

Homework #6: due in class Friday, Oct. 23

From the text:

Chapter 4.3 / 18, 26

Chapter 4.4 / 9, 14, 18

6.1. Consider the matrix

$$\mathbf{A} = \begin{bmatrix} 1 & -1 & 0 & 1 & -1 \\ 2 & 0 & 1 & 1 & 0 \\ 0 & 1 & 0 & -1 & 0 \end{bmatrix}.$$

- (a) Write the Rowspace(\mathbf{A}) as the span of some vectors.
- (b) Write the Colspace(\mathbf{A}) as the span of some vectors.
- (c) Compute a basis for the row space of \mathbf{A} .
- (d) Compute a basis for the column space of \mathbf{A} .
- (e) Compute the rank of the matrix \mathbf{A} .