

Multiply by Two-Digit Numbers

Find. $238 \times 47 = n$ **Step 1:** Multiply by the ones digit.

$$\begin{array}{r} \overset{2}{\cancel{2}}\overset{5}{\cancel{3}}\overset{8}{\cancel{8}} \\ \times 47 \\ \hline 1666 \end{array} \leftarrow 7 \times 238$$

Step 2: Multiply by the tens digit. Start by placing a zero in the ones place.

$$\begin{array}{r} \overset{1}{\cancel{2}}\overset{3}{\cancel{3}}\overset{8}{\cancel{8}} \\ \times 47 \\ \hline 1666 \\ 9520 \end{array} \leftarrow 40 \times 238$$

Step 3: Add the partial products.

$$\begin{array}{r} \overset{1}{\cancel{2}}\overset{3}{\cancel{3}}\overset{8}{\cancel{8}} \\ \times 47 \\ \hline 1666 \\ 9520 \\ \hline 11,186 \end{array}$$

Find each product. Estimate or use a calculator to check.

1. $\begin{array}{r} 33 \\ \times 45 \\ \hline \end{array}$

2. $\begin{array}{r} 68 \\ \times 24 \\ \hline \end{array}$

3. $\begin{array}{r} 81 \\ \times 31 \\ \hline \end{array}$

4. $\begin{array}{r} 75 \\ \times 46 \\ \hline \end{array}$

5. $\begin{array}{r} 83 \\ \times 55 \\ \hline \end{array}$

6. $\begin{array}{r} 67 \\ \times 41 \\ \hline \end{array}$

7. $\begin{array}{r} 74 \\ \times 88 \\ \hline \end{array}$

8. $\begin{array}{r} 185 \\ \times 43 \\ \hline \end{array}$

9. $\begin{array}{r} 803 \\ \times 72 \\ \hline \end{array}$

10. $\begin{array}{r} 387 \\ \times 29 \\ \hline \end{array}$

11. $\begin{array}{r} 798 \\ \times 43 \\ \hline \end{array}$

12. $\begin{array}{r} 909 \\ \times 52 \\ \hline \end{array}$