

Name:

MA 515 – Homework 12
Due Wed, Dec 10th

Your answers should be detailed explanations written neatly in quality mathematical English.

Problems from J. Lee's book:

Page 112, Exercise (Weighted Matching)

Page 113, Problem (Disjoint Odd Set Cover)

The following are not to be turned in. If you plan on taking the prelim at any point, you should work through the Problem on page 114 regarding Tutte's Perfect-Matching Theorem. For all students, you should work on gaining a good understanding of this course as a whole. Some guiding questions might be:

1. What are the major theorems?
2. What are the major optimization problems?
3. What are the major max-min results?
4. What are the major matroids?
5. What are the major polytopes?
6. What are the major algorithms?
7. How are the above results justified? Can you sketch the proofs?