

Varied Fluency

Step 4: Multiply 3 Digits by 2 Digits

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 3-digit numbers by 2-digit numbers using the fully expanded method with no exchanges. Includes multiplication to find area and solving 1-step or 2-step problems.

Expected Questions to support multiplying 3-digit numbers by 2-digit numbers using a formal multiplication method including exchanges. Includes multiplication to find area and solving 2-step problems.

Greater Depth Questions to support multiplying 3-digit numbers by 2-digit numbers using a formal multiplication method including exchanges where the numbers in the questions are incomplete. Includes multiplication to find area and solving 2-step problems.

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

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

Multiply 3 Digits by 2 Digits

Multiply 3 Digits by 2 Digits

4a. Use the formal multiplication method to complete the calculation below.

		1	6	2
x			4	2
<hr/>				
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★ $162 \times 42 = \square$

VF

4b. Use the formal multiplication method to complete the calculation below.

		3	4	5
x			3	4
<hr/>				
<hr/>				
<hr/>				

★ $345 \times 34 = \square$

VF

5a. Complete the calculations below.

A.

	1	0	1
x		4	2
<hr/>			
<hr/>			
<hr/>			

B.

	3	1	6
x		1	2
<hr/>			
<hr/>			
<hr/>			

★ Which has the larger answer?

VF

5b. Complete the calculations below.

A.

	2	1	6
x		3	2
<hr/>			
<hr/>			
<hr/>			

B.

	2	0	7
x		3	5
<hr/>			
<hr/>			
<hr/>			

★ Which has the larger answer?

VF

6a. Michael says,



My curtains are twice as big as the window.

63cm



122cm

	1	2	2
x		6	3
<hr/>			
<hr/>			
<hr/>			

★ What is the area of his curtains?

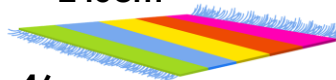
VF

6b. Aleema says,



My room is twice the size of the rug.

245cm



46cm

	2	4	5
x		4	6
<hr/>			
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★ What is the area of her room?

VF

Multiply 3 Digits by 2 Digits

Multiply 3 Digits by 2 Digits

7a. Use the formal multiplication method to complete the calculation below.

		3		6
x			4	
<hr/>				
			1	2
			₁	₁
	4		4	
	₂		₂	
<hr/>				
1	4	9	5	2
<hr/>				

★ $3 \square 6 \times 4 \square = 14,952$ VF

7b. Use the formal multiplication method to complete the calculation below.

		4	8	
x				3
<hr/>				
	1		4	6
	4		0	
	₄		₁	
<hr/>				
2	5	5	4	6
<hr/>				

★ $48 \square \times \square 3 = 25,546$ VF

8a. Complete the calculations below.

A.

	1		3
x		5	1
<hr/>			
		2	3
6		5	
₁		₁	
<hr/>			
<hr/>			

B.

	3	1	2
x		2	
<hr/>			
1	8	7	
		₁	
6	2		
<hr/>			
1	1		
<hr/>			

★ Which has the larger answer? VF

8b. Complete the calculations below.

A.

		1	7
x		1	4
<hr/>			
2			
			₂
6	1		
<hr/>			
1			
<hr/>			

B.

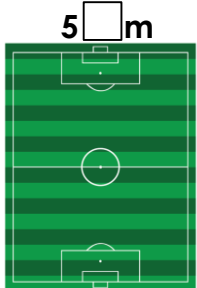
		5	3	1
x				9
<hr/>				
				₂
5		1		
<hr/>				
1				
<hr/>				

★ Which has the larger answer? VF

9a. Saura says,



The school field is twice as big as the football pitch.



109m

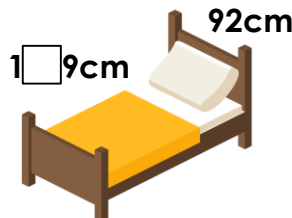
		1	0	9
x			5	
<hr/>				
			7	
			₇	
		4		
		₄		
<hr/>				
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★ What is the area of the field? VF

9b. Harees says,



My rug is twice the size of my bed.



		1		9
x			9	2
<hr/>				
		3		
		₁		₁
7	0			
₈	₈			
<hr/>				
<hr/>				

★ What is the area of his rug? VF

Varied Fluency
Multiply 3 Digits by 2 Digits

Developing

1a. **9,951**

2a. **A. 6,496; B. 6,594.**

The larger answer is B.

3a. **37,908cm²**

Expected

4a. **6,804**

5a. **A. 4,242; B. 3,792.**

The larger answer is A.

6a. **15,372cm².**

Greater Depth

7a. **$356 \times 42 = 14,952$**

8a. **A. $123 \times 51 = 6,273$;**

B. $312 \times 26 = 8,112$. The larger answer is B.

9a. **12,644cm².**

Varied Fluency
Multiply 3 Digits by 2 Digits

Developing

1b. **6,688**

2b. **A. 11,880; B. 3,596.**

The larger answer is A.

3b. **17,892cm²**

Expected

4b. **11,730**

5b. **A. 6,912; B. 7,245.**

The larger answer is B.

6b. **False. The area of the window is 11,270cm².**

Greater Depth

7b. **$482 \times 53 = 25,546$**

8b. **A. $617 \times 14 = 8,638$;**

B. $531 \times 19 = 10,089$. The larger answer is B.

9b. **34,776cm².**