

General Stuff

- Office Hours
 - T: 12:30 - 1:30, Th: 10 - 11
- Midterm Thursday 2/4
 - 2 problems
 - 30 minutes to take exam
 - 5-10 minutes to upload to gradescope
 - 11:15 - 11:25 questions before midterms
 - 11:25 - 11:55 midterm
 - 11:55 - 12:05 uploading
- Lab after midterm from 12:20 - 1:10

Main Midterm 1 Topics

- vector addition, scalar multiplication
- Dot product in \mathbb{R}^n
- Magnitude in \mathbb{R}^n
 - $n = 2, 3$ most common
- Cross product of vectors in \mathbb{R}^3
- Cartesian equation of a plane
 - normal vector n
 - direction vectors
- Distance from a point to a plane formula
- parametrization of a line
- matrix multiplication
 - formula for it
 - knowing when it is well-defined and not
 - $m \times n$ and $n \times p \longrightarrow m \times p$
- $AB \neq BA$ in general
 - finding when matrices do commute
- Determinants