

# Homework/Extension

## Step 4: Multiply 3-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:

Questions 1, 4 and 7 (Varied Fluency)

**Developing** Match the calculations to the correct answers. Calculations use fully expanded method and require no exchanges.

**Expected** Match the calculations to the correct answers. Calculations use a formal multiplication method and require up to two exchanges.

**Greater Depth** Match the calculations to the correct answers. Calculations use a formal multiplication method where the numbers in the questions are incomplete and require up to two exchanges.

Questions 2, 5 and 8 (Varied Fluency)

**Developing** Complete each number statement using  $<$ ,  $>$  or  $=$ . Calculations require no exchanges.

**Expected** Complete each number statement using  $<$ ,  $>$  or  $=$ . Calculations require up to two exchanges.

**Greater Depth** Complete each calculation to make each statement correct. Calculations are incomplete and require up to two exchanges.

Questions 3, 6 and 9 (Reasoning and Problem Solving)

**Developing** Calculate the area of the compound shape. Calculations use fully expanded method and require no exchanges.

**Expected** Calculate the area of the compound shape. Calculations use a formal multiplication method and require up to two exchanges.

**Greater Depth** Calculate the area of the compound shape. Calculations use a formal multiplication method where the numbers in the questions are incomplete and require up to two exchanges.

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

1. Match the calculation to the correct answer.

<p>A.</p> <table border="0" style="margin-left: 20px;"> <tr><td></td><td></td><td>3</td><td>2</td><td>1</td></tr> <tr><td></td><td>x</td><td></td><td>1</td><td>4</td></tr> <tr><td colspan="5"><hr/></td></tr> </table> <p>(1 x 4) (20 x 4) (300 x 4) (1 x 10) (20 x 10) (300 x 10)</p>			3	2	1		x		1	4	<hr/>					<p>B.</p> <table border="0" style="margin-left: 20px;"> <tr><td></td><td></td><td>2</td><td>0</td><td>3</td></tr> <tr><td></td><td>x</td><td></td><td>2</td><td>1</td></tr> <tr><td colspan="5"><hr/></td></tr> </table> <p>(3 x 1) (0 x 1) (200 x 1) (3 x 20) (0 x 20) (200 x 20)</p>			2	0	3		x		2	1	<hr/>					<p>C.</p> <table border="0" style="margin-left: 20px;"> <tr><td></td><td></td><td>3</td><td>1</td><td>2</td></tr> <tr><td></td><td>x</td><td></td><td>3</td><td>2</td></tr> <tr><td colspan="5"><hr/></td></tr> </table> <p>(2 x 2) (10 x 2) (300 x 2) (2 x 30) (10 x 30) (300 x 30)</p>			3	1	2		x		3	2	<hr/>				
		3	2	1																																											
	x		1	4																																											
<hr/>																																															
		2	0	3																																											
	x		2	1																																											
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		3	1	2																																											
	x		3	2																																											
<hr/>																																															
<b>4,494</b>	<b>9,984</b>	<b>4,263</b>																																													



VF  
HW/Ext

2. Complete each number statement using >, < or =.

A. 103 x 14  1,314

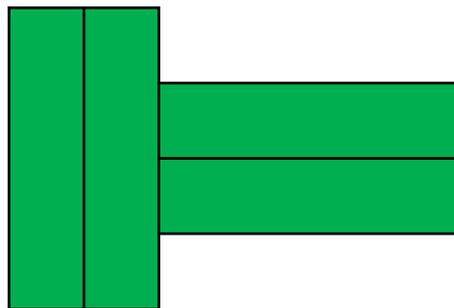
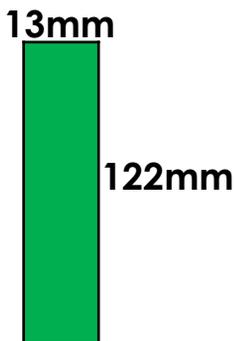
B. 105 x 11  2,524

C. 315 x 12  3,780



VF  
HW/Ext

3. Using the measurements of a single rectangle, calculate the area of the compound shape.



	x			
<hr/>				
				(__ x __)
				(__ x __)
				(__ x __)
				(__ x __)
				(__ x __)
				(__ x __)
<hr/>				



Not to scale

RPS  
HW/Ext

# Multiply 3-Digits by 2-Digits

4. Match the calculation to the correct answer.

A.

		5	7	3
	x		3	4
<hr/>				
<hr/>				

13,344

B.

		4	1	7
	x		3	2
<hr/>				
<hr/>				

4,480

C.

		2	8	0
	x		1	6
<hr/>				
<hr/>				

19,482



VF  
HW/Ext

5. Complete each number statement using >, < or =.

A. 206 x 13 ○ 107 x 22

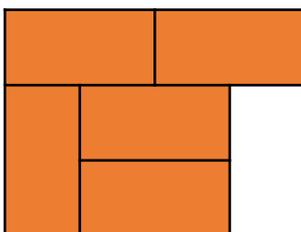
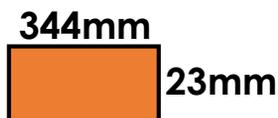
B. 328 x 32 ○ 234 x 52

C. 405 x 16 ○ 436 x 23



VF  
HW/Ext

6. Using the measurements of a single rectangle, calculate the area of the compound shape.



	x			
<hr/>				
<hr/>				



Not to scale

RPS  
HW/Ext

# Multiply 3-Digits by 2-Digits

7. Use the clues to complete the calculations below. Match them to the correct answer.

A.

		6	5	4
	x		3	<input type="text"/>
		<hr/>		
				8
<hr/>				

16,128

B.

		5	<input type="text"/>	4
	x		3	2
		<hr/>		
				0
<hr/>				

20,928

C.

		2	8	<input type="text"/>
	x		6	2
		<hr/>		
				2
<hr/>				

17,422



VF  
HW/Ext

8. Complete each calculation to make each statement correct.

A.  $360 \times 24 = 2\text{}0 \times 32$

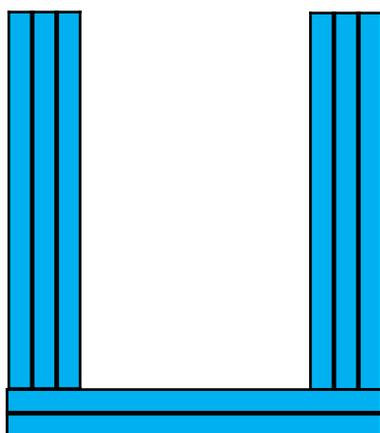
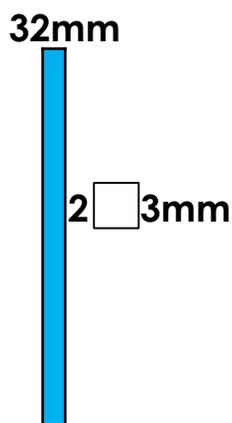
B.  $282 \times 14 = \text{}88 \times 21$

C.  $831 \times 24 = 55\text{} \times 36$



VF  
HW/Ext

9. Using the measurements of a single rectangle, calculate the area of the compound shape.



		2	<input type="text"/>	3
	x		3	2
		<hr/>		
				4
<hr/>				



Not to scale

RPS  
HW/Ext

## Homework/Extension Multiply 3-Digits by 2-Digits

### Developing

1. A. 4,494; B. 4,263; C. 9,984
2. A. >, B. <, C. =
3.  $122 \times 13 = 1,586\text{mm}^2$ ;  $1586 \times 4 = 6,344\text{mm}^2$

### Expected

4. A. 19,482; B. 13,344; C. 4,480
5. A. >, B. <, C. <
6.  $344 \times 23 = 7,912\text{mm}^2$ ;  $7912 \times 5 = 39,560\text{mm}^2$

### Greater Depth

7. A. 20,928; B. 16,128; C. 17,422
8. A.  $270 \times 32$ , B.  $188 \times 21$ ,  $554 \times 36$
9.  $223 \times 32 = 7,136\text{mm}^2$ ;  $7,136 \times 8 = 57,088\text{mm}^2$