

Augmented Matrices and RREF

Name: _____

Period: _____

Directions: Write each matrix as an augmented matrix.

1.
$$\begin{array}{r} 2x - 7y = 43 \\ 5x + 8y = -20 \end{array}$$

2.
$$\begin{array}{r} 7x - 10y = 78 \\ 8x - 9y = 77 \end{array}$$

3.
$$\begin{array}{r} 13x - 9y = 97 \\ 3x + 10y = -38 \end{array}$$

Directions: Write each one in an augmented matrix, then use RREF to solve each systems of equations.

4.
$$\begin{array}{r} 5x + 6y = -1 \\ 9x - 10y = -85 \end{array}$$

5.
$$\begin{array}{r} 13x - 6y = -55 \\ 7x - 15y = 41 \end{array}$$

6.
$$\begin{array}{r} 13x + 9y = 142 \\ 3x - 10y = -88 \end{array}$$

7.
$$\begin{array}{r} 4x - 13y = 128 \\ 10x + 9y = -12 \end{array}$$

8.
$$\begin{array}{r} 9x = 198 + 13y \\ 10x = 27 - 7y \end{array}$$

9.
$$\begin{array}{r} 12x = -53 - 5y \\ 7y = -75 - 16x \end{array}$$

$$9x - 7y + 5z = -27$$

10. $7x + 2y - 4z = -39$
 $2x + 5y - 12z = -65$

$$10x - 5y = 55$$

11. $7y - z = -43$
 $5x + 8z = 79$