

# Multiply in Parts 1

**Example 1.** To multiply  $3 \times 46$ , break 46 into two parts: 40 and 6.

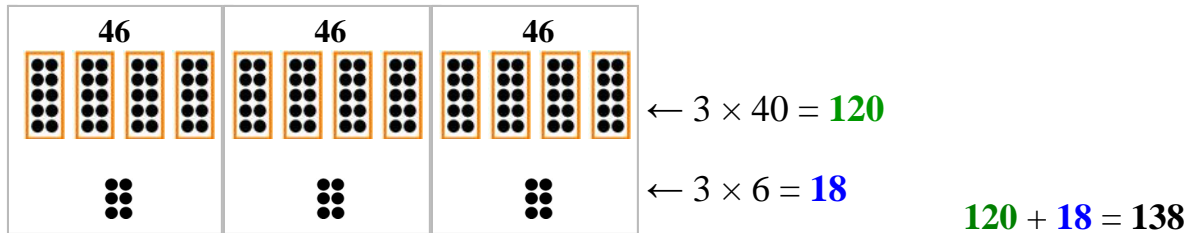
Then multiply those two parts separately by 3:

$3 \times 40$  is 120, and  $3 \times 6$  is 18.

Lastly add these two partial results:  $120 + 18 = 138$ .

$$\begin{array}{c}
 3 \times 46 \\
 \quad \uparrow \\
 \quad (40 + 6) \\
 \hline
 (3 \times 40) \quad \text{and} \quad (3 \times 6)
 \end{array}$$

**Example 2.** This illustration shows the same thing,  $3 \times 46$ , using bundles of ten.



Study these examples. Multiply the tens and ones separately, then add:

$$\begin{array}{r}
 \underline{8 \times 13} \\
 (10 + 3)
 \end{array}$$

$$\begin{array}{l}
 8 \times 10 \text{ and } 8 \times 3 \\
 80 \text{ and } 24 \\
 = 104
 \end{array}$$

$$\begin{array}{r}
 \underline{5 \times 24} \\
 (20 + 4)
 \end{array}$$

$$\begin{array}{l}
 5 \times 20 \text{ and } 5 \times 4 \\
 100 \text{ and } 20 \\
 = 120
 \end{array}$$

$$\begin{array}{r}
 \underline{7 \times 68} \\
 (60 + 8)
 \end{array}$$

$$\begin{array}{l}
 7 \times 60 \text{ and } 7 \times 8 \\
 420 \text{ and } 56 \\
 = 476
 \end{array}$$

1. Multiply the tens and ones separately. Then add to get the final answer.

**a.  $6 \times 27$**   
(20 + 7)

$$\begin{array}{l}
 6 \times \underline{\quad} \text{ and } 6 \times \underline{\quad} \\
 \underline{\quad} \text{ and } \underline{\quad} \\
 = \underline{\quad}
 \end{array}$$

**b.  $5 \times 83$**   
(     +     )

$$\begin{array}{l}
 5 \times \underline{\quad} \text{ and } 5 \times \underline{\quad} \\
 \underline{\quad} \text{ and } \underline{\quad} \\
 = \underline{\quad}
 \end{array}$$

**c.  $9 \times 34$**   
(     +     )

$$\begin{array}{l}
 9 \times \underline{\quad} \text{ and } 9 \times \underline{\quad} \\
 \underline{\quad} \text{ and } \underline{\quad} \\
 = \underline{\quad}
 \end{array}$$

**d.  $3 \times 99$**

$$\begin{array}{l}
 3 \times \underline{\quad} \text{ and } 3 \times \underline{\quad} \\
 \underline{\quad} \text{ and } \underline{\quad} \\
 = \underline{\quad}
 \end{array}$$

**e.  $7 \times 65$**

$$\begin{array}{l}
 7 \times \underline{\quad} \text{ and } 7 \times \underline{\quad} \\
 \underline{\quad} \text{ and } \underline{\quad} \\
 = \underline{\quad}
 \end{array}$$

**f.  $4 \times 58$**

$$\begin{array}{l}
 4 \times \underline{\quad} \text{ and } 4 \times \underline{\quad} \\
 \underline{\quad} \text{ and } \underline{\quad} \\
 = \underline{\quad}
 \end{array}$$