

Worksheet: Substitution and elimination
Mr. Chvatal

Name: _____

Use substitution or elimination.

1.
$$\begin{cases} 2x + 4y = 42 \\ 3x + y = 8 \end{cases}$$

2.
$$\begin{cases} 3m + 6n = 12 \\ 4m + 5n = 28 \end{cases}$$

3.
$$\begin{cases} -3x + 6y = 18 \\ y = \frac{1}{2}x + 3 \end{cases}$$

4.
$$\begin{cases} 2x + 3y = 3 \\ -6x - 12y = -11 \end{cases}$$

5.
$$\begin{cases} 6x - 8y = 27 \\ -\frac{1}{2}x - \frac{1}{3}y = \frac{5}{8} \end{cases}$$

6.
$$\begin{cases} 5x - \frac{28}{3}y = 2 \\ -3x = 4y \end{cases}$$

$$7. \begin{cases} -.01x - .02y = .0011 \\ .24x + .12y = .0024 \end{cases}$$

$$8. \begin{cases} \frac{1}{3}x + \frac{3}{4}y = 6 \\ \frac{2}{3}x + \frac{3}{2}y = 12 \end{cases}$$

$$9. \begin{cases} 2x + 3y - z = 0 \\ -2x - 2y + 4z = 2 \\ 3x - y + 2z = 9 \end{cases}$$

$$10. \begin{cases} 5x - 2y + 3z = -52.5 \\ -2x + y + 4z = 9 \\ 3x + 2y - z = -8.5 \end{cases}$$