CSI 30 LECTURE NOTES (Ojakian)

Topic 7: Matrices

OUTLINE

(References: 2.6)

- 1. Matrix Addition
- 2. Matrix Multiplication

1. Matrix Definition

- (a) Definition.
- (b) Dimensions.
- 2. Matrix Addition
- 3. Matrix Multiplication
 - (a) Small examples
 - (b) Find example of non-commutativity.
 - (c) Example: $A \cdot B$, where each row of A is a person's buying pattern, and each column of A is some good; the number in an entry is the quantity bought. Each column of B are the prices of the goods in some country.
 - So $A \cdot B$ gives the amount a person pays in a given country (get estimates from students!).
- 4. Exercises

Section 2.6: 1 - 4, 10, 11