

## 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.

$$\begin{array}{r} 26 \\ \underline{429} \\ \times 227 \\ \hline 3003 \end{array}$$

First you multiply the number by the ones.

$$\begin{array}{r} 1 \\ \underline{429} \\ \times 227 \\ \hline 3003 \\ 8580 \end{array}$$

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

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

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.

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

b.

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

c.

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

d.

$$\begin{array}{r} 815 \\ \times 723 \\ \hline \\ - \\ \hline \end{array}$$

e.

$$\begin{array}{r} 207 \\ \times 803 \\ \hline \\ - \\ \hline \end{array}$$

f.

$$\begin{array}{r} 125 \\ \times 662 \\ \hline \\ - \\ \hline \end{array}$$