



National University – Sudan

Faculty Of Engineering & Architecture

Academic year 2019/2020 – semester 4 Tutorial No.(2)

Batch (3) Civil Engineering

Name:.....

Index No:.....

Course Title : Numerical Methods

Course Code MAT221

Date: /12/2019

Duration: 2 hour

Time :10 :00- 12:00

1- use the inverse of a matrix
to solve the systems

$$2x - 3y = 2$$

$$5x - 6y = 8$$

$$x + 2y = -1$$

$$2x + 3y = 1$$

$$-x + y = 2$$

$$3x + 4y = 15$$



$$x_1 + 2x_2 - x_3 = 4$$

$$2x_1 - 3x_2 + x_3 = -1$$

$$5x_1 + 7x_2 + 2x_3 = -1$$



$$\begin{array}{rcl} x_1 + 2x_2 + 3x_3 & = & 5 \\ 2x_1 + 5x_2 + 3x_3 & = & 3 \\ x_1 + \quad \quad + 8x_3 & = & 17 \end{array}$$

$$\begin{array}{rcl} 2x_1 + 4x_2 - 2x_3 & = & 2 \\ 4x_1 + 9x_2 - 3x_3 & = & 8 \\ -2x_1 - 3x_2 + 7x_3 & = & 10 \end{array}$$

