

WRITTEN ASSIGNMENT # 10

MATH 38

DUE: WEDNESDAY 27, 2005

Read Section 2.3

1. Describe Kruskal's algorithm. Use the weighted graph in Exercise 2.3.23 to illustrate Kruskal's algorithm. Do not just give the answer indicate which edges were added at each iteration of the algorithm.
2. Describe Dijkstra's algorithm. Illustrate this algorithm with graph in Exercise 2.3.23 and choose P as starting vertex. Please indicate the outcomes of each iteration.
3. Ignoring the edges labels in the graph in Exercise 2.3.23. Illustrate the Breadth First Search algorithm. Choose P as the starting point.
4. What method of proof is used to prove Theorem 2.3.3?
5. Give a sketch of the proof of Theorem 2.3.7. This means that you indicate a method of proof and give the main ideas used in the proof.