

ESO 208A; ESO 218

Computational methods in engineering

Tutorial # 9

October 24, 2013

1. Solve the following boundary value problem.

$$\frac{d^2y}{dx^2} + x + y = 0 \quad \{x \in [0, 1]\}$$

Boundary values: $y(0) = y(1) = 0$

- a. Use shooting method with Euler method and step size = 0.25
- b. Use finite difference method with 5 nodes.