

Introduction to the Distributive Law

Try these!

For the following questions, draw arrows to display which terms are multiplied using the distributive law, rewrite the question using the distributive law and simplify.

Examples

$$\begin{aligned} 2(4x+1) &= (2)(4x) + (2)(1) \\ &= 8x + 2 \end{aligned}$$

$$\begin{aligned} -2(3x-4) &= (-2)(3x) - (-2)(4) \\ &= -6x - (-8) \\ &= -6x + 8 \end{aligned}$$

1) $2(x+4)$

2) $3(p-5)$

3) $5(2x+3)$

4) $-2(3x+5)$

5) $-2(4x-1)$

6) $3(-2c-1)$

7) $-(2x+7)$

Hint: This expression is the same as $-1(2x+7)$

8) $10(x-2)$

9) $-3(4x-6)$

10) $5(-2x+4)$

Extension

Solve the following equations.

1) $2(x+1)=8$

2) $2(3x-4)=4(x+3)$