

The Distributive Property Pattern

A-DPA 1

Instructions: Each of these equations shows the basic pattern of the distributive property. Fill in the missing numbers to complete the pattern and make the equation true.

1 $8 \times (3 + 10) = \boxed{8} \times 3 + \boxed{8} \times 10$

2 $3 \times (7 + 9) = 3 \times \boxed{} + 3 \times \boxed{}$

3 $5 \times (12 - 6) = 5 \times \boxed{} - \boxed{} \times 6$

4 $7 \times (4 + 8) = \boxed{} \times 4 + 7 \times \boxed{}$

5 $11 \times (3 - 2) = 11 \times 3 - 11 \times \boxed{}$

6 $\boxed{} \times (5 - \boxed{}) = 6 \times 5 - 6 \times 3$

7 $\boxed{} \times (\boxed{} + 8) = 8 \times 3 + 8 \times 8$

8 $5 \times (7 - 4) = 5 \times \boxed{} - 5 \times 4$

9 $\boxed{} \times (10 + 12) = 9 \times 10 + 9 \times 12$

10 $10 \times (\boxed{} + \boxed{}) = 10 \times 2 + 10 \times 7$

11 $2 \times (\boxed{} - 13) = 2 \times 15 - 2 \times 13$

12 $4 \times (9 + 5) = \boxed{} \times 9 + \boxed{} \times 5$


Simplifying Expressions Two Different Ways

A-DPA 2

Instructions: Simplify each expression two different ways. In the first way, simplify what is inside the group first. In the second way, use the distributive property to eliminate the group. You should get the same answer both ways. Be sure to show your work!

Way 1: Group First

Way 2: The Distributive Property

1	$5 \times (8 + 2)$ 5×10 50	$5 \times (8 + 2)$ $5 \times 8 + 5 \times 2$ $40 + 10$ 50
	 <p>same answer both ways</p>	

2	$3 \times (7 + 5)$	$3 \times (7 + 5)$
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3	$10 \times (12 - 4)$	$10 \times (12 - 4)$
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4	$6 \times (2 + 5 + 1)$	$6 \times (2 + 5 + 1)$
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5	$4 \times (10 - 3 + 2)$	$4 \times (10 - 3 + 2)$
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Simplifying Expressions with the Distributive Property

A-DPA 3

Instructions: Use the Distributive Property to simplify each of these expressions. Be sure to show all your work.

1 $3 \times (7 + 4)$
 $3 \times 7 + 3 \times 4$
 $21 + 12$
 33

2 $10 \times (3 + 5)$

3 $2 \times (7 + 5)$

4 $7 \times (5 - 1)$

5 $3 \times (12 + 10)$

6 $4 \times (9 + 5)$

7 $5 \times (6 + 5 - 1)$

8 $6 \times (10 - 6 - 4)$

9 $12 \times (10 - 5 + 2)$

10 $8 \times (2 + 3 + 4)$

Using the Distributive Property to Multiply - Set 1

A-DPA 4

Instructions: Use the Distributive Property to rearrange these multiplication problems so they are easier to do mentally. Then simplify them to get a final answer.

1 7×32
 $7 \times (30 + 2)$
 $7 \times 30 + 7 \times 2$
 $210 + 14$
224

2 4×26

3 5×132

4 8×54

5 9×41

6 2×734

7 6×65

8 4×456

Using the Distributive Property to Multiply - Set 2

A-DPA 5

Instructions: Use the Distributive Property to rearrange these multiplication problems so they are easier to do mentally. Then simplify them to get a final answer.

1 9×43

$$9 \times (40 + 3)$$

$$9 \times 40 + 9 \times 3$$

$$360 + 27$$

$$387$$

2 6×58

3 3×97

4 5×28

5 7×84

6 3×615

7 2×843

8 4×722