MAT 375-1

HOMEWORK ASG. #5 HAND IN TUESDAY, OCT. 4

(OPTIONAL: If you want feedback on this homework assignment before Test 1, hand in your assignment either in class Thursday, Sep. 29, or to Dr. Spackman's mailbox in BR 217 before 4:00 pm Friday, Sep. 30)

1. Find:
   a) a depth-first spanning tree for the graph of Exercise # 4d in Section 2.2
   b) a breadth-first spanning tree for the graph of Exercise # 4d in Section 2.2

2. Exercise Set 3.2 # 4

3. Exercise Set 3.2 # 16a

4. Exercise Set 3.2 # 26a

5. Finish the Branch and Bound Method on the tree diagram in Figure 3.21 on page 118 of the textbook. (and show your work)

6. A manufacturing plant makes five products: A, B, C, D, and E. It can make only one product at a time, and there is a set-up cost (in hundreds of dollars) in converting from the production of one product to another, given in the cost matrix below. Each week, it must make all five products, and then do it all over again the next week. Find a production sequence that minimizes weekly costs. Show your work.

From\To	**A**	**B**	**C**	**D**	**E**
A	-	5	7	6	6
B	6	-	5	9	6
C	6	4	-	5	10
D	5	8	6	-	6
E	7	6	11	4	-