


Using an Expanded Algorithm

You can use arrays of place-value blocks to multiply.

Find the product for 3×14 .

What You Show	What You Write
$3 \times 10 = 30$ $3 \times 4 = 12$ $30 + 12 = 42$ 	$\begin{array}{r} 14 \\ \times 3 \\ \hline 12 \\ +30 \\ \hline 42 \end{array}$ <p>3 X 4 ones 3 X 1 tens</p>

Draw an array for each problem to find the partial products and the product. Complete the calculation.

1.
$$\begin{array}{r} 18 \\ \times 4 \\ \hline \end{array}$$

2.
$$\begin{array}{r} 21 \\ \times 6 \\ \hline \end{array}$$

3.
$$\begin{array}{r} 17 \\ \times 6 \\ \hline \end{array}$$

4.
$$\begin{array}{r} 11 \\ \times 2 \\ \hline \end{array}$$

5.
$$\begin{array}{r} 23 \\ \times 5 \\ \hline \end{array}$$

6.
$$\begin{array}{r} 14 \\ \times 3 \\ \hline \end{array}$$

7. **Number Sense** What two simpler problems can you use to find 9×38 ? (Hint: think about the tens and ones.)
- _____