

# Selected Answers

Name \_\_\_\_\_ Period \_\_\_\_\_

Score:

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## HW 6-3 HONORS: Solving Systems using Elimination

For questions #1-12, solve using elimination. SHOW ALL WORK! Remember you can check your solutions!

1.  $4x + 7y = -80$   
 $3x + 5y = -58$

$(-6, -8)$

2.  $-4x + 2y = 0$   
 $10x + 3y = 8$

3.  $x + 4y = -4$   
 $x + 10y = -16$

$(4, -2)$

4.  $4y + 3x = 20$   
 $-3x - 4y = 8$

5.  $3x - 5y = 11$   
 $5(x + y) = 5$

$(2, -1)$

6.  $2x + 3y = 15$   
 $4x + 2y = 18$

Solve using elimination. SHOW ALL WORK! Remember you can check your solutions!

7.  $3x - 3y = -6$   
 $-5x + 6y = 12$

$(0, 2)$

8.  $4(x + 2y) = 8$   
 $4x + 4y = 12$

9.  $6x - 7y = -26$   
 $6x + 5y = 10$

$(-\frac{5}{6}, 3)$

10.  $2x - 3y = 5$   
 $-2x + 3y = -5$

11.  $4x + 3y = 6$   
 $3x + 3y = 7$

$(-1, \frac{10}{3})$

12.  $\frac{3}{5}x + \frac{1}{4}y = 3$   
 $-\frac{3}{5}x + \frac{3}{4}y = -3$

For questions #13-21, solve using any method you choose. Attach graph paper if you solve by graphing.

$$13. \begin{cases} y = 5x + 1 \\ 4x + y = 10 \end{cases}$$

$$(1, 6)$$

$$14. \begin{cases} -1 = 2x - y \\ 8x - 4y = 8 \end{cases}$$

$$15. \begin{cases} 5x - y = 5 \\ -x + 3y = 13 \end{cases}$$

$$(2, 5)$$

$$16. \begin{cases} 3x + y = -5 \\ 6x + 2y = 10 \end{cases}$$

$$17. \begin{cases} -5x + 4y = 20 \\ 10x - 8y = -40 \end{cases}$$

$$18. \begin{cases} y = \frac{1}{2}x \\ y = x + 2 \end{cases}$$

$\infty$  Many

$$19. \begin{cases} -3x - 8y = -24 \\ 3x - 5y = 4.5 \end{cases}$$

$$(4, 1\frac{1}{2})$$

$$20. \begin{cases} y = 2x - 17 \\ y = x - 10 \end{cases}$$

$$21. \begin{cases} x + 4y = 0 \\ 3x + \frac{1}{2}y = 23 \end{cases}$$

$$(8, -2)$$