

## Distributive Property Homework

Name \_\_\_\_\_

**Distribute and Evaluate the Following**

$4(1+7)$

Expression

$6(5-3)$

Expression

$3(5+9-3)$

\_\_\_\_\_

Distribute \_\_\_\_\_

\_\_\_\_\_

Evaluate \_\_\_\_\_

\_\_\_\_\_

Distribute \_\_\_\_\_

\_\_\_\_\_

Evaluate \_\_\_\_\_

$9(2x-3y)$

Expression

$5(2x+y)$

Expression

$2(8x-7)$

\_\_\_\_\_

Distribute \_\_\_\_\_

\_\_\_\_\_

Distribute \_\_\_\_\_

\_\_\_\_\_

$9(x-2y+4z)$

Expression

$4(5a-b-7c+2)$

Expression

$12(5x-3b)$

\_\_\_\_\_

Distribute \_\_\_\_\_

\_\_\_\_\_

Distribute \_\_\_\_\_

\_\_\_\_\_

$3(2x+5)+7$

Expression

$8(4x+3)-7$

Expression

$6(4+3x)-10x$

\_\_\_\_\_

Distribute \_\_\_\_\_

\_\_\_\_\_

Distribute \_\_\_\_\_

\_\_\_\_\_

Combine  
Like TermsCombine  
Like Terms

Which expression is equivalent to  $3(6m) + m$ ?

- A  $19m$
- B  $21m$
- C  $7m + 3$
- D  $18m + 6m^2$

The expression below was simplified using two properties of operations.

$$5(11z + 29 + 6z)$$

- Step 1  $5(11z + 6z + 29)$
- Step 2  $5(17z + 29)$
- Step 3  $85z + 145$

Which properties were applied in Steps 1 and 3, respectively?

- A commutative property, then distributive property
- B commutative property, then identity property
- C associative property, then distributive property
- D associative property, then commutative property

Which expression is equivalent to  $5(d + 1)$ ?

- A  $5d + 5$
- B  $5d + 1$
- C  $d + 5$
- D  $d + 6$

## Distribute and Evaluate the Following

$4(1+7)$

Expression

$6(5-3)$

Expression

$3(5+9-3)$

$$\begin{array}{r} 4 \cdot 1 + 4 \cdot 7 \\ \hline \underline{4} \quad \underline{28} \\ \hline \boxed{32} \end{array}$$

Distribute

$$\begin{array}{r} 6 \cdot 5 - 6 \cdot 3 \\ \hline \underline{6} \quad \underline{3} \\ \hline 30 - 18 \end{array}$$

Evaluate

$\boxed{12}$

$$\begin{array}{r} 3 \cdot 5 + 3 \cdot 9 - 3 \cdot 3 \\ \hline \underline{3} \quad \underline{9} \quad \underline{3} \\ \hline 15 + 27 - 9 \\ \hline \boxed{33} \end{array}$$

$9(2x-3y)$

Expression

$5(2x+y)$

Expression

$2(8x-7)$

$18x - 27y$

Distribute

$10x + 5y$

Distribute

$16x - 14$

$9(x-2y+4z)$

Expression

$4(5a-b-7c+2)$

Expression

$12(5x-3b)$

$9x - 18y + 36z$

Distribute

$20a - 4b - 28c + 8$

Distribute

$60x - 36b$

$3(2x+5)+7$

Expression

$8(4x+3)-7$

Expression

$6(4+3x)-10x$

$6x + 15 + 7$

Distribute

$32x + 24 - 7$

Distribute

$24 + 18x - 10x$

$6x + 22$

Combine  
Like Terms

$32x + 17$

Combine  
Like Terms

$24 + 8x$

Which expression is equivalent to  $3(6m) + 1m$ ?

- A  $19m$
- B  $21m$
- C  $7m + 3$
- D  $18m + 6m^2$

$$\begin{array}{r} 18m + 1m \\ \hline 19m \end{array}$$

The expression below was simplified using two properties of operations.

$$5(11z + 29 + 6z)$$

- \*Step 1  $5(11z + 6z + 29)$  Swapped  $6z$  and  $29$ : Commutative Property
- Step 2  $5(17z + 29)$  Combined  $11z + 6z$
- \*Step 3  $85z + 145$  Multiplied  $17z$  and  $29$  by  $5$ : Distributive Property

Which properties were applied in Steps 1 and 3, respectively?

- A commutative property, then distributive property
- B commutative property, then identity property
- C associative property, then distributive property
- D associative property, then commutative property

Which expression is equivalent to  $5(d + 1)$ ?

- A  $5d + 5$
- B  $5d + 1$
- C  $d + 5$
- D  $d + 6$

$$\begin{array}{r} 5d + 5 \cdot 1 \\ \hline 5d + 5 \end{array}$$