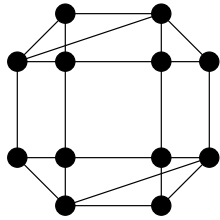


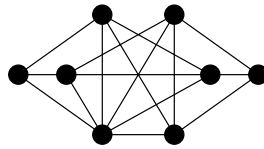
Math 142, problem set 03
REVISED TUE SEP 13
Outline due: Wed Sep 14
Final version due: Fri Sep 16

Problems to be turned in:

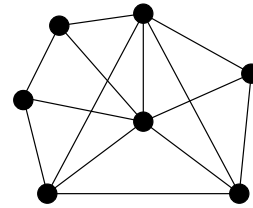
1. (a) Which complete bipartite graphs $K_{r,s}$ have an Euler cycle? Explain.
(b) Which complete bipartite graphs $K_{r,s}$ have an Euler trail but not an Euler cycle? Explain.
2. (2.1) 10.
3. (2.2) 2(b).
4. (2.2) 4(d,e, ℓ).
5. (2.2) 16.
6. Find the chromatic number of each of the following graphs. Give a careful argument to show that fewer colors will not suffice.



(a)



(b)



(c)