

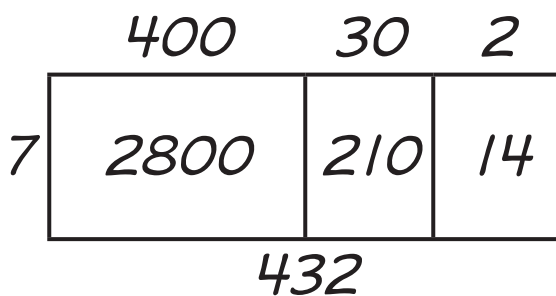
# Multiplying in Parts

In the example, a rectangle was drawn to represent the problem. Then partial-products multiplication was used to record the work in a simpler way. Use partial-products multiplication to solve Problems 1 and 2.



## Example:

### Partitioned Rectangle



### Partial-Products Multiplication

$$\begin{array}{r}
 432 \\
 * 7 \\
 \hline
 2800 \\
 210 \\
 + 14 \\
 \hline
 3,024
 \end{array}$$

①

$$\begin{array}{r}
 48 \\
 * 3 \\
 \hline
 120 \\
 + 24 \\
 \hline
 144
 \end{array}$$

②

$$\begin{array}{r}
 653 \\
 * 8 \\
 \hline
 4800 \\
 400 \\
 + 24 \\
 \hline
 5,224
 \end{array}$$

## Practice

Write the numbers in expanded form.

③ 905,603 9 [100,000s] + 5 [1,000s] + 6 [100s] + 3 [1s]

④ 589,043 5 [100,000s] + 8 [10,000s] + 9 [1,000s] +  
4 [10s] + 3 [1s]

⑤ 2,599,002 2 [1,000,000s] + 5 [100,000s] + 9 [10,000s] +  
9 [1,000s] + 2 [1s]

⑥ 8,003,952 8 [1,000,000s] + 3 [1,000s] + 9 [100s] +  
5 [10s] + 2 [1s]