

CSE 321: Discrete Structures

Assignment #9

Due Wednesday, December 10

Reading: Rosen, Chapter 8 (In 4th edition, chapter 7).

1. p. 555, problem 24 (4th edition, p. 455, problem 18)
2. Describe an algorithm to decide whether a graph is bipartite.
3. Show that in any simple graph there is a path from any vertex of odd degree to some other vertex of odd degree.
4. For which values of m and n does the complete bipartite graph $K_{m,n}$ have an
 - Euler circuit
 - Euler path.
5. Suppose that a connected bipartite planar simple graph has e edges and v vertices. Show that $e \leq 2v - 4$ if $v \geq 3$.