

Box Method Multiplication

Here's an Example: 375
 $\times 56$

✘ Step 1: Break the number apart.

$$\begin{array}{r} 375 \\ \times 56 \end{array} \quad \Rightarrow \quad \begin{array}{r} 300 + 70 + 5 \\ 50 + 6 \end{array}$$

✘ Step 2: Draw a box with grid lines. Write the top numbers on top of the box and the bottom numbers on the side of the box.

	300	70	5
50			
6			

✘ Step 3: Using the grid, multiply the number on the top by the number on the side.

	300	70	5
50	300 x 50 15000	70 x 50 3500	5 x 50 250
6	300 x 6 1800	70 x 6 420	5 x 6 30

Hint:
 To multiply 300 x 50, just multiply 3 x 5, then add in the three zeros.

✘ Step 4: Add the numbers in the boxes.

$$\begin{array}{r} 15000 \\ 3500 \\ 250 \\ 1800 \\ 420 \\ + 30 \\ \hline 21000 \end{array}$$

That's the answer!

One more example...

$$\begin{array}{r} 42 \\ \times 71 \end{array}$$

	40	2
70	40 x 70 2800	2 x 70 140
1	40 x 1 40	2 x 1 2

$$\begin{array}{r} 2800 \\ 140 \\ 40 \\ + 2 \\ \hline 2982 \end{array}$$