



DEEPENING UNDERSTANDING ANSWER SHEET

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

Fluency 1

The 6 table facts needed are:

7×5 , 3×5 , 2×5

7×2 , 3×2 , 2×2

	2	3	7
×		2	5
1	1	8	5
4	7	4	0
5	9	2	5

Fluency 2

	1	9	6
×		3	6
1	1	7	6
5	8	8	0
7	0	5	6

$$196 \times 6 = 1,176$$

$$196 \times 30 = 5,880$$

$$196 \times 36 = 7,056$$

Fluency 3

	3	0	8
×		2	8
2	4	6	4
6	1	6	0
8	6	2	4

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



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 – 819×54 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	5	0
4	4	2	2	6
	1	4		

			5	4
×		8	1	9
		4	8	6
		5	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.

	5	4	2
×		1	6
3	2	5	2
5	4	2	0
8	6	7	2

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: $843 \times 76 = 64,068$

Challenge 2: Answers may include $243 \times 67 = 16,281$

Challenge 3: $134 \times 67 = 8,978$

