

Matrices

Name: _____

Date: _____

Cramer's Rules

1

$$7x + 2y = 24$$

$$12x + 3y = 21$$

2

$$5x + 2y + z = 10$$

$$4x + 2y + z = 14$$

$$9x + y + 2z = 18$$

3

$$2x + 2y = 10$$

$$4x + 4y = 8$$

4

$$2x + 3y - 5z = 1$$

$$x + y - z = 2$$

$$2y + z = 8$$

5

$$11x + 4y + 2z = 22$$

$$4x + 12y + 2z = 24$$

$$16x + 4y + 2z = 32$$

6

$$-2x - 3y = 5$$

$$-4x + 6y = -2$$

7

$$2x - 3y + 6z = -18$$

$$-6x + 5y - 3z = 12$$

$$-5x + 4y - z = 10$$

8

$$9x + 3y + 9z = 27$$

$$6x + 3y + 4z = 12$$

$$3x + 2y + z = 6$$

9

$$10x + y = 20$$

$$15x + 2y = 15$$

10

$$8x + 3y + 5z = 40$$

$$7x + 5y + 2z = 35$$

$$4x + 4y + 3z = 44$$

Matrices

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Date: _____

Cramer's Rules

1

$$\begin{aligned} 7x + 2y &= 24 \\ 12x + 3y &= 21 \end{aligned} \quad \underline{(-10, 47)}$$

2

$$\begin{aligned} 5x + 2y + z &= 10 \\ 4x + 2y + z &= 14 \\ 9x + y + 2z &= 18 \end{aligned} \quad \underline{(-4, 2, 26)}$$

3

$$\begin{aligned} 2x + 2y &= 10 \\ 4x + 4y &= 8 \end{aligned} \quad \underline{\text{No Solution}}$$

4

$$\begin{aligned} 2x + 3y - 5z &= 1 \\ x + y - z &= 2 \\ 2y + z &= 8 \end{aligned} \quad \underline{(1, 3, 2)}$$

5

$$\begin{aligned} 11x + 4y + 2z &= 22 \\ 4x + 12y + 2z &= 24 \\ 16x + 4y + 2z &= 32 \end{aligned} \quad \underline{(2, 2, -4)}$$

6

$$\begin{aligned} -2x - 3y &= 5 \\ -4x + 6y &= -2 \end{aligned} \quad \underline{(-1, -1)}$$

7

$$\begin{aligned} 2x - 3y + 6z &= -18 \\ -6x + 5y - 3z &= 12 \\ -5x + 4y - z &= 10 \end{aligned} \quad \underline{(12, 18, 2)}$$

8

$$\begin{aligned} 9x + 3y + 9z &= 27 \\ 6x + 3y + 4z &= 12 \\ 3x + 2y + z &= 6 \end{aligned} \quad \underline{\text{No Solution}}$$

9

$$\begin{aligned} 10x + y &= 20 \\ 15x + 2y &= 15 \end{aligned} \quad \underline{(5, -30)}$$

10

$$\begin{aligned} 8x + 3y + 5z &= 40 \\ 7x + 5y + 2z &= 35 \\ 4x + 4y + 3z &= 44 \end{aligned} \quad \underline{(-3, 8, 8)}$$