Partial Products & Box Method

There are other strategies you can use to solve multiplication problems. You can use the Box Method or the Partial Products.

Box Method

23 x 42

	20	**3**
40	**20** x *40* = *800*	**3** x *40* = *120*
2	**20** x *2* = *40*	**3** x *2* = *6*

800 + 120 + 40 + 6

Step 1: Expand each of the factors you are multiplying.
Step 2: Set up the numbers above the boxes.
Step 3: Multiply the numbers in the rows and columns.
Step 4: Add all of the products found in each of the boxes to get the total.

Partial Products

23 x 42

42 think (40 +2)
X 23 think (20 + 3)
6 (3 x 2)
120 (3 x 40)
40 (20 x 2)
+ 800 (20 x 40)
966

Step 1: Multiply by the ones.
Step 2: Multiply by the tens.
Step 3: List all the partial products.
Step 4: Add all of the partial products together to get the total.