



**THIRD SPACE
LEARNING**

Teaching Long Multiplication

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

5th Grade

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 students/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.

Teaching Long Multiplication

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

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

Group 1

- a) $45 \times 14 =$
- b) $57 \times 15 =$
- c) $31 \times 25 =$
- d) $46 \times 21 =$
- e) $33 \times 23 =$

Group 2

- a) $27 \times 19 =$
- b) $36 \times 31 =$
- c) $47 \times 23 =$
- d) $62 \times 25 =$
- e) $55 \times 42 =$

Group 3

- a) $50 \times 38 =$
- b) $68 \times 49 =$
- c) $37 \times 26 =$
- d) $93 \times 57 =$
- e) $47 \times 77 =$

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Multiplying 2-digit by 2-digit

Answers

Group	Question	Answer
Group 1	a) $45 \times 14 =$ b) $57 \times 15 =$ c) $31 \times 25 =$ d) $46 \times 21 =$ e) $33 \times 23 =$	a) 630 b) 855 c) 775 d) 966 e) 759
Group 2	a) $27 \times 19 =$ b) $36 \times 31 =$ c) $47 \times 23 =$ d) $62 \times 25 =$ e) $55 \times 42 =$	a) 513 b) 1,116 c) 1,081 d) 1,550 e) 2,310
Group 3	a) $50 \times 38 =$ b) $68 \times 49 =$ c) $37 \times 26 =$ d) $93 \times 57 =$ e) $47 \times 77 =$	a) 1,900 b) 3,332 c) 962 d) 5,301 e) 3,619

Teaching Long Multiplication

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

$$\begin{array}{r}
 154 \\
 \times 32 \\
 \hline
 308 \quad (154 \times 2) \\
 1 \\
 4620 \quad (154 \times 30) \\
 \hline
 4928
 \end{array}$$

Group 1

- a) $243 \times 13 =$
- b) $417 \times 15 =$
- c) $314 \times 25 =$
- d) $426 \times 23 =$
- e) $386 \times 35 =$

Group 2

- a) $249 \times 17 =$
- b) $315 \times 26 =$
- c) $492 \times 34 =$
- d) $528 \times 35 =$
- e) $753 \times 52 =$

Group 3

- a) $407 \times 35 =$
- b) $628 \times 46 =$
- c) $317 \times 67 =$
- d) $536 \times 59 =$
- e) $734 \times 63 =$

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

$$\begin{array}{r}
 154 \\
 \times 32 \\
 \hline
 308 \quad (154 \times 2) \\
 1 \\
 4620 \quad (154 \times 30) \\
 \hline
 4928
 \end{array}$$

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Teaching Long Multiplication

Multiplying 3-digit by 2-digit

Answers

Group	Question	Answer
Group 1	a) $243 \times 13 =$ b) $417 \times 15 =$ c) $314 \times 25 =$ d) $426 \times 23 =$ e) $386 \times 35 =$	a) 3,159 b) 6,255 c) 7,850 d) 9,798 e) 13,510
Group 2	a) $249 \times 17 =$ b) $315 \times 26 =$ c) $492 \times 34 =$ d) $528 \times 35 =$ e) $753 \times 52 =$	a) 4,233 b) 8,190 c) 16,728 d) 18,480 e) 39,156
Group 3	a) $407 \times 35 =$ b) $628 \times 46 =$ c) $317 \times 67 =$ d) $536 \times 59 =$ e) $734 \times 63 =$	a) 14,245 b) 28,888 c) 21,239 d) 31,624 e) 46,242

Teaching Long Multiplication

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

$$\begin{array}{r}
 2154 \\
 \times 32 \\
 \hline
 4308 \quad (2,154 \times 2) \\
 64620 \quad (2,154 \times 30) \\
 \hline
 68928
 \end{array}$$

Group 1

- a) $1,542 \times 15 =$
- b) $3,024 \times 13 =$
- c) $2,634 \times 24 =$
- d) $3,142 \times 23 =$
- e) $5,346 \times 37 =$

Group 2

- a) $2,458 \times 16 =$
- b) $1,796 \times 27 =$
- c) $4,260 \times 34 =$
- d) $3,086 \times 72 =$
- e) $5,935 \times 63 =$

Group 3

- a) $4,918 \times 36 =$
- b) $3,569 \times 53 =$
- c) $6,708 \times 84 =$
- d) $5,319 \times 69 =$
- e) $4,826 \times 83 =$

Multiplying 4-digit by 2-digit

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- 2) Ones times multiplicand
- 3) Tens times multiplicand
- 4) Add the products

$$\begin{array}{r}
 2154 \\
 \times 32 \\
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 4308 \quad (2,154 \times 2) \\
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Teaching Long Multiplication




Multiplying 4-digit by 2-digit

Answers

Group	Question	Answer
Group 1	a) $1,542 \times 15 =$ b) $3,024 \times 13 =$ c) $2,634 \times 24 =$ d) $3,142 \times 23 =$ e) $5,346 \times 37 =$	a) 23,130 b) 39,312 c) 63,216 d) 72,266 e) 197,802
Group 2	a) $2,458 \times 16 =$ b) $1,796 \times 27 =$ c) $4,260 \times 34 =$ d) $3,086 \times 72 =$ e) $5,935 \times 63 =$	a) 39,328 b) 48,492 c) 144,840 d) 222,192 e) 373,905
Group 3	a) $4,918 \times 36 =$ b) $3,569 \times 53 =$ c) $6,708 \times 84 =$ d) $5,319 \times 69 =$ e) $4,826 \times 83 =$	a) 177,048 b) 189,157 c) 563,472 d) 367,011 e) 400,558

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-  Aligned to your state's standards
-  Scaffolded learning to close gaps

“We just had our first session and it went great! The kids really liked it and felt like they were learning! One even said he finally felt like math was making sense.”



Michelle Craig, Instructional Coach,
Sherwood Forest Elementary, Washington

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