

MTH 42 LECTURE NOTES (Ojakian)

Topic 2: Special Forms

OUTLINE

(References: 1.1)

1. Triangular Systems
 2. Echelon Form
 3. Back substitution
-

1. Triangular form

(a)

PROBLEM 1. *Do 1.1 (p.12): 24*

(b) Note properties of triangular system.

(c) Definition: Leading Variable

2. Echelon Form

(a)

PROBLEM 2. *Do Example 6.*

(b) Note Definition 1.3 - Echelon Form

(c) Definition: Free Variables (versus leading variables)

(d) Process called **Back Substitution**

(e)

PROBLEM 3. *From 1.1 (page 12): Do exercises 15, 17, 19, 21.*

3. Solve using a computer

(a) Write the coefficients and the constant column as a **matrix** and a **vector**.

(b) Then plug into the computer function.

4. More Exercises

PROBLEM 4. *Do 1.1 (p.12): 41, 43*