Final Exam Information

Math 375, Spring 2012

Date and Time: Friday, May 4, 12:30 – 2:30

Location: TR C122

Topics: Sections 4.1 through 4.4. Be able to answer a question about the proof of Prim's Algorithm for finding a least weight spanning tree in complete graph with positive edge-weights; use the Flow Augmentation Algorithm for increasing flow in a network; find a (P,Q)-cut with capacity equal to a maximal flow; model and solve a problem using the concepts of network and flow (examples in class: matrix with given row and column sums and entry restrictions, elimination from contention, messenger problem, dynamic network flow, matching problem); find a matching M in a bipartite graph and an edge cover S for this graph with the property that |M| = |S|using a matching network.

Number of problems: 4 or 5