

Varied Fluency

Step 5: Multiply 4 Digits by 2 Digits

Teaching note: We have included grids for column multiplication and recommend that this resource is printed in colour or greyscale.

National Curriculum Objectives:

Mathematics Year 5: (5C6a) [Multiply and divide numbers mentally drawing upon known facts](#)

Mathematics Year 5: (5C7a) [Multiply numbers up to 4 digits by a one- or two-digit number using a formal written method, including long multiplication for two-digit numbers](#)

Differentiation:

Developing Questions to support multiplying 4-digit numbers by 2-digit numbers using the fully expanded method with no exchanges.

Expected Questions to support multiplying 4-digit numbers by 2-digit numbers using a formal multiplication method including exchanges.

Greater Depth Questions to support multiplying 4-digit numbers by 2-digit numbers using a formal multiplication method including exchanges where the numbers in the questions are incomplete.

More [Year 5 Multiplication and Division](#) resources.

Did you like this resource? Don't forget to [review](#) it on our website.

Multiply 4 Digits by 2 Digits

1b. Solve the calculation below using the fully expanded method.

(1 x 3)	
(1 x 10)	
(1 x 300)	
(1 x 1,000)	
(20 x 3)	
(20 x 10)	
(20 x 300)	
(20 x 1,000)	
Total	

(3 x 2)
(3 x 10)
(3 x 100)
(3 x 2,000)
(20 x 2)
(20 x 10)
(20 x 100)
(20 x 2,000)
Total



VF



VF

2b. Match the calculations to the correct answers.

1. **49,464**

2. 45,232

3. **25,692**

4. 23,254

1. **49,651**

2. 68,442

3. **86,961**

4. **65,961**



VF



VF

3b. True or false?

$$1,223 \times 13 = 1,224 \times 12$$



VF



VF

Multiply 4 Digits by 2 Digits

Multiply 4 Digits by 2 Digits

4a. Solve the calculation using a formal multiplication method.

		3	8	0	2
x				2	3



VF

4b. Solve the calculation using a formal multiplication method.

		6	1	2	4
x				3	1



VF

5a. Match the calculations to the correct answers.

- A. 4,242 x 231. 50,904
- B. 4,242 x 122. 77,064
- C. 2,424 x 253. 97,566
- D. 6,422 x 124. 60,600



VF

5b. Match the calculations to the correct answers.

- A. 3,212 x 341. 78,608
- B. 2,312 x 252. 57,800
- C. 2,312 x 343. 48,180
- D. 3,212 x 154. 109,208



VF

6a. True or false?

7,121 x 32 = 7,132 x 21



VF

6b. True or false?

2,112 x 34 < 3,322 x 22



VF

Multiply 4 Digits by 2 Digits

7a. Find the missing digits and complete the calculations.

A.

		2		3	2
x				3	
		2	4	3	2
	7				

B. $2,432 \times 3\boxed{} = 7\boxed{}, 824$

Which gives the bigger answer?



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Multiply 4 Digits by 2 Digits

7b. Find the missing digits and complete the calculations.

A.

		2	5		1
x				2	6
			5		6
	5	0	2		

B. $2,51\boxed{} \times 26 = 65,4\boxed{}6$

Which gives the bigger answer?



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8a. Use the digit cards to complete the calculations. Match the calculations to the correct answer.

2 1 1

- A. $9,212 \times 3\boxed{}$ 1. $291,584$
- B. $9,112 \times 3\boxed{}$ 2. $285,572$
- C. $9,122 \times 3\boxed{}$ 3. $282,782$



VF

8b. Use the digit cards to complete the calculations. Match the calculations to the correct answer.

3 2 3

- A. $5,232 \times 4\boxed{}$ 1. $224,589$
- B. $5,223 \times 4\boxed{}$ 2. $228,889$
- C. $5,323 \times 4\boxed{}$ 3. $219,744$



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9a. Complete the statement using the digit cards to make the statement correct.

$8\boxed{}0\boxed{}\boxed{} \times 13 < 8\boxed{}6\boxed{}\boxed{} \times 12$

8 7 1



VF

9b. Complete the statement using the digit cards to make the statement correct.

$8\boxed{}2\boxed{}\boxed{}0 \times 68 < \boxed{}\boxed{}6\boxed{}9\boxed{}9 \times 65$

0 6 8



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Varied Fluency Multiply 4 Digits by 2 Digits

Developing

- 1a. $1,313 \times 21 = 27,573$
 2a. A and 2; B and 1; C and 4; D and 3
 3a. True

Expected

- 4a. $3,802 \times 23 = 87,446$
 5a. A and 3; B and 1; C and 4; D and 2
 6a. False, $7,121 \times 32 = 227,872$ and
 $7,132 \times 21 = 149,772$ therefore
 $7,121 \times 32 > 7,132 \times 21$.

Greater Depth

7a.

A.

		2	4	3	2
	x			3	1
		2	4	3	2
7		2	9	6	0
1		7	5	3	9
		1			

B. $2,432 \times 32 = 77,824$ so B gives the bigger answer.

8a. A and 2 ($9,221 \times 31$);
 B and 1 ($9,112 \times 32$);
 C and 3 ($9,122 \times 31$)

9a. $8,001 \times 13 < 8,670 \times 12$ or
 $8,001 \times 13 < 8,680 \times 12$

Varied Fluency Multiply 4 Digits by 2 Digits

Developing

- 1b. $2,112 \times 23 = 48,576$
 2b. A and 4; B and 2; C and 1; D and 3
 3b. False. $1,223 \times 13 = 15,899$ and
 $1,224 \times 12 = 14,688$ therefore
 $1,223 \times 13 > 1,224 \times 12$.

Expected

- 4b. $6,124 \times 31 = 189,844$
 5b. A and 4; B and 2; C and 1; D and 3
 6b. True

Greater Depth

7b.

A.

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

B. $2,516 \times 26 = 65,416$ so B gives the bigger answer.

8b. A and 3 ($5,232 \times 42$);
 B and 1 ($5,223 \times 43$);
 C and 2 ($5,323 \times 43$)

9b. $8,200 \times 68 < 8,699 \times 65$