

Gauss Jordan Elimination Summary

1. If a_{11} entry is not 1, interchange two rows (Row Operation 1) or use Row Operation 2.

$$\left(\frac{1}{\# \text{ to change to } 1}\right) (\text{Row to change}) \rightarrow (\text{Row to change})$$

2. Change any other entries in column to 0 with Row Operation 3.

$$(-\# \text{ to change to } 0) (\text{Row with the leading } 1) + (\text{Row to change}) \rightarrow (\text{Row to change})$$

3. Have you successfully pivoted on the a_{11} entry? Do you have a unit column?

4. Move over a row and make the leading 1. Use Row Operation 2.

$$\left(\frac{1}{\# \text{ to change to } 1}\right) (\text{Row to change}) \rightarrow (\text{Row to change})$$

5. Change any other entries in column to 0 with Row Operation 3.

$$(-\# \text{ to change to } 0) (\text{Row with the leading } 1) + (\text{Row to change}) \rightarrow (\text{Row to change})$$

6. Have you successfully pivoted on the leading 1? Do you have a unit column?

7. Continue with the other columns until all are unit columns or the matrix is in row-reduced form (or row-reduced echelon form).

8. Read off solutions.