CIS 435, Spring 2002, Joseph Leung
Homework #12

36.2-6 A **hamiltonian path** in a graph is a simple path that visits every vertex exactly once. Show that the language HAM-PATH = $\{ \langle G, u, v \rangle$: there is a hamiltonian path from u to v in a graph $G \}$ belongs to NP.

36.2-7 Show that the hamiltonian-path problem can be solved in polynomial time on directed acyclic graphs. Given an efficient algorithm for the problem.

33.7-1 Consider an RSA key set with $p = 11$, $q = 29$, $n = 319$, and $e = 3$. What value of d should be used in the secret key? What is the encryption of the message $M = 100$?