

Name _____ Date _____ Period _____

Solve Linear Systems by Elimination**Solve each system using the elimination by addition method.**

1.
$$\begin{cases} 3x + 2y = 1 \\ 5x - 2y = 23 \end{cases}$$

2.
$$\begin{cases} 4x + 3y = -22 \\ 4x - 5y = 26 \end{cases}$$

3.
$$\begin{cases} x - 3y = -22 \\ 2x + 7y = 60 \end{cases}$$

4.
$$\begin{cases} 6x - y = 3 \\ 5x + 3y = -9 \end{cases}$$

5.
$$\begin{cases} 4x - 5y = 21 \\ 3x + 7y = -38 \end{cases}$$

6.
$$\begin{cases} 5x - 3y = -34 \\ 2x + 7y = -30 \end{cases}$$

7.
$$\begin{cases} 5x - 2y = 7 \\ 10x - 4y = 14 \end{cases}$$

8.
$$\begin{cases} 4a + 2b = -4 \\ 6a - 5b = 18 \end{cases}$$

9.
$$\begin{cases} 5a + 6b = 8 \\ 2a - 15b = 9 \end{cases}$$

10.
$$\begin{cases} 7x + 2y = 11 \\ 7x + 2y = -4 \end{cases}$$

11.
$$\begin{cases} \frac{2}{3}x + \frac{1}{4}y = -1 \\ \frac{1}{2}x - \frac{1}{3}y = -7 \end{cases}$$

12.
$$\begin{cases} \frac{1}{4}s - \frac{2}{3}t = -3 \\ \frac{1}{3}s + \frac{1}{3}t = 7 \end{cases}$$

13.
$$\begin{cases} \frac{x}{2} - \frac{2y}{5} = \frac{-23}{60} \\ \frac{2x}{3} + \frac{y}{4} = \frac{-1}{4} \end{cases}$$

14.
$$\begin{cases} \frac{2}{3}x + \frac{1}{2}y = \frac{1}{6} \\ 4x + 6y = -1 \end{cases}$$

15.
$$\begin{cases} \frac{1}{2}x + \frac{2}{3}y = -\frac{3}{10} \\ 5x + 4y = -1 \end{cases}$$

16.
$$\begin{cases} 2x - 3y = 16 \\ 3x + 4y = 7 \end{cases}$$

17.
$$\begin{cases} 4x - 3y = 1 \\ 2x + 9y = 4 \end{cases}$$

18.
$$\begin{cases} \frac{2}{5}x - \frac{3}{4}y = 1 \\ \frac{3}{4}x + \frac{3}{8}y = 9 \end{cases}$$

19.
$$\begin{cases} \frac{x+1}{2} + \frac{y-4}{3} = 2 \\ \frac{x+2}{5} - \frac{y-7}{2} = \frac{22}{5} \end{cases}$$

20.
$$\begin{cases} \frac{x+2}{4} + \frac{y-1}{3} = \frac{1}{12} \\ \frac{x+4}{5} - \frac{y-2}{2} = \frac{5}{2} \end{cases}$$