

- i. Show all relevant work. No work, no credit.
- ii. Write your answers in the spaces provided on the right.
- iii. Staple when you turn in the assignment.
- iv. Due Wednesday, November 19 at the beginning of the class.

Solve using the Gauss-Jordan Method

1) $4x + 8y = 40$

$5x + 4y = 8$

Solve using the Gauss-Jordan Method

2) $x + y + z = 9$

$2x - 3y + 4z = 7$

$x - 4y + 3z = -2$

Solve using the Gauss-Jordan Method

$$\begin{aligned} 3) \quad & 4x - 7y - z = 21 \\ & x - 3y - 5z = -15 \\ & 9x + y + z = 77 \end{aligned}$$

Perform the indicated operation, whenever possible.

$$4) \text{ Let } A = \begin{bmatrix} 7 & -4 & 8 \\ -6 & 5 & -1 \\ 0 & 6 & -3 \end{bmatrix} \text{ and } B = \begin{bmatrix} -2 & -6 & -1 \\ -7 & -4 & 3 \\ -3 & -9 & -5 \end{bmatrix}. \text{ Find } 5A - 2B.$$

Perform the matrix multiplication.

$$5) \text{ Let } A = \begin{bmatrix} 0 & -3 & 1 \\ 5 & -1 & 0 \end{bmatrix} \text{ and } B = \begin{bmatrix} 1 & 2 \\ 0 & 1 \\ 1 & -1 \end{bmatrix}. \text{ Find } AB.$$