

Math 54 Worksheet 25

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1. Solve the boundary value problem

$$2x^2y'' + 3xy' - y = 0, \quad y(1) = 0, \quad y'(1) = 1.$$

2. Solve the boundary value problem

$$y'' - 2y' + y = x^2, \quad y(0) = 1, \quad y'(0) = 0.$$