



Lesson 6 Distributive Properties using Negative numbers

Simplifying Pre-Algebraic Expressions

Name _____

Directions: Click on the video button above to provide you with instructions and answers. Rewrite the statements using distributive property.

What are the rules for multiplying negative numbers?

With two numbers, the rules for multiplying and dividing positive and negative numbers are not only simple, but they're also the same for both operations: When multiplying or dividing two numbers, if the two signs are the same, the result is positive, and if the two signs are different, the result is negative.

Examples (A)

$$\begin{aligned} -4X + 4(5X - 19) &= 68 \\ -4X + 20X - 76 &= 68 \\ 16X - 76 &= 68 \\ 16X &= 144 \\ X &= 9 \end{aligned}$$

(B)

$$\begin{aligned} 6X - 2(-5X + 16) &= -224 \\ 6X + 10X - 32 &= -224 \\ 16X - 32 &= -224 \\ 16X &= -192 \\ X &= -12 \end{aligned}$$

(1) $6X - 2(5X - 14) = -16$

(2) $2X + 5(7X + 12) = -125$

(3) $5X + 3(-4X + 15) = 10$

(4) $6X + 4(-2X - 21) = -70$