

Name: _____ Period: _____ Score: _____/_____ = _____% = _____

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

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

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

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

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

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

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

$$7. \begin{cases} 3x - 3y = -6 \\ -5x + 6y = 12 \end{cases}$$

$$8. \begin{cases} 4(x + 2y) = 8 \\ 4x + 4y = 12 \end{cases}$$

$$9. \begin{cases} 6x - 7y = -26 \\ 6x + 5y = 10 \end{cases}$$

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

$$11. \begin{cases} 4x + 3y = 6 \\ 3x + 3y = 7 \end{cases}$$

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

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

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

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

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

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

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

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

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

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

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