

Maths - year 5

To multiply a 2 digit number by a 2 digit number using area model and expanded model

An approximate answer is found first, by rounding both numbers to the nearest 10.
 The **partitioned number** is placed in the grid and **multiplied**. The **products (answers to the times sums in the grid)** are then added to find the **answer**. You can use any mental or written method for adding the product.

e.g. $75 \times 26 = 1950$ Approximate Answer: $70 \times 30 = 2100$

x	70	5	
20	1400	100	1500
6	420	30	450
			1950

$$75 \times 26 = 1500 + 450 = 1950$$

Work out these multiplication sums using the grid method.

1) $34 \times 21 =$

Approx. Answer: $30 \times 20 =$

x	30	4	
20			
1			

+ =

2) $42 \times 27 =$

Approx. Answer: $40 \times 30 =$

x	40	2	
20			
7			

+ =

6) $63 \times 27 =$

Approx. Answer: $60 \times 30 =$

x	60	3	
20			
7			

6) $54 \times 37 =$

Approx. Answer: $50 \times 40 =$

x			

Expanded Long Multiplication (TU x TU)

When working out long multiplication sums, it is always good to find an approximate answer first. You don't have to put the sums in brackets, but it can help you whilst you are learning.

54×23 approx. answer: $50 \times 20 = 1000$

	T	U	
	5	4	
x	2	3	
	1	2	(3 x 4)
	1	5	0 (3 x 50)
	8	0	(20 x 4)
+	1	0	0 (20 x 50)
	1	2	4
	1	2	4
	1	2	4

Use expanded long multiplication to work out these sums.

1) 43×25

2) 52×32

3) 76×36