

Topic/Objective:

7.6 Distribute and like terms

Name:

Class/Period

Date:

Essential Question (Big Idea):

What if there are parentheses?

$$2(x + 3) - 7 = 11$$

Modeling

$$3x = 9$$

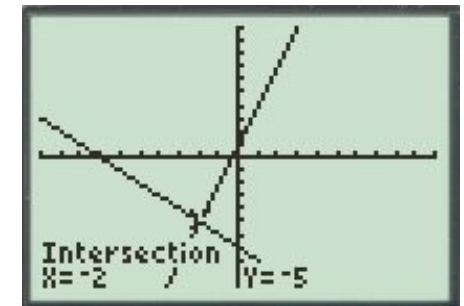
Algebra

$$\begin{aligned}
 2(x - 3) + 1 &= 6 - (x + 2) \\
 2x - 5 &= 4 - x \\
 +x & \quad +x \\
 \hline
 3x - 5 &= 4 \\
 +5 & \quad +5 \\
 \hline
 3x &= 9 \\
 \frac{3x}{3} &= \frac{9}{3} \\
 x &= 3
 \end{aligned}$$

Table

X	Y ₁	Y ₂
0	-5	4
1	-3	3
2	-1	2
3	1	1
4	3	0
5	5	-1
6	7	-2

Graph



How to use this method to solve an algebra problem:

<p>Draw pictures until one green x is by itself</p>	<p>First, distribute and add like terms that are on the same side</p> <p>Move all the x's to the left (<i>by adding x</i>)</p> <p>Move all the numbers to the right (<i>by adding 5</i>)</p> <p>Always wait to divide until the last step</p>	<p>Set Y1 as the left side of the equation $Y1 = 2(x - 3) + 1$</p> <p>Set Y2 as the right side of the equation $Y2 = 6 - (x + 2)$</p> <p>Make a table</p> <p>Look for what value of x will make Y1 = Y2</p>	<p>Set Y1 as the left side of the equation $Y1 = 2(x - 3) + 1$</p> <p>Set Y2 as the right side of the equation $Y2 = 6 - (x + 2)$</p> <p>Draw a graph</p> <p>Look for where the two lines intersect</p>
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$$2(x - 3) + 1 = 6 - (x + 2)$$

Modeling	Algebra	Table	Graph

Summary: