

Week 6 Day 1

Make a Long List

Make sure you know your neighbors' names. Then take 2 minutes to come up with a list of statements about a square matrix A , each of which is *equivalent* to the following one:

A is invertible.

Readings This Week

- ▶ Today: 3.1
- ▶ Wednesday: 3.2–3
- ▶ Friday: No Class!

Determinants 1

1. What is the determinant of the following matrix?

$$\begin{bmatrix} 1 & 3 & 1 \\ 2 & 0 & 0 \\ 3 & 1 & -2 \end{bmatrix}$$

- (A) -7
- (B) 7
- (C) -14
- (D) None of the above

2. What is the determinant of the following matrix?

$$\begin{bmatrix} 1 & 2 & 3 \\ 4 & 5 & 6 \\ 5 & 7 & 9 \end{bmatrix}$$

- (A) 0
- (B) 1
- (C) -1
- (D) None of the above