

Mathematics 1350H – Linear algebra I: Matrix algebra

TRENT UNIVERSITY, Summer 2017

Homework

The following exercises from the text are for practice – they are not to be handed in and do not count for credit – and you should do them as we go through the material. (Get ahead if you like, just don't fall behind if you can avoid it.) Feel free to do as many more exercises besides those suggested below as you can stand, and by all means ask about any examples, problems, or exercises from the text in tutorial time or office hours if you encounter any difficulties with them. Note that the answers to most odd-numbered exercises are given in the back of the text.

§1.0 Problem # 2

§1.1 Exercises # 1, 3, 4, 5, 9, 11, 13, 14, 15, 17, 19, 21, 23

§1.2 Exercises # 3, 5, 9, 11, 15, 17, 21, 23, 27, 29, 31, 33, 35, 39, 41, 43, 47, 49, 51, 53, 55, 59, 60, 61, 65(a); Problem # 4

§1.3 Exercises # 1, 5, 7, 9, 11, 13, 15, 18, 19, 21, 23, 27, 29, 31, 33, 35, 37, 43, 45, 47; Problems # 1, 3

§1.4 Exercises # 9, 11, 13

§2.0 Problems # 1, 5

§2.1 Exercises # 1, 5, 9, 11, 15, 17, 23, 25, 29, 31, 35, 37, 39, 41

§2.2 Exercises # 1, 3, 5, 7, 11, 13, 15, 16, 17, 19, 21, 27, 29, 31, 33, 35, 37, 39, 43, 45, 47, 49

§2.3 Exercises # 1, 5, 7, 9, 11, 13, 15, 17, 21, 25, 29, 31, 35, 39, 41, 42, 43

§2.4 Exercises # 15, 17, 31, 34, 39, 45

§2.5 Exercises # 1, 5, 7, 11, 13, 15, 17

§3.0 Problems # 1, 2, 3

§3.1 Exercises # 3, 7, 13, 17, 19, 21, 23, 27, 29, 31, 35, 39

§3.2 Exercises # 3, 5, 7, 9, 11, 13, 15, 19, 25, 27, 36a, 41

§3.3 Exercises # 1, 5, 9, 11, 13, 17, 19, 21, 25, 29, 33, 35, 39, 42, 44, 47, 49, 53, 59, 65

§3.4 Exercises # 1, 3, 7, 9

§3.5 Exercises # 3, 4, 5, 8, 10, 11, 13, 15, 17, 19, 21, 25, 27, 29, 31, 35, 37, 39, 43, 47, 49

§3.6 Exercises # 1, 5, 7, 13, 15, 17, 19, 21, 23, 25, 31, 33, 37, 41, 47, 51

§3.7 Exercises # 1, 3, 27, 29, 37, 45, 49

§4.1 Exercises # 1, 5, 7, 11, 13, 15, 17, 19, 21, 23, 27, 37

§4.2 Exercises # 3, 5, 8, 9, 11, 15, 17, 18, 23, 25, 27, 33, 37, 39, 45, 49, 51, 55, 56

§4.3 Exercises # 1, 7, 11, 15, 17, 19, 21, 23, 25, 27

§4.4 Exercises # 1, 3, 5, 7, 9, 13, 17, 25, 27, 37, 39

Note: We will spend little class time, if any, on §2.4, §2.5, §3.4, and §3.7. You are not responsible for any content in these sections which is not needed to do the problems listed above. Depending on how things go, we might not get to the last section or two in Chapter 4 noted above.