

Training Problems 7

1. $B = [5, 7]$

$$B^T = ?$$

2. $A = \begin{bmatrix} 5 & 2 & 4 & 12 \\ 3 & 7 & -1 & 8 \\ -2 & 2 & 5 & 3 \end{bmatrix}$

$$A^T = ?$$

3. What does it mean for a matrix to be in row echelon form? Also give an example.

4. What does it mean for a matrix to be in reduced row echelon form? Also give an example.

5. Use Gaussian Elimination to solve the following system of linear equations:

$$x + 5y = 7$$

$$-2x - 7y = -5$$

6. Use Gaussian Elimination to get the below system of linear equations to row echelon form:

$$x + y - z = 9$$

$$y + 3z = 3$$

$$-x - 2z = 2$$

You should then use back-substitution to solve.