## MAT 375-1 HOMEWORK ASG. #3 HAND IN TUESDAY, SEP. 20

- 1. Find an Euler cycle for the <u>left</u> graph in Figure 1.8 on page 16.
- 2. For which values of n does  $K_n$  (the complete graph on n vertices) have an Euler cycle? Make clear your reasoning.
- 3. Find an Euler trail in the <u>left</u> graph of Problem # 5b on page 18.
- 4. Build a graph with 7 vertices that has an Euler trail, but does not have an Euler cycle. (And explain why it has these properties.)
- 5. Exercise set 2.2 Problem # 2a, b, c
- 6. Exercise Set 2.2 # 4c (Give complete and concise written reasoning.)
- 7. Exercise Set 2.2 # 4d (Give complete and concise written reasoning.)
- 8. Exercise Set 2.2 # 4k (Give complete and concise written reasoning.)