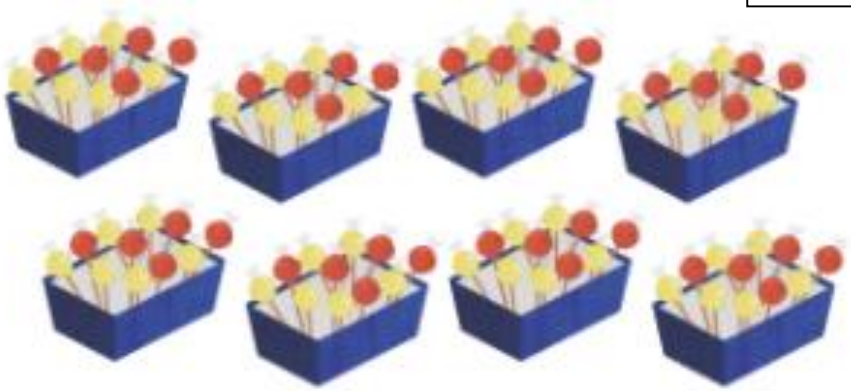
Multiplying 2-Digit Numbers

In Focus

What do we need to know to work out this answer?



How many are there in 8 boxes?

We are going to look at 3 different methods of solving this problem.

Let's Learn

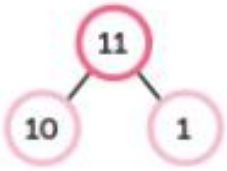
1 $8 \times 11 =$ ☐

Method 1

Method 1 is really easy if you know your 8 or 11 times table!

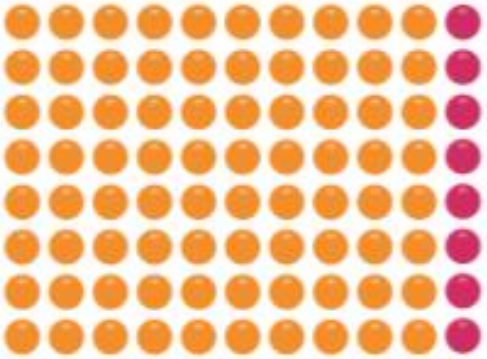
Method 2 partitions 11 into 10 and 1 to make it easier to work out.

Method 2



$8 \times 11 = 80 + 8$

$= \square$



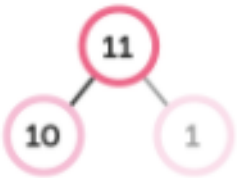
$8 \times 10 = 80$ $8 \times 1 = 8$

Method 3 uses a written method, multiplying by ones then tens.

Method 3

$8 \times 11 = \square$

$8 \times 1 = 8$



$8 \times 10 = 80$

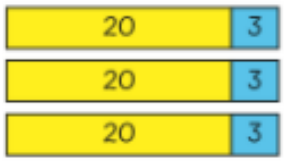
		1	1
×			8
			8

		1	1
×			8
			8
+	8	0	
	8	8	

This is a different way of looking at method 3.

2 $23 \times 3 = \square$

$20 \times 3 = 60$



$3 \times 3 = 9$

$23 \times 3 = 60 + 9$

$= \square$

		2	3
×			3
			9
+		6	0
		☐	☐

Use the pictures to help you with the guided practice questions.

Guided Practice

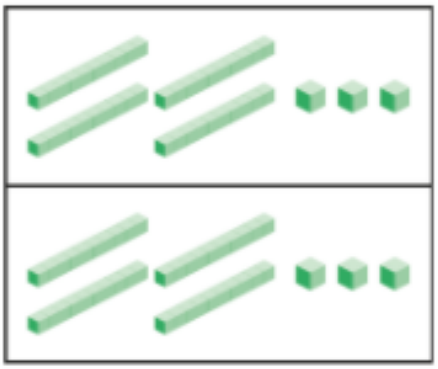
1 Multiply.

$12 \times 4 = \square$

		1	2
×			4
			☐
+		☐	☐
		☐	☐

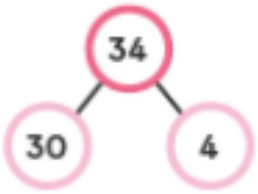
2 Find the product of 43 and 2.

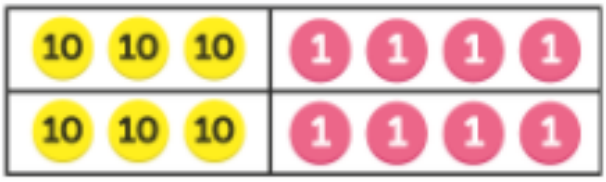
$43 \times 2 =$ ☐



	4	3
×		2
		☐
+	☐	☐
	☐	☐

3 Find the value of 34×2.





	3	4
×		2

4 Multiply.

(a) $3 \times 31 =$ ☐

(b) $41 \times 2 =$ ☐

Worksheet 6

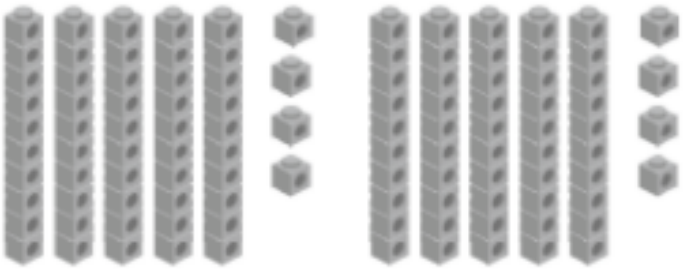
Multiplying 2-Digit Numbers

1 Multiply.

(a) $12 \times 3 =$ ☐

$$\begin{array}{r} 1\ 2 \\ \times\ \ 3 \\ \hline \\ + \\ \hline \\ \hline \end{array}$$

(b) $54 \times 2 =$ ☐



$$\begin{array}{r} 5\ 4 \\ \times\ \ 2 \\ \hline \\ + \\ \hline \\ \hline \end{array}$$

(c) $22 \times 4 =$ ☐

20	2
20	2
20	2
20	2

$$\begin{array}{r} 2\ 2 \\ \times\ \ 4 \\ \hline \\ + \\ \hline \\ \hline \end{array}$$

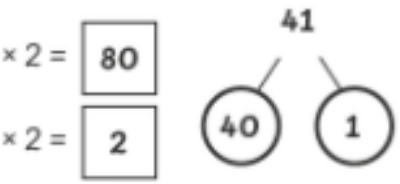
2 Sam and Amira found the product of 41 and 2 in two different ways.

40 × 2 = 80

1 × 2 = 2

80 + 2 = ☐

41 × 2 = ☐



$$\begin{array}{r} 4\ 1 \\ \times\quad 2 \\ \hline 2 \\ +\ 8\ 0 \\ \hline 8\ 2 \end{array}$$

Use their methods to find the product of 23 and 3.

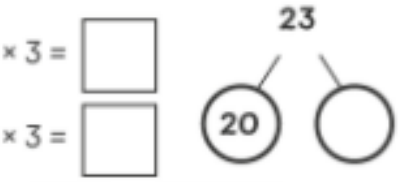
Sam's method

☐ × 3 = ☐

☐ × 3 = ☐

☐ + ☐ = ☐

23 × 3 = ☐



Amira's method

$$\begin{array}{r} 2\ 3 \\ \times\quad 3 \\ \hline \\ + \\ \hline \\ \hline \end{array}$$

3 Multiply.

(a) 31 × 3 = ☐

(b) 4 × 21 = ☐

(c) 34 × 2 = ☐

(d) 2 × 22 = ☐

(e) 14 × 2 = ☐

(f) 32 × 2 = ☐

(g) 3 × 33 = ☐

(h) 2 × 43 = ☐

(i) 51 × 2 = ☐

(j) 42 × 2 = ☐

Extension

Have a go at this journal activity

Here are three incorrect multiplications.

	T	O
	6	1
x		5
	3	5

	T	O
	7	4
x		7
4	9	8

	T	O
	2	6
x		4
8	2	4

Correct the multiplications.

Worksheet 6

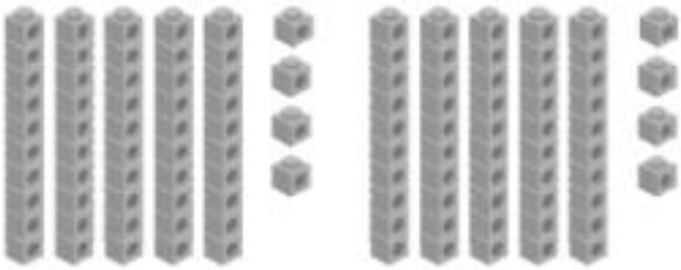
Multiplying 2-Digit Numbers

1 Multiply.

(a) $12 \times 3 =$ 36

		1	2
	×		3
			6
+		3	0
		3	6

(b) $54 \times 2 =$ 108



		5	4
	×		2
			8
+	1	0	0
	1	0	8

(c) $22 \times 4 =$ 88

20	2
20	2
20	2
20	2

		2	2
	×		4
			8
+		8	0
		8	8

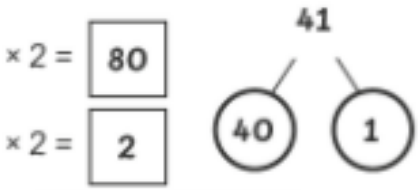
2 Sam and Amira found the product of 41 and 2 in two different ways.

40 × 2 = 80

1 × 2 = 2

80 + 2 = 82

41 × 2 = 82



$$\begin{array}{r} 41 \\ \times\ 2 \\ \hline 2 \\ +\ 80 \\ \hline 82 \end{array}$$

Use their methods to find the product of 23 and 3.

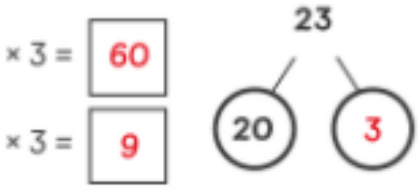
Sam's method

20 × 3 = 60

3 × 3 = 9

60 + 9 = 69

23 × 3 = 69



Amira's method

$$\begin{array}{r} 23 \\ \times\ 3 \\ \hline 9 \\ +\ 60 \\ \hline 69 \end{array}$$

3 Multiply.

(a) 31 × 3 = 93

(b) 4 × 21 = 84

(c) 34 × 2 = 68

(d) 2 × 22 = 44

(e) 14 × 2 = 28

(f) 32 × 2 = 64

(g) 3 × 33 = 99

(h) 2 × 43 = 86

(i) 51 × 2 = 102

(j) 42 × 2 = 84