

## Math 250 Introduction to Linear Algebra

I recommend being able to do the following problems for the final exam. Note that these are recommendations only. There is no substitute for a thorough understanding of the techniques and concepts in the course. But this selection tries to touch on many of the important things without being overwhelmingly long.

Note also: I recommend doing the True/False questions as you would on an exam, that is, justify it if it's true, and find a counterexample if it's false.

### Section Problems

- 1.1 1, 8, 39
- 1.2 1, 13, 45
- 1.3 1, 45
- 1.4 1, 2, 11, 25, 29, 45, 46, 59, 60
- 1.6 1, 9, 11, 17, 25, 35, 42
- 1.7 1, 17, 21, 27, 33, 39, 41

- 2.1 1, 15, 23
- 2.3 1, 7, 11, 13, 19, 21
- 2.4 1, 7, 17, 30
- 2.5 3, 7, 15, 19

- 3.1 1, 19, 25
- 3.2 1, 15, 21, 41

- 4.1 1, 9, 11, 19, 23, 27, 42
- 4.2 1, 5, 7, 13, 15, 27
- 4.3 1, 3, 7, 11, 37, 47

### Appen. worksheet

- 5.1 1a-d, 13, 39, 42
- 5.2 1, 5, 17, 41, 45, 51 (for #41 find the complex eigenvalues)
- 5.3 1, 7, 9, 11, 19, 27, 29, 39, 45, 51
- 5.5 13

- 6.1 1, 7, 13, 17, 21, 25, 35, 43
- 6.2 1, 5, 9, 15, 19, 23, 27, 29, 31, 38
- 6.3 1, 5, 9, 13, 29
- 6.4 1a,e-h, 3, 22
- 6.5 1a-d,g,h, 17