

MATH 226

Differential Equations

Assignment 4

Due Monday, February 24

Read Section 2.2: “Linear Equations: Method of Integrating Factors” and Section 2.3: “Modeling with First Order Equations”

Problems

Part I: Section 2.1: Separable Equations

For the starred(*) problems, use *MATLAB* to plot the solution and verify the solution you obtain by hand.

Practice Problems 2.1: 1, 3, 7, 12, 13*, 16*, 17*, 21, 29, 33

Feedback Problems 2.1: 16, 29, 33

Part II: Section 2.2: Linear Equations: Method of Integrating Factors

For the starred(*) problems, use *MATLAB* for drawing direction fields.

Practice Problems 2.2: 1*, 4*, 7*, 8*, 13, 15, 22*, 25*, 31, 35, 36, 38, 41

Feedback Problems 2.2: 4*, 22*, 36