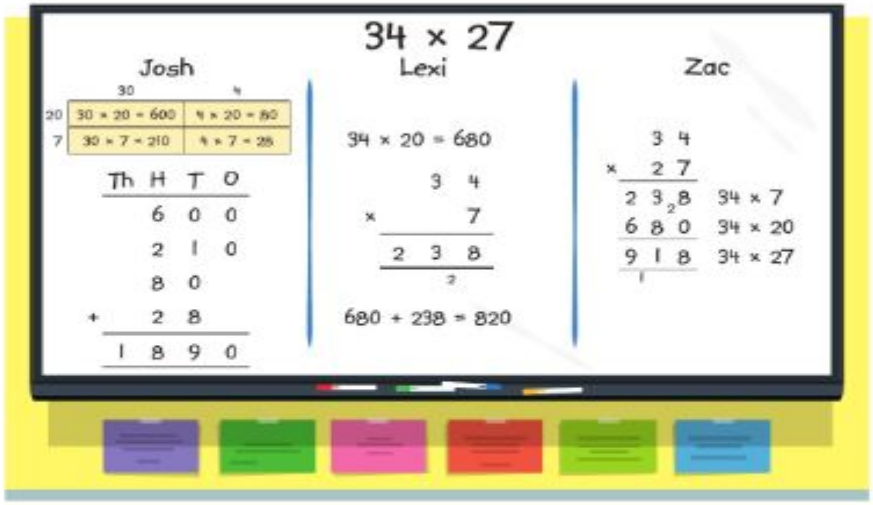
Tuesday – 24.03.20

Multiplying larger numbers using the column method

This week we are continuing with multiplication of larger numbers. Read the sheets and complete the tasks in your books when asked to do so.

Multiplying 2-digit numbers 3

Discover



1 **a)** What mistake has Josh made?

b) Look at Lexi's method and Zac's method.

What is the same? What is different?

Share

a) The calculations in the grid are all correct but Josh has lined up the numbers incorrectly in his addition.

	30	4
20	30 × 20 = 600	4 × 20 = 80
7	30 × 7 = 210	4 × 7 = 28

Th	H	T	O
	6	0	0
	2	1	0
		8	0
+		2	8
	9	1	8
	1		

The correct answer is 918.

b) Lexi partitioned her number and worked out each multiplication separately.

Lexi did that correctly, but she then made a mistake when adding her two totals.

Zac did the same as Lexi, except he did it all in one column multiplication and made no mistakes. This is called long multiplication.

34 × 20 = 680

3 4
× 7
2 3 8
2

3 4
× 2 7
2 3 8 34 × 7

3 4
× 2 7
2 3 8 34 × 7
6 8 0 34 × 20

3 4
× 2 7
2 3 8 34 × 7
6 8 0 34 × 20
9 1 8 34 × 27
1

Did you notice that Zac placed a 0 here to show that he is multiplying 34 by 20 and not by 2?

Think together

1 Mr Jones sets the class some more long multiplication questions.

Complete each multiplication.

a) 46 × 13

	4 6	
×	1 3	
	1 8	46 × 3
	0	46 × 10
	8	46 × 13

b) 34 × 24

	3 4	
×	2 4	
		34 × 4
	0	34 × 20
		34 × 24

c) 37 × 21

	3 7	
×	2 1	
		37 × 1
	0	37 × 20
		37 × 21

2 Mr Jones's class are going on a school trip.

There are 29 children in the class and they each pay £15.

How much money is paid in total by all the children?

£ ☐ is paid in total.

CHALLENGE

3 **a)** Josh works out 63 × 24.

	6 3	
×	2 4	
	2 4 1 2	
	1 2 6 0	
	3 6 7 2	

What mistake has Josh made?

Show the correct long multiplication.

b) Zac has worked out another multiplication.

What two numbers has Zac multiplied together?

	✱ ✱	
×	✱ ✱	
	3 8 7	
	4 3 0	
	8 1 7	

→ Practice book 5B p15