

Break it Up: Distributive Property 1

The **distributive property** is a tool to make multiplication with larger numbers easier.

To use the distributive property:
Break one factor into two addends,
multiply both addends by the other
factor, and add together both products.

Break up
the bigger
number
into two
addends

$$\begin{aligned}
 &16 \times 5 \\
 &\swarrow \\
 &(10 + 6) \times 5 \\
 &(10 \times 5) + (6 \times 5) \\
 &50 + 30 = 80
 \end{aligned}$$

$$16 \times 5 = 80$$



Directions: Fill in the blanks to solve each problem below using the distributive property.

1. **8 x 9**

$$8 \times (3 + 6)$$

$$(8 \times \underline{\quad}) + (8 \times \underline{\quad})$$

$$\underline{\quad} + \underline{\quad}$$

$$8 \times 9 = \underline{\quad}$$

2. **12 x 3**

$$(\underline{\quad} + 2) \times 3$$

$$(\underline{\quad} \times 3) + (2 \times 3)$$

$$\underline{\quad} + \underline{\quad}$$

$$12 \times 3 = \underline{\quad}$$

3. **4 x 13**

$$4 \times (\underline{\quad} + \underline{\quad})$$

$$(4 \times \underline{\quad}) + (4 \times \underline{\quad})$$

$$\underline{\quad} + \underline{\quad}$$

$$4 \times 13 = \underline{\quad}$$

4. **14 x 6**

$$(\underline{\quad} + \underline{\quad}) \times 6$$

$$(\underline{\quad} \times 6) + (\underline{\quad} \times 6)$$

$$\underline{\quad} + \underline{\quad}$$

$$14 \times 6 = \underline{\quad}$$

5. **3 x 16**

$$\underline{\quad} \times (\underline{\quad} + \underline{\quad})$$

$$(\underline{\quad} \times \underline{\quad}) + (\underline{\quad} \times \underline{\quad})$$

$$\underline{\quad} + \underline{\quad}$$

$$3 \times 16 = \underline{\quad}$$

6. **17 x 5**

$$(\underline{\quad} + \underline{\quad}) \times \underline{\quad}$$

$$(\underline{\quad} \times \underline{\quad}) + (\underline{\quad} \times \underline{\quad})$$

$$\underline{\quad} + \underline{\quad}$$

$$17 \times 5 = \underline{\quad}$$