

Math 301-161 Quiz 5 (A)

Name:.....Sec#:.....ID#:.....Ser#:.....

Q:1 (5 points) Find eigenvalues and eigenvectors of the boundary value problem

$$y'' + 2y' + \lambda y = 0 \text{ with } y(0) = 0 \text{ and } y(1) = 0.$$

Q:2 (5 points) Find eigenvalues and eigenvectors of the boundary value problem

$$x^2y'' + xy' + \lambda y = 0 \text{ with } y(1) = 0 \text{ and } y(e) = 0.$$