

Multi-Digit Multiplication - Part 2

1

$$\begin{array}{r} 43 \\ \times 25 \\ \hline \end{array}$$

2

$$\begin{array}{r} 12 \\ \times 12 \\ \hline \end{array}$$

3

$$\begin{array}{r} 237 \\ \times 50 \\ \hline \end{array}$$

4

$$\begin{array}{r} 612 \\ \times 48 \\ \hline \end{array}$$

5

$$\begin{array}{r} 824 \\ \times 316 \\ \hline \end{array}$$

6

$$\begin{array}{r} 1,294 \\ \times 302 \\ \hline \end{array}$$

Multi-Digit Multiplication - Part 2

1

$$\begin{array}{r} 1 \\ 43 \\ \times 25 \\ \hline 215 \\ + 860 \\ \hline 1,075 \end{array}$$

2

$$\begin{array}{r} 12 \\ \times 12 \\ \hline 24 \\ + 120 \\ \hline 144 \end{array}$$

3

$$\begin{array}{r} 13 \\ 237 \\ \times 50 \\ \hline 000 \\ + 11850 \\ \hline 11,850 \end{array}$$

4

$$\begin{array}{r} 1 \\ 612 \\ \times 48 \\ \hline 4896 \\ + 24480 \\ \hline 29,376 \end{array}$$

5

$$\begin{array}{r} 1 \\ 824 \\ \times 316 \\ \hline 4944 \\ 28240 \\ + 247200 \\ \hline 260,384 \end{array}$$

6

$$\begin{array}{r} 21 \\ 1,294 \\ \times 302 \\ \hline 2588 \\ 00000 \\ + 388200 \\ \hline 390,788 \end{array}$$

Multiplying 2-Digit Numbers (with guides)

A-MM2 1

Instructions: Multiply these numbers.

Example

The 2 got carried and then was crossed off after it was added to the answer from 4×1

This 1 got carried during the addition we did to get the final answer

$$\begin{array}{r}
 17 \\
 \times 24 \\
 \hline
 68 \\
 + 340 \\
 \hline
 408
 \end{array}$$

This 1 got carried from multiplying the second bottom digit. ($2 \times 7 = 14$)

1

$$\begin{array}{r}
 23 \\
 \times 12 \\
 \hline
 \\
 + 0 \\
 \hline

 \end{array}$$

2

$$\begin{array}{r}
 12 \\
 \times 35 \\
 \hline
 \\
 + 0 \\
 \hline

 \end{array}$$

3

$$\begin{array}{r}
 18 \\
 \times 13 \\
 \hline
 \\
 + 0 \\
 \hline

 \end{array}$$

4

$$\begin{array}{r}
 42 \\
 \times 16 \\
 \hline
 \\
 + 0 \\
 \hline

 \end{array}$$

5

$$\begin{array}{r}
 47 \\
 \times 26 \\
 \hline
 \\
 + 0 \\
 \hline

 \end{array}$$

6

$$\begin{array}{r}
 42 \\
 \times 58 \\
 \hline
 \\
 + 0 \\
 \hline

 \end{array}$$

Multiplying 2-digit numbers by 3-digit numbers (with guides)

A-MM 2

Instructions: Multiply these numbers.

Example

$$\begin{array}{r}
 \begin{array}{r}
 24 \\
 12 \\
 \hline
 248
 \end{array} \\
 \times 53 \\
 \hline
 1744 \\
 + 12400 \\
 \hline
 13144
 \end{array}$$

Don't forget to cross off the digits you carry from the first answer line after you are finished with them.

1

$$\begin{array}{r}
 186 \\
 \times 43 \\
 \hline
 \\
 + 0 \\
 \hline

 \end{array}$$

2

$$\begin{array}{r}
 507 \\
 \times 83 \\
 \hline
 \\
 + 0 \\
 \hline

 \end{array}$$

3

$$\begin{array}{r}
 612 \\
 \times 37 \\
 \hline
 \\
 + 0 \\
 \hline

 \end{array}$$

4

$$\begin{array}{r}
 429 \\
 \times 35 \\
 \hline
 \\
 + 0 \\
 \hline

 \end{array}$$

5

$$\begin{array}{r}
 722 \\
 \times 56 \\
 \hline
 \\
 + 0 \\
 \hline

 \end{array}$$

6

$$\begin{array}{r}
 365 \\
 \times 24 \\
 \hline
 \\
 + 0 \\
 \hline

 \end{array}$$

Multiplying by a 3-Digit Number (with guides)

A-MM2 3

Instructions: Multiply these numbers.

Example

$$\begin{array}{r}
 21 \\
 11 \\
 11 \\
 11 \\
 \hline
 653 \\
 \times 432 \\
 \hline
 1306 \\
 19590 \\
 + 261200 \\
 \hline
 282096
 \end{array}$$

Because we have 3 answers, there are 3 sets of carried digits.

Remember, our third answer line needs two zeros so that it's 100 times bigger.

1

$$\begin{array}{r}
 172 \\
 \times 325 \\
 \hline
 00 \\
 000 \\
 + 0000 \\
 \hline
 000
 \end{array}$$

2

$$\begin{array}{r}
 637 \\
 \times 204 \\
 \hline
 000 \\
 0000 \\
 + 00000 \\
 \hline
 0000
 \end{array}$$

3

$$\begin{array}{r}
 508 \\
 \times 463 \\
 \hline
 000 \\
 0000 \\
 + 00000 \\
 \hline
 0000
 \end{array}$$

4

$$\begin{array}{r}
 1,217 \\
 \times 539 \\
 \hline
 0000 \\
 00000 \\
 + 000000 \\
 \hline
 00000
 \end{array}$$

Multi-Digit Multiplication Practice

A-MM2 4

Instructions: Multiply these numbers.

$$\begin{array}{r} 1 \\ 2 \\ 48 \\ \times 23 \\ \hline 144 \\ + 960 \\ \hline 1,104 \end{array}$$

$$\begin{array}{r} 2 \\ 37 \\ \times 75 \\ \hline \end{array}$$

$$\begin{array}{r} 3 \\ 98 \\ \times 41 \\ \hline \end{array}$$

$$\begin{array}{r} 4 \\ 52 \\ \times 16 \\ \hline \end{array}$$

$$\begin{array}{r} 5 \\ 86 \\ \times 43 \\ \hline \end{array}$$

$$\begin{array}{r} 6 \\ 135 \\ \times 94 \\ \hline \end{array}$$

$$\begin{array}{r} 7 \\ 605 \\ \times 26 \\ \hline \end{array}$$

$$\begin{array}{r} 8 \\ 514 \\ \times 72 \\ \hline \end{array}$$

$$\begin{array}{r} 9 \\ 371 \\ \times 54 \\ \hline \end{array}$$

Multiplying 2-Digit Numbers (with guides)

A-MM2 1

Instructions: Multiply these numbers.

Example

The 2 got carried and then was crossed off after it was added to the answer from 4×1

This 1 got carried during the addition we did to get the final answer

$$\begin{array}{r} 17 \\ \times 24 \\ \hline 68 \\ + 340 \\ \hline 408 \end{array}$$

This 1 got carried from multiplying the second bottom digit. ($2 \times 7 = 14$)

1

$$\begin{array}{r} 23 \\ \times 12 \\ \hline 46 \\ + 230 \\ \hline 276 \end{array}$$

2

$$\begin{array}{r} 12 \\ \times 35 \\ \hline 60 \\ + 360 \\ \hline 420 \end{array}$$

3

$$\begin{array}{r} 18 \\ \times 13 \\ \hline 54 \\ + 180 \\ \hline 234 \end{array}$$

4

$$\begin{array}{r} 42 \\ \times 16 \\ \hline 252 \\ + 420 \\ \hline 672 \end{array}$$

5

$$\begin{array}{r} 47 \\ \times 26 \\ \hline 282 \\ + 940 \\ \hline 1222 \end{array}$$

6

$$\begin{array}{r} 42 \\ \times 58 \\ \hline 336 \\ + 2100 \\ \hline 2436 \end{array}$$

Multiplying 2-digit numbers by 3-digit numbers (with guides)

A-MM 2

Instructions: Multiply these numbers.

Example

$$\begin{array}{r}
 \begin{array}{c} 24 \\ 12 \end{array} \\
 248 \\
 \times 53 \\
 \hline
 1744 \\
 + 12400 \\
 \hline
 13144
 \end{array}$$

Don't forget to cross off the digits you carry from the first answer line after you are finished with them.

1

$$\begin{array}{r}
 \begin{array}{c} 32 \\ 21 \end{array} \\
 186 \\
 \times 43 \\
 \hline
 558 \\
 + 7440 \\
 \hline
 7998
 \end{array}$$

2

$$\begin{array}{r}
 \begin{array}{c} 5 \\ 2 \end{array} \\
 507 \\
 \times 83 \\
 \hline
 1521 \\
 + 40560 \\
 \hline
 42081
 \end{array}$$

3

$$\begin{array}{r}
 \begin{array}{c} 1 \\ 1 \end{array} \\
 612 \\
 \times 37 \\
 \hline
 4284 \\
 + 18360 \\
 \hline
 22644
 \end{array}$$

4

$$\begin{array}{r}
 \begin{array}{c} 2 \\ 14 \end{array} \\
 429 \\
 \times 35 \\
 \hline
 2145 \\
 + 12870 \\
 \hline
 15015
 \end{array}$$

5

$$\begin{array}{r}
 \begin{array}{c} 11 \\ 11 \end{array} \\
 722 \\
 \times 56 \\
 \hline
 4332 \\
 + 36100 \\
 \hline
 40432
 \end{array}$$

6

$$\begin{array}{r}
 \begin{array}{c} 11 \\ 22 \end{array} \\
 365 \\
 \times 24 \\
 \hline
 1460 \\
 + 7300 \\
 \hline
 8760
 \end{array}$$

Multiplying by a 3-Digit Number (with guides)

A-MM2 3

Instructions: Multiply these numbers.

Example

$$\begin{array}{r}
 \begin{array}{c} 2 \\ 1 \\ 1 \\ 1 \end{array} \\
 653 \\
 \times 432 \\
 \hline
 1306 \\
 19590 \\
 + 261200 \\
 \hline
 282096
 \end{array}$$

Because we have 3 answers, there are 3 sets of carried digits.

Remember, our third answer line needs two zeros so that it's 100 times bigger.

1

$$\begin{array}{r}
 \begin{array}{c} 2 \\ 1 \\ 3 \\ 1 \end{array} \\
 172 \\
 \times 325 \\
 \hline
 860 \\
 3440 \\
 + 51600 \\
 \hline
 55900
 \end{array}$$

2

$$\begin{array}{r}
 1 \\
 18 \\
 637 \\
 \times 204 \\
 \hline
 2548 \\
 0000 \\
 + 127400 \\
 \hline
 129948
 \end{array}$$

3

$$\begin{array}{r}
 \begin{array}{c} 3 \\ 4 \\ 2 \end{array} \\
 508 \\
 \times 463 \\
 \hline
 1524 \\
 30480 \\
 + 203200 \\
 \hline
 235204
 \end{array}$$

4

$$\begin{array}{r}
 1 \quad 3 \\
 116 \\
 1,217 \\
 \times 539 \\
 \hline
 10953 \\
 36510 \\
 + 608500 \\
 \hline
 655963
 \end{array}$$

Multi-Digit Multiplication Practice

A-MM2 4

Instructions: Multiply these numbers.

$$\begin{array}{r}
 1 \\
 2 \\
 48 \\
 \times 23 \\
 \hline
 144 \\
 + 960 \\
 \hline
 1,104
 \end{array}$$

$$\begin{array}{r}
 4 \\
 3 \\
 37 \\
 \times 75 \\
 \hline
 185 \\
 + 2590 \\
 \hline
 2,775
 \end{array}$$

$$\begin{array}{r}
 3 \\
 98 \\
 \times 41 \\
 \hline
 98 \\
 + 3920 \\
 \hline
 4,018
 \end{array}$$

$$\begin{array}{r}
 1 \\
 52 \\
 \times 16 \\
 \hline
 312 \\
 + 520 \\
 \hline
 832
 \end{array}$$

$$\begin{array}{r}
 2 \\
 1 \\
 86 \\
 \times 43 \\
 \hline
 258 \\
 + 3440 \\
 \hline
 3,698
 \end{array}$$

$$\begin{array}{r}
 3 \\
 4 \\
 1 \\
 2 \\
 135 \\
 \times 94 \\
 \hline
 540 \\
 + 12150 \\
 \hline
 12,690
 \end{array}$$

$$\begin{array}{r}
 1 \\
 3 \\
 605 \\
 \times 26 \\
 \hline
 3630 \\
 + 12100 \\
 \hline
 15,730
 \end{array}$$

$$\begin{array}{r}
 2 \\
 514 \\
 \times 72 \\
 \hline
 1028 \\
 + 35980 \\
 \hline
 37,008
 \end{array}$$

$$\begin{array}{r}
 3 \\
 2 \\
 1 \\
 371 \\
 \times 54 \\
 \hline
 1484 \\
 + 18550 \\
 \hline
 20,034
 \end{array}$$