

Solving Linear Equations - Two Steps or More - Pt2

Learning Goal:

By the end of today, I will be able to solve equations with more than two steps and equations that involve the distributive property.

Review - Distributive Property

Expand/Multiply
(use the dimensions to find the area) $-2x (3x - 1)$

	x	x	x	-1
$x-$	$-X^2$	$-X^2$	$-X^2$	x
$x-$	$-X^2$	$-X^2$	$-X^2$	x

x $x-$ -1 1

Expand and Simplify

$$4(x + 8) =$$

$$(-3x)(2x - 5) =$$

Mixing Distributive Property and Solving Equations

Solve

$$3(x + 2) = 18$$

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Mixing Distributive Property and Solving Equations

Solve

$$-7(x - 1) = 21$$

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Wandering Variables, Oh No!!!!

When our DESIRED unknown is on both sides of the equal sign, we want to use the four operations, add/subtract/multiply/divide, OR ZERO pairs, to gather or collect them onto one side (left or right).

Solve the following:

x

-x

1

-1

$$2x + 9 = x + 5$$

x

x

1 1 1 1
1 1 1 1
1

x

1 1
1 1
1



-1 -1
-1 -1
-1 -1
-1 -1
-1

-1 -1
-1 -1
-1 -1
-1 -1
-1

Solve the following:

$$4x + 11 = 2x + 5$$

Solve the following:

$$8x + 14 = 2x - 10$$

Solve the following:

$$4(2x + 5) = 2(x - 20)$$

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