Unit 5 Day 6: Solving Systems by Elimination Continued

Review

Solve the systems using what we learned about the **elimination** method. Then graph to find the solution to each system to check your answers.

1.) $5x + y = 9$
$10x - 7y = -18$

$2(5x + y = 9)$

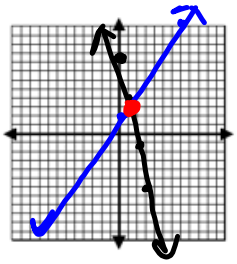
$10x + 2y = 18$
$-10x + 7y = +18$

$9y = 36$
$9 \quad 9$
$y = 4$

$5x + (4) = 9$
$-4 \quad -4$
$5x = 5$
$5 \quad 5$
$x = 1$

$(1, 4)$

Graphing:



2.) $-4x + 9y = 9$
$x - 3y = -6$

$4(x - 3y = -6)$

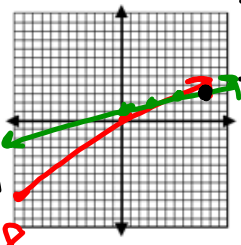
$4x - 12y = -24$
$-4x + 9y = 9$

$-3y = -15$
$-3 \quad -3$
$y = 5$

$x - 3(5) = -6$
$x - 15 = -6$
$x = 9$

$(9, 5)$

Graphing:



$5x + y = 9$
$-5x \quad -5x$
$y = -5x + 9$

$10x - 7y = -18$
$-10x \quad -10x$
$-7y = -10x - 18$
$-7 \quad -7 \quad -7$
$y = \frac{10}{7}x + 2.6$

$-4x + 9y = 9$
$+4x \quad +4x$
$9y = 4x + 9$
$9 \quad 9 \quad 9$
$y = \frac{4}{9}x + 1$

$x - 3y = -6$
$-x \quad -x$
$-3y = -x - 6$
$-3 \quad -3 \quad -3$
$y = \frac{1}{3}x + 2$

$4x + 9y = 9$

OR

$3(x - 3y = -6)$

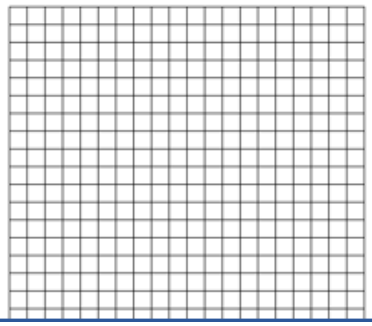
$3x - 9y = -18$
$-4x + 9y = 9$

$-x = -9$
$-1 \quad -1$
$x = 9$

Practice Together

Jerry has a collection of dimes and quarters worth $13.60. He has 4 more quarters than dimes. How many dimes does he have?

How many different ways can you come up with to answer the problem?



Practice/Closure Day 6

The cost of 4 T-shirts and 5 pair of jeans is $138. The cost of 2 T-shirts and 6 pair of jeans is $132. Find the cost of each.

How many different ways can you come up with to answer the problem?