Name _____ Due Date _____ Per _____

5.2 Solving Systems of Equations by Substitution

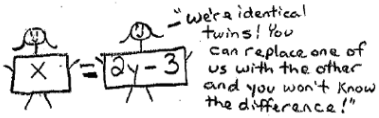
Directions: Use substitution to solve each system of equations. Write your answer as an ordered pair. **SHOW ALL YOUR WORK!!!**

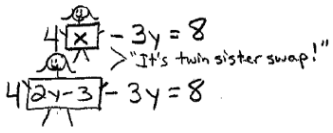
Example 1

$$x - 2y = -3$$
$$4x - 3y = 8$$

Step One

Step Two





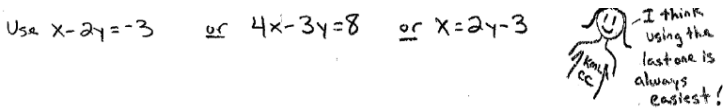
Step Three

Solve the eaugtion with the substituted value…

$$4(2y-3) - 3y = 8$$

Step Four

Take your answer and plug it any equation to find the last variable



1. y = 7x - 10
   y = -3

2. x = -8
   2x + y = -12

3. y = 6x
   y – 7 = 5x

4. y + 9 = 9x
   y = 9

5. x = -4
   y = -x – 8

6. y = 8x – 9
   y = 7

7. $x - 6y = -14$
$x = -8y$

8. $y = 2x - 15$
$y = 5x$

9. $y = -8x$
$2x + 4y = 0$

10. $-4x + y = 6$
$-5x - y = 21$

11. $-7x - 2y = -13$
$x - 2y = 11$

12. $-3x + 3y = 4$
$-x + y = 3$

13. $x = 2y$
$3x + 3y = 18$

14. $6x + 6y = -6$
$5x + y = -13$

15. $3x - 4y = 2$
$3x + 3y = -3$