Math 3280 Worksheet 22: Linear homogeneous ODEs with constant coefficients

Group members (2 to 4):

(1) Solve the initial value problem

$$y^{(4)} + 2y'' + y = 0,$$

$$y(0) = 0,$$

$$y'(0) = 1,$$

$$y''(0) = 2,$$

$$y'''(0) = 3.$$