

Math 200 – Non Homework

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Never due!

This assignment is not due, and will **not** be graded! It's just meant to be a practice for sections 10.2, 10.5, 10.6. Please do not spend too much time on this, because there are plenty of other things to focus on for the final!

Reading: Sections 10.2, 10.5, 10.6. In those sections, you do **not** need to memorize any proofs, but you do need to know some of the statements. Note that, unlike last semester, tree induction will **NOT** be on the exam! In Section 10.2: Ignore Lemma 10.2.1, know the statements of Theorems 10.2.2 and 10.2.3, Ignore the section on Euler Trails (Corollary 10.2.5 and Example 10.2.7), ignore Proposition 10.2.6, and ignore Example 10.2.9. In Section 10.5: Know the statements of Lemma 10.5.1 and Theorem 10.5.2, ignore Examples 10.5.3 and 10.5.4, ignore Lemma 10.5.3, know the statement of Theorem 10.5.4. In Section 10.6: Know the statement of Theorem 10.6.1, ignore Example 10.6.2, know the statement of Theorem 10.6.2.

- **Section 10.2:** 12, 15, 23
- **Section 10.5:** 6, 8, 10, 13
- **Section 10.6:** 1, 6, 7, 8, 11

The solutions to most of them are in the back of the book, except for two of them:

Solution to 10.2.15: Consider the path $s t u v w x y z r s z u y w u s$.

Solution to 10.5.6: Just consider an infinite version of Example 10.5.1 (d).