

Math 250:C1, Fall 2003, Chapter 1 review assignment

The following problems taken from the list of assigned problems for the course require working with the definitions and theorems stated in the text to reason about matrices, vectors, and systems of linear equations:

1.1	1, 39, 45, 46
1.3	1, 39, 41, 44, 47
1.4	1, 51–60
1.6	1, 42, 43, 44, 49
1.7	1, 38, 40, 41, 49

To synthesize your understanding of Chapter 1, it is very useful to review these problems in light of what you learned in the whole chapter. Many of these problems are clarified or even directly answered by methods and theorems introduced in later sections; for example, for 1.3, 39, refer to page 43, for 1.3 44, to Theorem 1.4, for 1.4, 55 to Theorem 1.7, etc. To encourage you to review, the following are assigned to be handed in October 1. Five of them will be graded.

1. True-false questions:

- (i) 1.1 1e) (ii) 1.2 1b),g) (iii) 1.3 1d),h),j) (iv) 1.4 1b),h)
(v) 1.6 1d),h) (vi) 1k)

Support your answer with a short argument, an example, or a reference to a statement from the text.

2. 1.1, 45

3. 1.3, 41

4. 1.4, 54

5. 1.4, 59

6. 1.6, 42

7. 1.7, 38