

## MATH 354: Homework 6

Due: March 3, 2022 at 11:00 am

1. Upcoming office hours are Monday February 28 8:30-9:30 am and Thursday February 24 9-10 am.
2. Reminder that Midterm 1 is coming up on Monday February 28 in class. It will cover the material of lecture up to the end of our discussion of basic solutions (which is to say, not the simplex method). The review session with your TA is Friday 3-4 on zoom and will be recorded.
3. Reading is still Sections 7.1-4 in Miller, or equivalently Section 2.1-2 in Kolman and Beck.
4. Recall that last week in Problem 4 you found a set of four basic feasible solutions to (the canonical form of) Problem 6 from Homework 1. For each basic feasible solution you found, decide which other basic feasible solutions it is adjacent to.
5. Consider the set of basic feasible solutions you found to the linear programming problem in Problem 4(d) of the sample midterm. For each basic feasible solution you found, decide which other basic feasible solutions it is adjacent to.
6. Set up an initial tableau for the linear programming problem in Problem 6 from Homework 1. [You can start with the canonical form you found in Problem 4 from last week.]
7. Set up an initial tableau for the linear programming problem in Problem 4 from the sample midterm.