

Teaching Long Multiplication

Worksheets for multiplying up to 4-digits by 2-digits

KS2

Teaching Long Multiplication - Contents

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Resource instructions

Read the accompanying blog on Third Space Learning before using the resources provided.

Note:

'multiplicand' is a quantity which is to be multiplied by another.

How to use the worksheets below

1. Print out the worksheet, with 1 sheet covering every 2 pupils/groups.
2. Cut the worksheet in half (the questions are on there twice to save paper).
3. Hand the sheets out to your class, and get them to work through the questions in their maths books.
4. Watch them solve the problems using the method they have just learned!
5. Either hand out the answer sheet provided, or go through the answers on the whiteboard, opening them up to discussion.

Multiplying 2-digit by 2-digit

Instructions

1. Lay out the calculation in columns
2. Ones times multiplicand
3. Tens times multiplicand
4. Add the products

$$\begin{array}{r}
 54 \\
 \times 32 \\
 \hline
 108 \quad (54 \times 2) \\
 1620 \quad (54 \times 30) \\
 \hline
 \underline{1728}
 \end{array}$$

	A		B		C
1)	45 x 14 =	1)	27 x 19 =	1)	50 x 38 =
2)	57 x 15 =	2)	36 x 31 =	2)	68 x 49 =
3)	31 x 25 =	3)	47 x 23 =	3)	37 x 26 =
4)	46 x 21 =	4)	62 x 25 =	4)	93 x 57 =
5)	33 x 23 =	5)	55 x 42 =	5)	47 x 77 =

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4)	46 x 21 =	4)	62 x 25 =	4)	93 x 57 =
5)	33 x 23 =	5)	55 x 42 =	5)	47 x 77 =

Multiplying 2-digit by 2-digit -

The answers

A

1) $45 \times 14 = 630$

2) $57 \times 15 = 855$

3) $31 \times 25 = 775$

4) $46 \times 21 = 966$

5) $33 \times 23 = 759$

B

1) $27 \times 19 = 513$

2) $36 \times 31 = 1,116$

3) $47 \times 23 = 1,081$

4) $62 \times 25 = 1,550$

5) $55 \times 42 = 2,310$

C

1) $50 \times 38 = 1,900$

2) $68 \times 49 = 3,332$

3) $37 \times 26 = 962$

4) $93 \times 57 = 5,301$

5) $47 \times 77 = 3,619$

Multiplying 3-digit by 2-digit

Instructions

1. Lay out the calculation in columns
2. Ones times multiplicand
3. Tens times multiplicand
4. Add the products

$$\begin{array}{r}
 154 \\
 \times 32 \\
 \hline
 308 \quad (154 \times 2) \\
 \\
 4620 \quad (154 \times 30) \\
 \hline
 4928
 \end{array}$$

	A		B		C
1)	243 x 13 =	1)	249 x 17 =	1)	407 x 35 =
2)	417 x 15 =	2)	315 x 26 =	2)	628 x 46 =
3)	314 x 25 =	3)	492 x 34 =	3)	317 x 67 =
4)	426 x 23 =	4)	528 x 35 =	4)	536 x 59 =
5)	386 x 35 =	5)	753 x 52 =	5)	734 x 63 =

Multiplying 3-digit by 2-digit

Instructions

1. Lay out the calculation in columns
2. Ones times multiplicand
3. Tens times multiplicand
4. Add the products

$$\begin{array}{r}
 154 \\
 \times 32 \\
 \hline
 308 \quad (154 \times 2) \\
 \\
 4620 \quad (154 \times 30) \\
 \hline
 4928
 \end{array}$$

	A		B		C
1)	243 x 13 =	1)	249 x 17 =	1)	407 x 35 =
2)	417 x 15 =	2)	315 x 26 =	2)	628 x 46 =
3)	314 x 25 =	3)	492 x 34 =	3)	317 x 67 =
4)	426 x 23 =	4)	528 x 35 =	4)	536 x 59 =
5)	386 x 35 =	5)	753 x 52 =	5)	734 x 63 =

Multiplying 3-digit by 2-digit -

The answers

A

1) $243 \times 13 = 3,159$

2) $417 \times 15 = 6,255$

3) $314 \times 25 = 7,850$

4) $426 \times 23 = 9,798$

5) $386 \times 35 = 13,510$

B

1) $249 \times 17 = 4,233$

2) $315 \times 26 = 8,190$

3) $492 \times 34 = 16,728$

4) $528 \times 35 = 18,480$

5) $753 \times 52 = 39,156$

C

1) $407 \times 35 = 14,245$

2) $628 \times 46 = 28,888$

3) $317 \times 67 = 21,239$

4) $536 \times 59 = 31,624$

5) $734 \times 63 = 46,242$

Multiplying 4-digit by 2-digit

Instructions

1. Lay out the calculation in columns
2. Ones times multiplicand
3. Tens times multiplicand
4. Add the products

$$\begin{array}{r}
 2154 \\
 \times 32 \\
 \hline
 4308 \quad (2154 \times 2) \\
 1 \\
 64620 \quad (2154 \times 30) \\
 11 \\
 \hline
 68928
 \end{array}$$

	A		B		C
1)	1,542 x 15 =	1)	2,458 x 16 =	1)	4,918 x 36 =
2)	3,024 x 13 =	2)	1,796 x 27 =	2)	3,569 x 53 =
3)	2,634 x 24 =	3)	4,260 x 34 =	3)	6,708 x 84 =
4)	3,142 x 23 =	4)	3,086 x 72 =	4)	5,319 x 69 =
5)	5,346 x 37 =	5)	5,935 x 63 =	5)	4,826 x 83 =

Multiplying 4-digit by 2-digit

Instructions

1. Lay out the calculation in columns
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4. Add the products

$$\begin{array}{r}
 2154 \\
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 4308 \quad (2154 \times 2) \\
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 \end{array}$$

	A		B		C
1)	1,542 x 15 =	1)	2,458 x 16 =	1)	4,918 x 36 =
2)	3,024 x 13 =	2)	1,796 x 27 =	2)	3,569 x 53 =
3)	2,634 x 24 =	3)	4,260 x 34 =	3)	6,708 x 84 =
4)	3,142 x 23 =	4)	3,086 x 72 =	4)	5,319 x 69 =
5)	5,346 x 37 =	5)	5,935 x 63 =	5)	4,826 x 83 =

Multiplying 4-digit by 2-digit -

The answers

A

- 1) $1,542 \times 15 = 23,130$
- 2) $3,024 \times 13 = 39,312$
- 3) $2,634 \times 24 = 63,216$
- 4) $3,142 \times 23 = 72,266$
- 5) $5,346 \times 37 = 197,802$

B

- 1) $2,458 \times 16 = 39,328$
- 2) $1,796 \times 27 = 48,492$
- 3) $4,260 \times 34 = 144,840$
- 4) $3,086 \times 72 = 222,192$
- 5) $5,935 \times 63 = 373,905$

C


- 1) $4,918 \times 36 = 177,048$
- 2) $3,569 \times 53 = 189,157$
- 3) $6,708 \times 84 = 563,472$
- 4) $5,319 \times 69 = 367,011$
- 5) $4,826 \times 83 = 400,558$


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