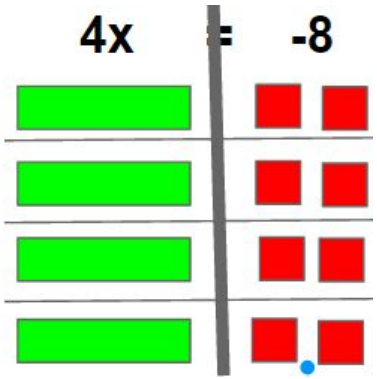
AVID Decades of College Dreams	**Topic/Objective:** 7.5 Terms on both sides	**Name:** **Class/Period** **Date:**

Essential Question (Big Idea):

What if there's an x on both sides?

$3x + 1 = 4x - 7 - 5x$

Modeling



Algebra

$3x + 1 = 4x - 7 - 5x$

$3x + 1 = -x - 7$

$+x \quad +x$

$4x + 1 = -7$

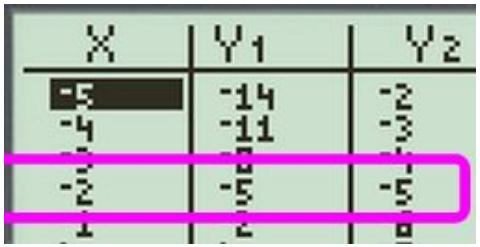
$-1 \quad -1$

$4x = -8$

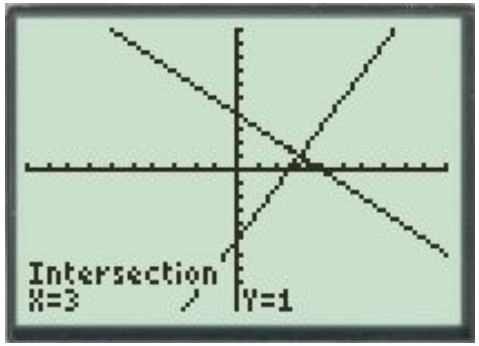
$\frac{4x}{4} = \frac{-8}{4}$

$x = -2$

Table



Graph



How to use this method to solve an algebra problem:

Draw pictures until one green x is by itself	**Do the opposite, to both sides, until x is by itself** **Move all the x's to the left (*by adding x)*** **Move all the numbers to the right *(by subtracting 1)*** **Always wait to divide until the last step**	**Set Y1 as the left side of the equation *Y1 = 3x + 1*** **Set Y2 as the right side of the equation *Y2 = 4x - 7 - 5x*** **Make a table** **Look for what value of x will make Y1 = Y2**	**Set Y1 as the left side of the equation *Y1 = 3x + 1*** **Set Y2 as the right side of the equation *Y2 = 4x - 7 - 5x*** **Draw a graph** **Look for where the two lines intersect**

3x - 1 = 4x + 7 -5x

Modeling	Algebra	Table	Graph

Summary: