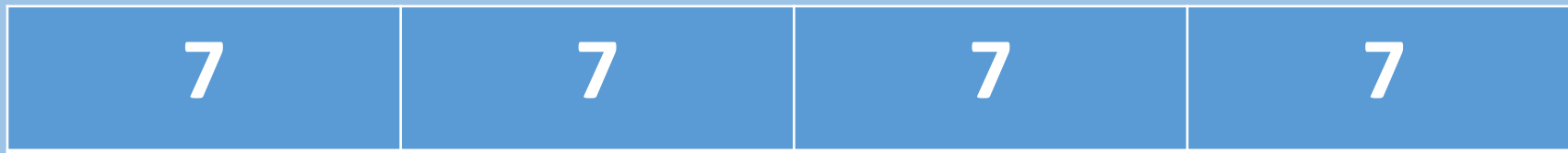
$$70 \times 4$$

This means 70, 4 times.



$$70 \times 4$$

I can do this mentally by using my knowledge of 7×4

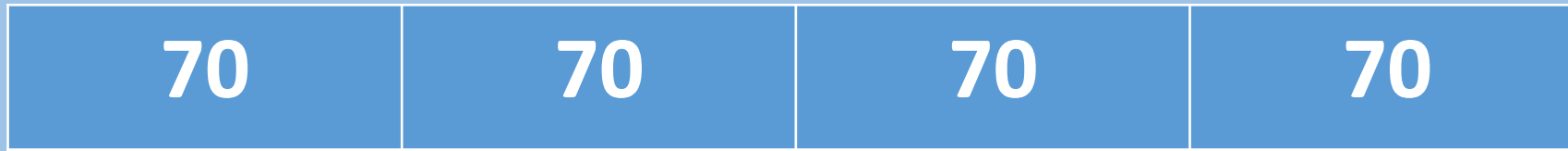


7, 4 times is 28

$$70 \times 4$$

So, if 7, 4 times is 28.

70, 4 times must be ten times that = 280



$$7 \times 4 = 28$$

$$70 \times 4 = 280$$

Try these...

- $50 \times 3 =$

- $40 \times 6 =$

- $70 \times 4 =$

- $30 \times 8 =$

- $60 \times 5 =$

Answers

- $50 \times 3 = 5 \times 3 \times 10 = 150$
- $40 \times 6 = 4 \times 6 \times 10 = 240$
- $70 \times 4 = 7 \times 4 \times 10 = 280$
- $30 \times 8 = 3 \times 8 \times 10 = 240$
- $60 \times 5 = 6 \times 5 \times 10 = 300$

But what about 54×3 ?

This means 54, 3 times.



$$54 \times 3 =$$

- We can think of it this way

Partition 54 into 50 and 4


x	50	4
3		

This is the **grid method** which you probably learnt in Year 3 and 4.

$$54 \times 3 =$$

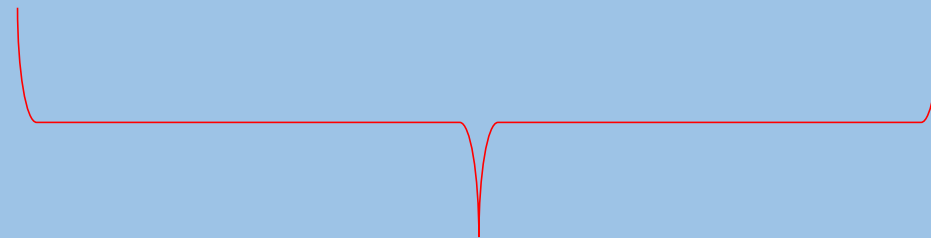
x	50	4
3	150	12


$$50 \times 3 =$$


$$4 \times 3 =$$

$$54 \times 3 =$$

x	50	4
3	150	12



$$150 + 12 = 162$$

$$54 \times 3 =$$

x	50	4
3		

In Year 5 and 6, we usually use this method...

	5	4
x		3

This is called short multiplication and it is quicker and more efficient than grid method.

$$54 \times 3 =$$

Short multiplication

Always start from the ones column.
 $4 \times 3 = 12$

	5	4
x		3
		2

The 12 is partitioned.

1

The 1 (ten) is placed under the tens column.

The 2 (ones) is placed in the ones answer column.

$$54 \times 3 =$$

Short multiplication

Next move to the tens column.

$$50 \times 3 = 150$$

	5	4
x		3
1	6	2

1

I need to add on this 1 ten onto 150. This is 160.

The 160 is placed in the correct answer boxes.
My answer is 162.

Try these...

	4	5
x		3

	1	8
x		4

	2	3
x		5

	5	9
x		6

Answers...

	4	5
X		3
1	3	5

1

	2	3
X		5
1	1	5

1

	1	8
X		4
	7	2

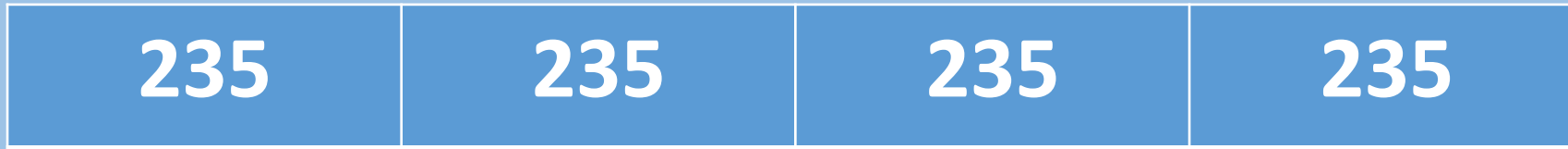
3

	5	9
X		6
3	5	4

5

But what about 235×4 ?

This means 235, 4 times.



$$235 \times 4 =$$

- Grid Method would look like this...

x	200	30	5
4			

$$235 \times 4 =$$

- Grid Method would look like this...

x	200	30	5
4	800	120	20

$$800 + 120 + 20 = 940$$

$$235 \times 4 =$$

x	200	30	5
4	800	120	20

	2	3	5
x			4

$$235 \times 4 =$$

First calculate 5×4 which is 20

	2	3	5
x			4
			0

2

$$235 \times 4 =$$

Next calculate $30 \times 4 = 120$. Then the extra 20 to make 140.

	2	3	5
x			4
		4	0
	1	2	

$$235 \times 4 =$$

Next calculate $200 \times 4 = 800$. Then the extra 100 to make 900.

	2	3	5
x			4
	9	4	0
	1	2	

Try these...

	3	2	7
x			3

	5	1	4
x			4

	2	0	5
x			5

	4	6	0
x			6

Answers...

	3	2	7
x			3
	9	8	1

2

	2	0	5
x			5
1	0	2	5

2

	5	1	4
x			4
2	0	5	6

1

	4	6	0
x			6
2	7	6	0

3

Now try some independent practice.

- Copy the calculation down correctly.
- Know your time tables. If you are not sure use your student diary.
- Start from the right hand side.
- Work your way to the left.
- Re-group if necessary.
- Remember to add on the re-grouping.
- Place your answers in the correct column.
- Remember that any number $\times 0$ is always 0.