Bellwork 9-10-15

Review from yesterday...

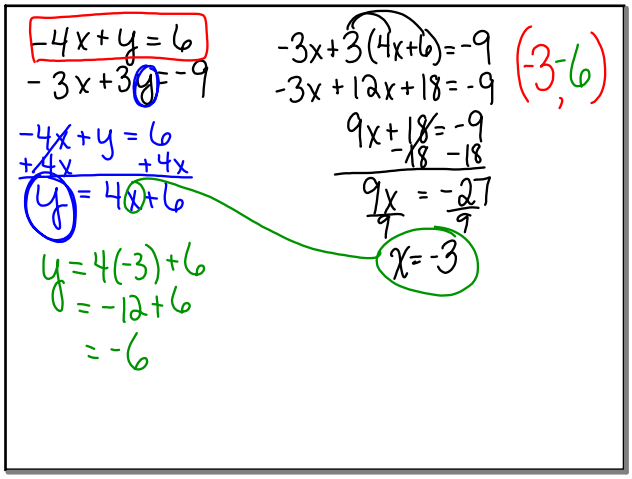
Solve by ***SUBSTITUTION*** meaning:

1) Solve one of the equations for either ***x*** or ***y***
2) Plug what x or y is equal to in the other equation
3) Solve for the variable
4) Now, plug that answer into the other equation
5) Write solution to the system as an (x,y) ordered pair.

Solve the linear system using substitution.

$$\begin{cases} 2x - 3y = 1 \\ x + y = 13 \end{cases}$$

Sep 22-8:47 AM



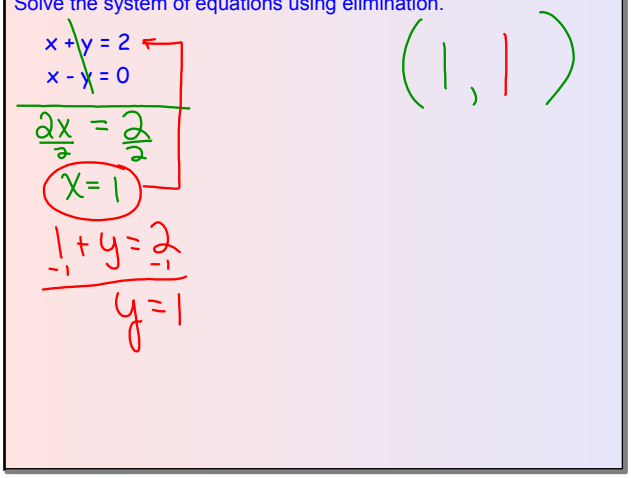
Sep 10-9:30 AM

9-10-15

3.2b Solve Systems of Linear Equations by Elimination

Sep 2-2:07 PM

Solve the system of equations using elimination.



Sep 22-8:54 AM

Solve the system of equations using elimination.

$2x + y = 1$
$x - y = 5$

$3x = 6$
$x = 2$

$2 - y = 5$
$-y = 3$
$y = -3$

$(2, -3)$

Sep 22-8:54 AM

Solve the system of equations using elimination.

$5x - 2y = -1$
$-2(3x - y = -2)$

$5x - 2y = -1$
$-6x + 2y = 4$
$-1x = 3$
$x = -3$

$5(-3) - 2y = -1$
$-15 - 2y = -1$
$+15 \quad +15$
$-2y = 14$
$y = -7$

$(-3, -7)$

Sep 22-8:54 AM

Solve the system of equations using elimination.

$2(3x + 5y = -16)$
$-3(2x + 3y = -9)$

$6x + 10y = -32$
$-6x - 9y = 27$
$y = -5$

$3x + 5(-5) = -16$
$3x - 25 = -16$
$+25 \quad +25$
$3x = 9$
$x = 3$

$(3, -5)$

Sep 22-8:54 AM

Vanessa has a coin collection of 30 coins. They consist of dimes and nickels. If her coins add to be $2.10, how many of each does Vanessa have?

$-.05(n + d = 30)$
$.05n + .10d = 2.10$

$-.05n - .05d = -1.50$
$.05n + .10d = 2.10$
$.05d = .60$
$d = 12$

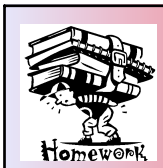
$n + 12 = 30$
$-12 \quad -12$
$n = 18$

Sep 14-3:27 PM

Conclusion

1. **Name three ways to solve systems of equations.**
   Substitution, Elimination, Graphing
2. **What needs to happen to solve by elimination?**
   Line up x + y then coefficients need to be opposite numbers
3. **Any Questions????**

Sep 14-3:30 PM



Assignment
for
Solving by Elimination
Worksheet

Sep 22-9:04 AM

Now, you try using ***ELIMINATION***:

$2x + 4y = 12$

$-3x + 3y = 63$

Sep 22-8:54 AM