

Distributive Property with Signed Numbers

Warmup

1. Use the distributive property to fill in the missing factors.

$$4(2+9) = \underline{\hspace{1cm}}(2) + \underline{\hspace{1cm}}(9)$$

2. Calculate:

$$-6(-15) = \underline{\hspace{2cm}}$$

$$-7(14) = \underline{\hspace{2cm}}$$

$$-8(-11) = \underline{\hspace{2cm}}$$

$$9(10) = \underline{\hspace{2cm}}$$

3. $(5x+9) + (7z+4)$:



When making baked potatoes, one ingredient at a time is distributed to potato half.

Distributive Property with Signed Numbers

- I. Distributive Property with Variables
- II. Distributive Property with Signed Numbers and Variables
- III. Algebraic Expressions Using the Distributive Property

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Pre-Algebra and Geometry I

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I. Distributive Property with Variables

Distributive Property $a(b + c) = a(b) + a(c)$

$$4(-y + 12)$$

$$5(x - 9)$$

$$2(z - 7)$$

4. $4(-t + 10)$

II. Distributive Property with Signed Numbers and Variables

Distribute a Negative Value:

Distribute the negative value to each term inside the parentheses.

$$-8(x + 3)$$

$$-9(4 - x)$$

$$-6(-y - 3)$$

$$-13(s-12)$$

$$-12(9x-6)$$

$$-(15y+6)$$

$$4(-t + 10)$$

6. $-(4r + 7)$

7. $-16(2y-3)$

III. Algebraic Expressions Using the Distributive Property

Distribute the negative value to each term inside the parentheses.

$$15 - 8(x + 3)$$

$$10 - 9(4 - x)$$

$$8y - 6(-y - 3)$$

$$8h + 6(5h - 2)$$

$$8h - 6(5h - 2)$$

9. $20 - 8(-5s - 10)$

10. $8w - 15(-2w + 3)$



[illegible]