

Show ALL work for credit!

Use Row Operations to Solve: (15 points)

$$6x - y - 6z = -43$$

$$-6x - 4z = -38$$

$$9y + z = 17$$

Use Row Operations to Solve: (15 points)

$$x + 8y + 8z = 8$$

$$7x + 7y + z = 1$$

$$8x + 15y + 9z = -9$$

Find the inverse matrix (20 points)

$$\begin{bmatrix} 1 & 2 & 3 \\ 1 & 1 & 1 \\ 2 & 2 & 1 \end{bmatrix}$$

Use Cramer's Rule to Solve each system (50 points)

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

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

$$5x + y + z = 20$$

$D =$

$D_x =$

$D_y =$

$D_z =$