

Homework #1

Due on Friday, January 15, 2016.

1. Problem 2.1.33

Solve the linear system

$$\begin{array}{rclcl} x & - & y & = & 0 \\ 2x & + & y & = & 3 \end{array}$$

2. Problem 2.1.35

Solve the linear system

$$\begin{array}{rclcl} x & + & 5y & = & -1 \\ -x & + & y & = & -5 \\ 2x & + & 4y & = & 4 \end{array}$$

3. Problem 2.1.40

- (a) Find a system of two linear equations in the variables x_1 , x_2 , and x_3 whose solution set is given by the parametric equations $x_1 = t$, $x_2 = 1 + t$, and $x_3 = 2 - t$.
- (b) Find another parametric solution to the system in part (a) in which the parameter is s and $x_3 = s$.