# October 23

# Announcements

- Worksheet 4 posted, due Friday
- Webassign 3.3 due Thursday
- Grade approximations posted
- Watch 3blue1brown 4,5,6

# Section 3.2

# Diaginal matrices are a thing

Multiplication is awesome! Won't it be great if every matrix was diagonal.

#### Elementary matrices are a thing

Elementary matices are the matrices that correpond to elementary row operations. Figure them out with class. It'll be fun.

### **Block multiplication**

They are a thing. You feel great them you get it to work.

### Matrix multiplication

We can think of AB as B acting on A or as A acting on B. We can demonstrate this with diagonal matrices. here it is.

### Section 3.3

What does invertible mean?

When is a linear transform T invertible?

What are some obvious transform that are not invertible?

What are some obvious transform that are invertible?

What are some obvious inverses we can figure out?

How can we compute this inverse?