Honor Pledge: On my honor as a student, I have neither given nor received aid on this quiz.

Name: **Signature:**

(1) Find the general solution to the initial value problem
$$y'' + 2y' + 2y = 0, \ y(0) = 0, y'(0) = 1.$$
Express the solution in terms of time-varying amplitude, circular frequency and phase shift. Sketch the solution. (6)