

Distributive Property in Expressions

I. Distributive Property

A. A Double Rainbow

ex: $3(x + 4)$
 $3x + 12$

ex: $-4(y + 7)$
 $-4y - 28$

ex: $-5(z - 8)$
 $-5z + 40$

ex: $-4(6b + 5)$
 $-24b - 20$

means -1
 become opposites

ex: $-1(-3y + 8)$
 $-1(-3y + 8)$
 $3y - 8$

II. Combining w/ Expressions

A. Simplify property distributive first.

Distributive Prop.

ex: $a + b - 1(2a - 3b)$

opposites

~~$a + b = 2a + 3b$~~

$$\boxed{-a + 4b}$$

ex: $-2(c - 4d) + c - (d + 4)$

Dist. Prop. Dist. Prop.

$-2c + 8d + c - d - 4$

$-c + 7d - 4$

opposites

ex: $3x + (7x - 5)$

$3x + 7x - 5$

$10x - 5$