

# A Three-Digit Multiplier, Plus Zeros

The multiplication algorithm works the same with 3-digit numbers. We simply have three partial products to do, and so the multiplication process takes three lines. Lastly add.

$$\begin{array}{r} \phantom{0}26 \\ \mathbf{429} \\ \times \mathbf{227} \\ \hline 3003 \end{array}$$

First you multiply the number by the ones.

$$\begin{array}{r} \phantom{0}1 \\ \mathbf{429} \\ \times \mathbf{227} \\ \hline 3003 \\ \mathbf{8580} \end{array}$$

Then by the tens. Here you need to put a zero in the ones place.

$$\begin{array}{r} \phantom{0}1 \\ \mathbf{429} \\ \times \mathbf{227} \\ \hline 3003 \\ 8580 \\ \mathbf{85800} \end{array}$$

Then by the hundreds. Here you need to put a zero in the ones AND in the hundreds place.

$$\begin{array}{r} 429 \\ \times 227 \\ \hline 3003 \\ 8580 \\ + 85800 \\ \hline 97383 \end{array}$$

Lastly add.

1. Multiply.

a.

$$\begin{array}{r} \phantom{0}191 \\ \times \phantom{0}245 \\ \hline \\ + \\ \hline \end{array}$$

b.

$$\begin{array}{r} \phantom{0}409 \\ \times \phantom{0}228 \\ \hline \\ + \\ \hline \end{array}$$

c.

$$\begin{array}{r} \phantom{0}246 \\ \times \phantom{0}137 \\ \hline \\ + \\ \hline \end{array}$$

d.

$$\begin{array}{r} \phantom{0}815 \\ \times \phantom{0}723 \\ \hline \\ + \\ \hline \end{array}$$

e.

$$\begin{array}{r} \phantom{0}207 \\ \times \phantom{0}803 \\ \hline \\ + \\ \hline \end{array}$$

f.

$$\begin{array}{r} \phantom{0}125 \\ \times \phantom{0}662 \\ \hline \\ + \\ \hline \end{array}$$