## Required Texts: Linear Algebra and Its Applications, n-th Edition by David C. Lay. https://www.pearson.com/mylab (class registration code) dick here from the Course webpage Use free for now! Solve elimination ? It you've done and substitution... } this before... First time already unity subscripts to denote different $\begin{cases} x - 2y + 2 = 0 \\ 2y - 8z = 8 \end{cases}$ three dimunianal rector with real-number entries a 50 $x \in \mathbb{R}^n$ Generalized notation $x \in \mathbb{C}^3$ a nector with number of three dimuniand rector components sadicated by the,

parameter n

with complex-number extries

Motrix of coefficients

another Vector

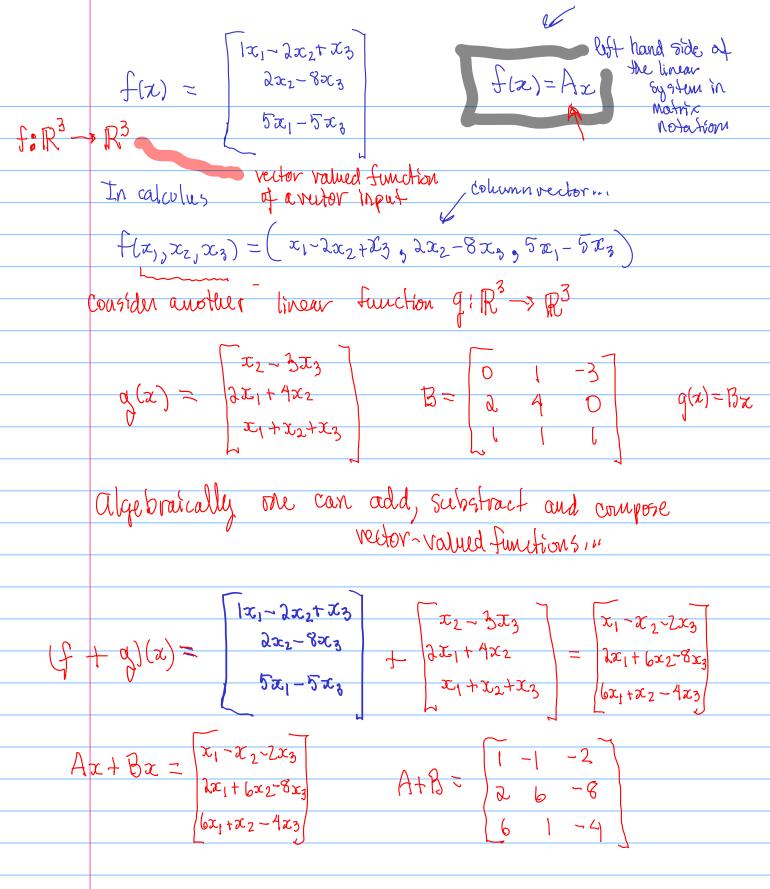
All the inputs and outputs to linear algebra problem have been encoded into vectors and a matrix.

The same problem is written as 
$$Ax = \sqrt{}$$

The method of elimination and substitution for solving Ax=b can be reinterpreted as a way of factoring the matrix A into two simpler matrices L and U.

What does it mean for A = LU?

left hand side of the linear system



Matrix addition is the matrix you get from adding the corresponding linear functions.

Matrix multiplication is the matrix you get from composing the corresponding linear functions...