



Additional Practice 3-6 Multiply Whole Numbers with Zeros

Another Look!

Find the product of 304×23 .

$$\begin{array}{r} 304 \\ \times 23 \\ \hline 912 \\ + 6080 \\ \hline 6,992 \end{array}$$

Step 1: First, multiply 304 by 3 ones.

Step 2: Then, multiply 304 by 2 tens.

Step 3: Finally, add to get the final product.

1. Use the place-value chart at the right to multiply 36×405 . Record each step in the correct place in the chart.



A place-value chart can help keep the numbers in the right place!

thousands period			ones period		
hundred thousands	ten thousands	one thousands	hundreds	tens	ones
		4	0	5	
\times			3	6	

What I Multiply

In 2–9, find each product. Estimate to check for reasonableness.

2.
$$\begin{array}{r} 203 \\ \times 12 \\ \hline \end{array}$$

3.
$$\begin{array}{r} 306 \\ \times 21 \\ \hline \end{array}$$

4.
$$\begin{array}{r} 109 \\ \times 73 \\ \hline \end{array}$$

5.
$$\begin{array}{r} 601 \\ \times 45 \\ \hline \end{array}$$

6.
$$\begin{array}{r} 708 \\ \times 34 \\ \hline \end{array}$$

7.
$$\begin{array}{r} 520 \\ \times 63 \\ \hline \end{array}$$

8.
$$\begin{array}{r} 405 \\ \times 70 \\ \hline \end{array}$$

9.
$$\begin{array}{r} 802 \\ \times 94 \\ \hline \end{array}$$



10. The Memorial Middle School Band has 108 members. They want to buy jackets with the name of the band on the back. What is the difference in the total price of the screen-print and the embroidered jackets?

DATA	Jackets	Price (in \$)
	Screen print name	35
	Embroidered name	48

11. **Critique Reasoning** Wildlife protection groups build bat houses to help save bats. One bat house holds about 300 bats. Larry says that 12 bat houses can hold about 4,500 bats. Do you agree? Explain.

12. **Higher Order Thinking** Replace the a , b , c , and d with the digits 2, 4, 6, 8 to form the greatest product. Each digit can only be used once. Explain your substitutions.

$$\begin{array}{r} a0b \\ \times \quad cd \\ \hline \end{array}$$

13. A packing crate can hold 205 avocados. There were 7,000 avocados picked at a large grove. The owner has 36 packing crates. Does he have enough crates to ship out the avocados? Explain.

14. Sarah found that the product of 49 and 805 is 3,165. How would finding an estimate help her know that the answer is NOT reasonable?

Assessment Practice

15. What is the product?

$$\begin{array}{r} 990 \\ \times 37 \\ \hline \end{array}$$