1. Find the general solution, y(x), to:

$$y'' + 3y' + 2y = 0$$

Then solve the initial value problem: y(0) = 0; y'(0) = -1.

$$y'' + 2y' + 26y = 0$$

1. Find the general solution, y(x), to:

$$y'' + 5y' + 6y = 0$$

Then solve the initial value problem: y(0) = 0; y'(0) = -1.

$$y'' + 8y' + 41y = 0$$

1. Find the general solution, y(x), to:

$$y'' + 7y' + 12y = 0$$

Then solve the initial value problem: y(0) = 0; y'(0) = -1.

$$y'' + 2y' + 5y = 0$$

1. Find the general solution, y(x), to:

$$y'' + 9y' + 20y = 0$$

Then solve the initial value problem: y(0) = 0; y'(0) = -1.

$$y'' + 4y' + 8y = 0$$