LECTURE SUMMARY 4.1

WEDNESDAY, MAY 25, 2016

ELIMINATION METHOD FOR SOLVING LINEAR SYSTEM OF EQUATIONS

1. Examples.
2. 3 steps: Find coefficient matrix and write down augmented matrix; Use elementary row operations to reduce augmented matrix; Plug into the reduced form and decide solutions.
3. Three cases: No solution, unique solution, multiple solutions. How to determine these cases?

DETERMINANT

1. Definition of determinant for 1×1, 2×2, 3×3 matrices.
2. Two theorems.
3. Examples.

EIGENVALUES AND EIGENVECTORS

1. Definitions and examples.
2. How to find eigenvalues.
3. How to find eigenvectors.