Name: _____ Date: _____

Solving Systems of Equations by Elimination Homework

Solve each of the following using the method of elimination:

1. $x - y = 7$
    $2x + y = -10$

2. $2x + y = 11$
    $x + y = 9$

3. $3x + y = 1$
    $2x + 3y = -11$

4. $x + y = 1$
    $3x - y = 11$

5. $9x + 2y = 2$
    $4x + y = 1$

6. $2x + 3y = 8$
    $5x - y = 3$

7. $5x - 3y = -14$
    $3x + 2y = 3$

8. $9x + 6y = 12$
    $8x + 3y = 13$

9. $3x + 2y = 6$
    $2x - 3y = 17$

Find and describe the error:

10.

$5x+8y=1$
$2x-8y=6$
$\overline{7x=7}$
$\dfrac{7x}{7}=\dfrac{7}{7}$
$x=1$

$-2(1)+8y=-6$
$2+8y=-6$
$\underline{-2-2}$
$\dfrac{8y}{8}=\dfrac{-8}{8}$
$y=-1$
$(1,-1)$

11.

$3x-4y=-5$
$-3x-6y=-5$
$\overline{-2y=-10}$
$\dfrac{-2y}{-2}=\dfrac{-10}{-2}$
$x=5$

$3x-4(5)=-5$
$3x-20=-5$
$\underline{+20+20}$
$\dfrac{3x}{3}=\dfrac{15}{3}$
$x=5$
$(5, 5)$

Review

Determine if **(-1, 3)** is a solution to the following system of equations. Answer **yes** or **no.**

12. $2x + 2y = 4$
    $3x - y = -6$

Determine whether the following systems have no solution, one solution, or infinitely many solutions. You may use the graph provided if needed.

13. $y = 5x - 4$
    $y = 5x - 5$
    A. No solution
    B. One solution
    C. Infinitely many solutions

14. $y = 2x - 3$
    $y = -x + 3$
    A. No solution
    B. One solution
    C. Infinitely many solutions