

YEAR 5 PIM - MULTIPLY 3-DIGITS BY 2-DIGITS

Fluency 1

The 6 table facts needed are:

7 x 5, 3 x 5, 2 x 5

7 x 2, 3 x 2, 2 x 2

	2	3	7
×		2	5
1	ļ	8	5
4	Ţ	4	0
5	9	2	5
	1		

Fluency 2

	1	9	6	
×		3	6	
1]	7	6	196 × 6 = 1,176
5	8 [°]	8	0	196 × 30 = 5,880
7	0	5	6	196 × 36 = 7,056
1	1			

Fluency 3

	3	0	8
×		2	8
2	4	6	4
6	ļ	° 6	0
8	6	2	4
	1		

		6	4	4
x			7	2
	1	2	8	8
4	5	0	8	0
4	6	3	6	8
		1		



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Fluency 4

£14,283

Reasoning 1

Modelled DAB Reasoning Responses

D – Anita has made an error.

A – She has not included any zeroes as place holders when multiplying the digits in the tens column.

B – The correct calculation is:

		5	0	3
×			3	3
	1	5	0	9
1	5	0	9	0
1	6	5	9	9

Reasoning 2

Modelled DAB Reasoning Response

D – One of the calculations is quicker to calculate.

 $A - 819 \times 54$ is quicker to calculate using the column method than 54×819 .

B – Less steps are needed to multiply 819 by tens and ones than to multiply 54 by hundreds, tens and ones.

		8	1	9
×			5	4
	3	2	7	6
4	0	9	3 5	0
4	4	2	2	6
	1	4		

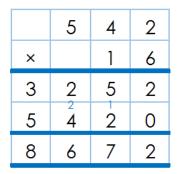
			5	4
×		8	1	9
		4	8	6
		5	8 3 4	0
4	3	2	0	0
4	4	2	2	6
	1	1		



Reasoning 3

Modelled DAB Reasoning Response

- **D** Alfie is incorrect.
- A The numbers that are missing are not both ones.
- **B** The tens value is one but the ones value is six.



Download our 'DAB' posters to support reasoning in your classroom:

https://www.deepeningunderstanding.co.uk/product/dab-reasoning-posters/

Problem Solving 1

There are multiple solutions for challenge 2.

Challenge 1: 843 x 76 = 64,068

Challenge 2: Answers may include 243 x 67 = 16,281

Challenge 3: 134 x 67 = 8,978

