

M341 (56140), Homework #2

Due: 11:00am, Thursday, Sep. 13

Instructions: Questions are from the book "Elementary Linear Algebra, 4th ed." by Andrilli & Hecker. Please show all your work, not only your final answer, to receive credit. Keep answers organized in the same order the problems have been assigned.

Proof techniques (1.3)

p. 44-47, #1, 4, 5, 6, 10, 11, 14, 15, 19

In addition:

- A) For #10, state the contrapositive and inverse of each statement and whether these are true or false.
- B) Show that #14 implies #17 by writing $\mathbf{x} = \mathbf{x}_1 + \dots + \mathbf{x}_n$ for an appropriate choice of $\mathbf{x}_1, \dots, \mathbf{x}_n$.