

RECALL



Calculate how much it would cost for:

- a) Six t-shirts
- b) Seven jumpers
- c) Three hats
- d) Nine dresses
- e) Eleven pairs of shorts

CHALLENGE:

I buy one dress, two hats and four jumpers but I only have £100. Can I afford them?

L.O. MULTIPLY MULTI-DIGIT NUMBER UP TO 4 DIGITS BY A 2-DIGIT NUMBER USING THE FORMAL WRITTEN METHOD OF LONG MULTIPLICATION.

- SOME WILL EVEN: APE to explain WHY
- SOME WILL: Use various ways to solve and check sums.
- MOST WILL: Use column multiplication for 2-digit numbers.
- ALL WILL: Use column multiplication for 1-digit numbers.



APE

MY TURN

Miss Curry has taken her class out for dinner. She has 33 children in total.

- a) 12 children want fish and chips. 9 children want Bacon and egg rolls and the rest want pie and chips. Can you calculate her total?
- b) Would it be cheaper for her to say everybody will have pie and chips?



Work with a partner and share the work.
Use column method carefully.

Hot Food	
Beefburger	£2.70
Cheeseburger	£3.00
Veggie Burger	£2.70
Extra Burger added	£1.50
Jumbo Hot Dog	£2.70
Bacon Roll	£2.70
Bacon & Egg Roll	£3.20
Steak & Kidney Pie	£2.20
Sausage Roll	£2.00
Cornish Pasty	£2.20
Tray of Chips	£1.70
Pie & Chips	£3.50
Fish & Chips	£4.80

YOUR TURN

Miss Curry has taken her class out for dinner. She has 33 children in total.

- a) 15 children want fish and chips. 9 children want Bacon and egg rolls and the rest want pie and chips. Can you calculate her total?
- b) Would it be cheaper for her to say everybody will have pie and chips?

help

Work with a partner and share the work.
Use column method carefully.



Mrs Reynolds has given Miss Curry £108.90 which she says gives each child an equal amount to spend. How much would each child have to spend? What could they buy?

Hot Food	
Beefburger	£2.70
Cheeseburger	£3.00
Veggie Burger	£2.70
Extra Burger added	£1.50
Jumbo Hot Dog	£2.70
Bacon Roll	£2.70
Bacon & Egg Roll	£3.20
Steak & Kidney Pie	£2.20
Sausage Roll	£2.00
Cornish Pasty	£2.20
Tray of Chips	£1.70
Pie & Chips	£3.50
Fish & Chips	£4.80

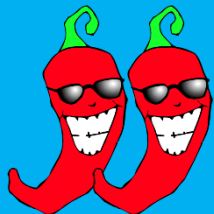
Intelligent Practice



$$\begin{array}{r} 1234 \\ \times 13 \\ \hline \\ \hline \end{array}$$

$$\begin{array}{r} 1234 \\ \times 14 \\ \hline \\ \hline \end{array}$$

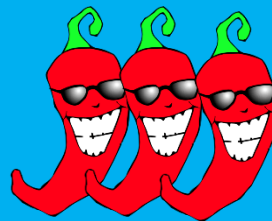
$$\begin{array}{r} 1234 \\ \times 15 \\ \hline \\ \hline \end{array}$$



$$\begin{array}{r} 1234 \\ \times 23 \\ \hline \\ \hline \end{array}$$

$$\begin{array}{r} 1234 \\ \times 33 \\ \hline \\ \hline \end{array}$$

$$\begin{array}{r} 1234 \\ \times 43 \\ \hline \\ \hline \end{array}$$



$$\begin{array}{r} 3456 \\ \times 56 \\ \hline \\ \hline \end{array}$$

$$\begin{array}{r} 5634 \\ \times 73 \\ \hline \\ \hline \end{array}$$

$$\begin{array}{r} 3456 \\ \times 88 \\ \hline \\ \hline \end{array}$$



$$\begin{array}{r} 3456 \\ \times 153 \\ \hline \end{array}$$

How would
you calculate
this sum?

Intelligent Practice



$$\begin{array}{r} 1234 \\ \times 13 \\ \hline \end{array}$$

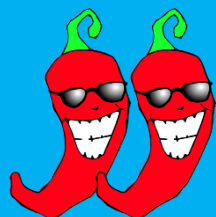
16,042

$$\begin{array}{r} 1234 \\ \times 14 \\ \hline \end{array}$$

17,276

$$\begin{array}{r} 1234 \\ \times 15 \\ \hline \end{array}$$

18,510



$$\begin{array}{r} 1234 \\ \times 23 \\ \hline \end{array}$$

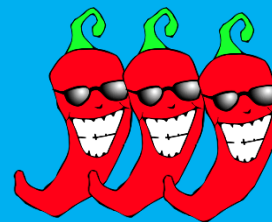
28,382

$$\begin{array}{r} 1234 \\ \times 33 \\ \hline \end{array}$$

40,722

$$\begin{array}{r} 1234 \\ \times 43 \\ \hline \end{array}$$

54,296



$$\begin{array}{r} 3456 \\ \times 56 \\ \hline \end{array}$$

193,536

$$\begin{array}{r} 5634 \\ \times 73 \\ \hline \end{array}$$

411,282

$$\begin{array}{r} 3456 \\ \times 88 \\ \hline \end{array}$$

304,128



$$\begin{array}{r} 3456 \\ \times 153 \\ \hline \end{array}$$

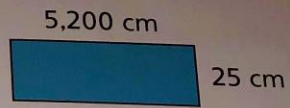
10,368

172,800

345,600

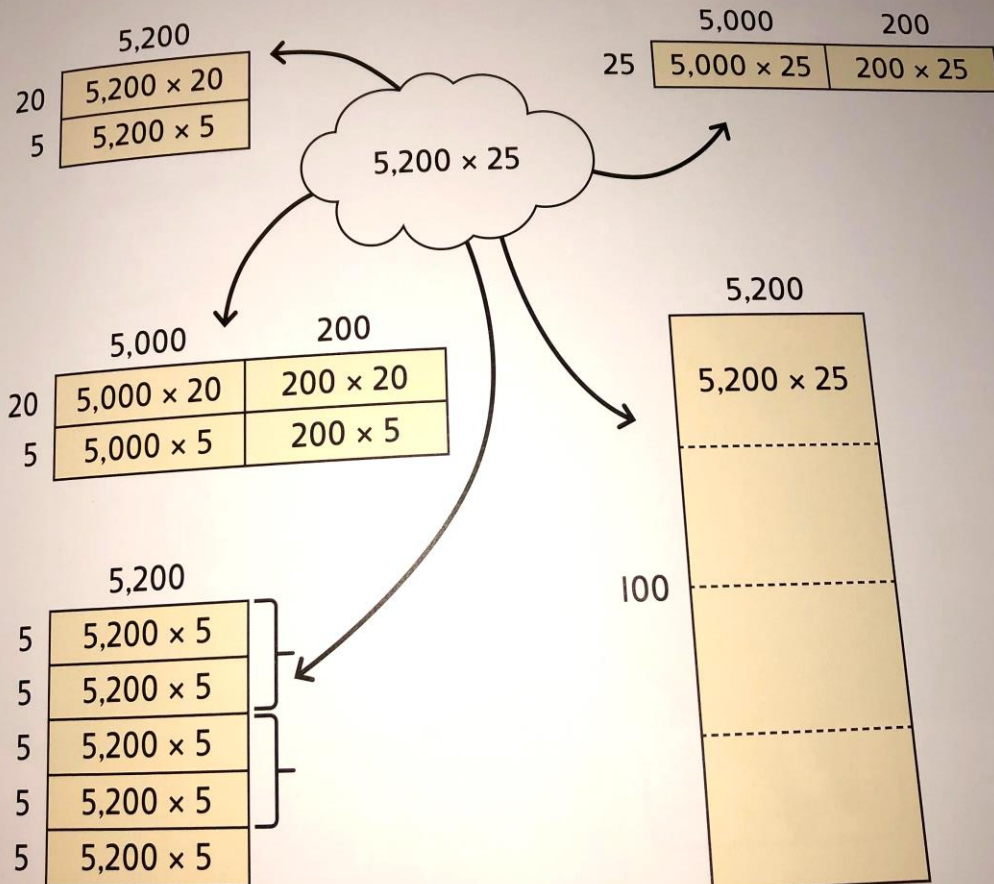
528,768

- 3 Isla is calculating the area of this rectangle.



She uses five different methods to find the solution.

Try out each of Isla's methods. Do they all produce the same answer?



Copy and complete these sums and then check your answer using column multiplication.
Which method is easiest/hardest?

4)

Estimate then work out which of the multiplications is closest to 70 000.

1 Abigail



Estimate is
60 000
6 537
× 12

12 6537

3 Naima



24 3531

5 Sameer



18 2035

2 Caitlin



24 2679

4 Chuy



39 1748

6 Kerry



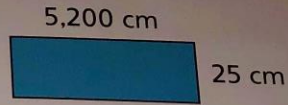
17 3897

DIVE DEEPER 2



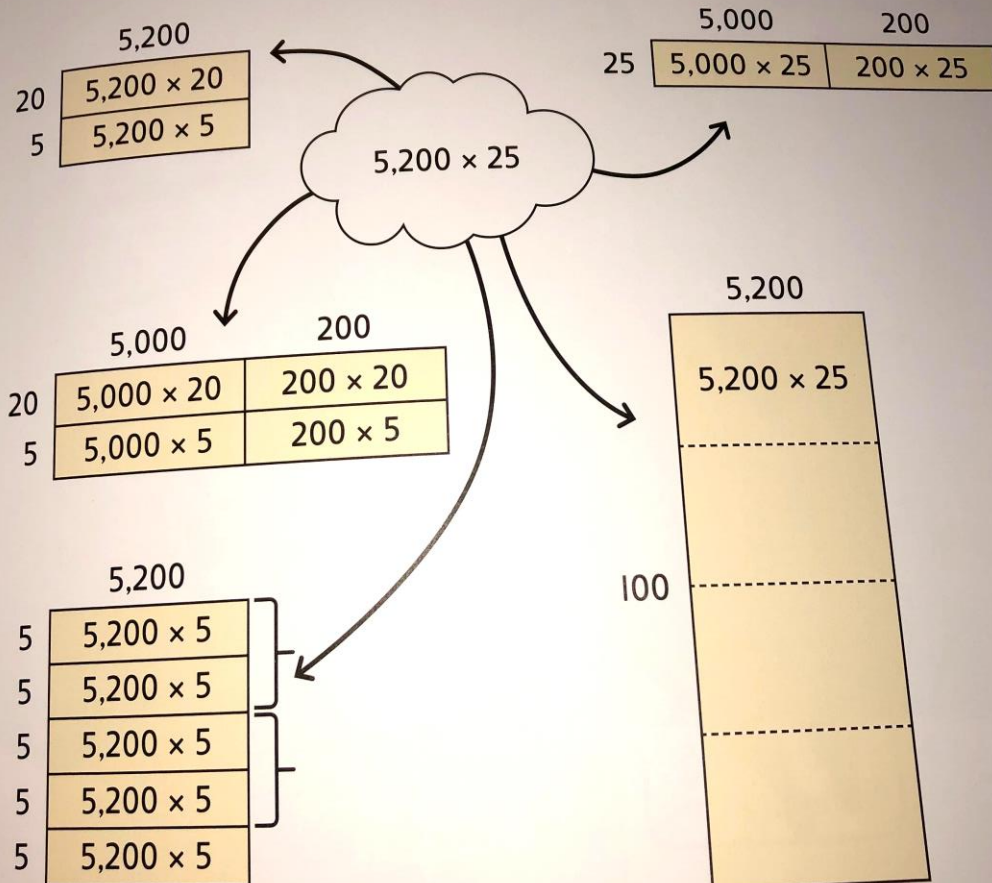
3,62 × 5 = 199,595.

- 3 Isla is calculating the area of this rectangle.



She uses five different methods to find the solution.

Try out each of Isla's methods. Do they all produce the same answer?



Copy and complete these sums and then check your answer using column multiplication.
Which method is easiest/hardest?

4)

Estimate then work out which of the multiplications is closest to 70 000.

1 Abigail



78,444

3 Naima



84,744

5 Sameer



36,630

2 Caitlin



64,296

4 Chuy



68,172

6 Kerry



66,249



DIVE DEEPER 2



$$3,629 \times 55 = 199,595.$$

$$\begin{array}{r}
 1 \ a \ b \ c \ d \ e \\
 \times 3 \\
 \hline
 a \ b \ c \ d \ e \ 1
 \end{array}$$

$$\begin{array}{r}
 2 \ f \ g \ h \ i \ j \\
 \times 3 \\
 \hline
 f \ g \ h \ i \ j \ 2
 \end{array}$$

Can you replace the letters with numbers?
Is there only one solution in each case?