

ANSWERS 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. 8×9

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

$$(8 \times \underline{3}) + (8 \times \underline{6})$$

$$\underline{24} + \underline{48}$$

$$8 \times 9 = \underline{72}$$

2. 12×3

$$(\underline{10} + 2) \times 3$$

$$(\underline{10} \times 3) + (2 \times 3)$$

$$\underline{30} + \underline{6}$$

$$12 \times 3 = \underline{36}$$

3. 4×13

$$4 \times (\underline{10} + \underline{3})$$

$$(4 \times \underline{10}) + (4 \times \underline{3})$$

$$\underline{40} + \underline{12}$$

$$4 \times 13 = \underline{52}$$

4. 14×6

$$(\underline{10} + \underline{4}) \times 6$$

$$(\underline{10} \times 6) + (\underline{4} \times 6)$$

$$\underline{60} + \underline{24}$$

$$14 \times 6 = \underline{84}$$

5. 3×16

$$\underline{3} \times (\underline{8} + \underline{8})$$

$$(\underline{3} \times \underline{8}) + (\underline{3} \times \underline{8})$$

$$\underline{24} + \underline{24}$$

$$3 \times 16 = \underline{48}$$

6. 17×5

$$(\underline{10} + \underline{7}) \times \underline{5}$$

$$(\underline{10} \times \underline{5}) + (\underline{7} \times \underline{5})$$

$$\underline{50} + \underline{35}$$

$$17 \times 5 = \underline{85}$$