



National University – Sudan
Faculty Of Engineering & Architecture

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

Batch (3 ) Civil Engineering

Name:.....

Index No:.....

Course Title : Numerical Methods

Course Code MAT221

Date: / /2020

Duration: 2 hour

Time :10 :00- 12:00

Compute the first two steps of the Jacobi method with starting vector [0, .....,0]

3u - v = 5

-u + 2v = 4

Dotted lines for student response, including a circle at the bottom right.

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$$2u - v = 0$$

$$-u + 2v - w = 2$$

$$-v + 2w = 0$$

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$$3u + v + w = 6$$
$$u + 3v + w = 3$$
$$u + v + 3w = 5$$

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$$10x - y + 2z = 6$$

$$-x + 11y - z + 3w = 25$$

$$2x - y + 10z - w = -11$$

$$3y - z + 8w = 15$$

$$4x - 2y = 0$$

$$-2x + 5y - z = 2$$

$$-y + 4z + 2w = 3$$

$$2z + 3w = -2$$

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