Suppose you want to multiply *two* 2-digit numbers. Let's say 43 x 26. What do you do?

You can expand and use the distributive property, just like you have been doing. BUT BE CAREFUL!

43 x 26 = (40 + 3) x (20 + 6). Now what do you do?

You must multiply BOTH the 20 and the 6 by the 40, AND you must ALSO multiply BOTH the 20 and the 6 by the 3.

This is easy to do using a grid. How does it work?

x	**2_0_**	**6**
4_0_	8_00_	24_0_
3	6_0_	18

43 x 26 = (40+3) x (20+6)

You put the 40 and the 3 in the grid along the left.

You put the 20 and the 6 in the grid along the top.

Now, multiply, and put the products in the boxes:

4_0_ x 2_0_ = 8_00_, so you put 800 in the top left box.

4_0_ x 6 = 24_0_, so you put 240 in the top right box.

3 x 2_0_ = 6_0_, so you put 60 in the bottom left box.

3 x 6 = 18, so you put 18 in the bottom right box.

Finally, you add the four partial products (the numbers in the boxes).

800 + 240 + 60 + 18 = 1,118. (It's easier to add if the numbers are in a column.)

So, **43 x 26 = 1,118**.   Do you see why?

1. Write in expanded form, but do *not* multiply:

    43 x 17 =

    29 x 45 =

    20 x 82 =

2. Expand and multiply using the grid:
Use the space under (and next to) the grid to work in, but put *only* the
products from your multiplication in the grid-boxes— just like in the example.

x	10	9
50		
3		

53 x 19 = _____

x	40	8
50		
4		

54 x 48 = _____

72 x 35 = _____

x

39 x 43 = _____

x

65 x 60 = _____

x

37 x 61 = _____

x