

Varied Fluency

Step 8: 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 (up to 30). No exchanges.

Expected Questions to support multiplying 3-digit numbers by 2-digit numbers (up to 50). Up to one exchange per calculation.

Greater Depth Questions to support multiplying 3-digit numbers by 2-digit numbers (up to 99). One or more exchanges per calculation.

More [Year 5 and Year 6 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

1a. Use the grid method to complete the calculation below.

x	10	2
200		
0		
1		

201 x 12 =



5 VF

1b. Use the grid method to complete the calculation below.

x	20	2
300		
10		
0		

310 x 22 =



5 VF

2a. Fill in the missing numbers in the calculation below.

$$\begin{array}{r}
 441 \\
 \times 1\boxed{} \\
 \hline
 \boxed{}41 \quad (441 \times 1) \\
 4410 \quad (441 \times 10) \\
 \hline
 \boxed{}8\boxed{}1
 \end{array}$$



5 VF

2b. Fill in the missing numbers in the calculation below.

$$\begin{array}{r}
 303 \\
 \times 1\boxed{} \\
 \hline
 \boxed{}06 \quad (303 \times 2) \\
 3030 \quad (303 \times 10) \\
 \hline
 \boxed{}6\boxed{}6
 \end{array}$$



5 VF

3a. Complete the calculations below.

	5	0	4		3	1	4
x		1	1	x		2	1



Which has the larger answer?

5 VF

3b. Complete the calculations below.

	4	1	2		4	0	1
x		1	1	x		2	2



Which has the larger answer?

5 VF

4a. Use <, > or = to complete the statements.

314 x 21 332 x 11

504 x 12 202 x 13



5 VF

4b. Use <, > or = to complete the statements.

412 x 11 413 x 21

310 x 22 313 x 11



5 VF

Multiply 3-Digits by 2-Digits

Multiply 3-Digits by 2-Digits

5a. Use the grid method to complete the calculation below.

x	30	1
300		
20		
1		

321 x 31 =



5 VF

5b. Use the grid method to complete the calculation below.

x	40	1
200		
10		
3		

213 x 41 =



5 VF

6a. Fill in the missing numbers in the calculation below.

$$\begin{array}{r}
 221 \\
 \times 1\boxed{} \\
 \hline
 \boxed{}63 \\
 2210 \\
 \hline
 \boxed{}8\boxed{}3
 \end{array}$$



5 VF

6b. Fill in the missing numbers in the calculation below.

$$\begin{array}{r}
 313 \\
 \times 2\boxed{} \\
 \hline
 \boxed{}13 \\
 6260 \\
 \hline
 \boxed{}5\boxed{}3
 \end{array}$$



5 VF

7a. Complete the calculations below.

	1	0	1		3	1	6
x		4	2	x		1	2



Which has the larger answer?

5 VF

7b. Complete the calculations below.

	2	1	2		2	0	1
x		3	2	x		3	5



Which has the larger answer?

5 VF

8a. Use <, > or = to complete the statements.

221 x 13 313 x 13

101 x 43 302 x 22



5 VF

8b. Use <, > or = to complete the statements.

212 x 33 213 x 42

313 x 21 102 x 36



5 VF

Multiply 3-Digits by 2-Digits

Multiply 3-Digits by 2-Digits

9a. Use the grid method to complete the calculation below.

x	60	2
100		
10		
2		

112 x 62 =



5 VF

9b. Use the grid method to complete the calculation below.

x	50	1
200		
10		
1		

211 x 51 =



5 VF

10a. Fill in the missing numbers in the calculation below.

$$\begin{array}{r}
 302 \\
 \times 3\ \square \\
 \hline
 \square 04 \\
 \square 06\ \square \\
 \hline
 \square 6\ \square 4
 \end{array}$$



5 VF

10b. Fill in the missing numbers in the calculation below.

$$\begin{array}{r}
 202 \\
 \times 3\ \square \\
 \hline
 \square 08 \\
 \square 06\ \square \\
 \hline
 \square 8\ \square 8
 \end{array}$$



5 VF

11a. Complete the calculations below.

	1	2	3			3	1	2
x		5	1		x		2	6



Which has the larger answer?

5 VF

11b. Complete the calculations below.

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



Which has the larger answer?

5 VF

12a. Use <, > or = to complete the statements.

112 x 62 407 x 51

121 x 71 332 x 32



5 VF

12b. Use <, > or = to complete the statements.

164 x 53 204 x 28

133 x 72 211 x 51



5 VF

Varied Fluency Multiply 3-Digits by 2-Digits

Developing

1a. **2,412**

x	10	2
200	2,000	400
0	0	0
1	10	2

2a. $441 \times 11 = 441 + 4,410 = 4,851$

3a. $504 \times 11 = 5,544$; $314 \times 21 = 6,594$;
 314×21 has the larger answer.

4a. $6,594 > 3,652$; $6,048 > 2,626$

Expected

5a. **9,951**

x	30	1
300	9,000	300
20	600	20
1	30	1

6a. $221 \times 13 = 663 + 2,210 = 2,873$

7a. $101 \times 42 = 4,242$; $316 \times 12 = 3,792$;
 101×42 has the larger answer.

8a. $2,873 < 4,069$; $4,343 < 6,644$

Greater Depth

9a. **6,944**

x	60	2
100	6,000	200
10	600	20
2	120	4

10a. $302 \times 32 = 604 + 9,060 = 9,664$

11a. $123 \times 51 = 6,273$; $312 \times 26 = 8,112$;
 312×26 has the larger answer.

12a. $6,944 < 20,757$; $8,591 < 10,624$

Varied Fluency Multiply 3-Digits by 2-Digits

Developing

1b. **6,820**

x	20	2
300	6,000	600
10	200	20
0	0	0

2b. $303 \times 12 = 606 + 3,030 = 3,636$

3b. $412 \times 11 = 4,532$; $401 \times 22 = 8,822$;
 402×22 has the larger answer.

4b. $4,532 < 8,673$; $6,820 > 3,443$

Expected

5b. **8,733**

x	40	1
200	8,000	200
10	400	10
3	120	3

6b. $313 \times 21 = 313 + 6,260 = 6,573$

7b. $212 \times 32 = 6,784$; $201 \times 35 = 7,035$;
 201×35 has the larger answer.

8b. $6,996 < 8,946$; $6,573 > 3,672$

Greater Depth

9b. **10,761**

x	50	1
200	10,000	200
10	500	10
1	50	1

10b. $202 \times 34 = 808 + 6,060 = 6,868$

11b. $206 \times 29 = 5,974$ and $164 \times 52 = 8,528$;
 164×52 has the larger answer.

12b. $8,692 > 5,712$; $9,576 < 10,761$