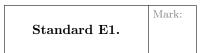
| Name: |            |
|-------|------------|
| J#:   | Dr. Clontz |
| Date: |            |

Math 237 – Linear Algebra Fall 2017

#### Version 1

Show all work. Answers without work will not receive credit. You may use a calculator, but you must show all relevant work to receive credit for a standard.



Write a system of linear equations corresponding to the following augmented matrix.

$$\begin{bmatrix} -4 & -1 & 3 & 2 \\ 1 & 2 & -1 & 0 \\ -1 & 4 & 1 & 4 \end{bmatrix}$$

|              | Mark: |
|--------------|-------|
| Standard E3. |       |
|              |       |

$$-3x + y = 2$$
$$-8x + 2y - z = 6$$
$$2y + 3z = -2$$

| Standard E4. | Mark: |
|--------------|-------|
|              |       |

$$x + 2y + 3z + w = 0$$
$$3x - y + z + w = 0$$
$$2x - 3y - 2z = 0$$
$$-x + 2z + 5w = 0$$

| Name: |            |
|-------|------------|
| J#:   | Dr. Clontz |
| Date: |            |

Math 237 – Linear Algebra Fall 2017

## Version 2

Show all work. Answers without work will not receive credit. You may use a calculator, but you must show all relevant work to receive credit for a standard.

Standard E1.

Mark:

Write an augmented matrix corresponding to the following system of linear equations.

$$x_1 + 4x_3 = 1$$
$$x_2 - x_3 = 7$$
$$x_1 - x_2 + 3x_3 = -1$$

Standard E3.

Mark:

Solve the system of linear equations.

$$2x + y - z + w = 5$$
$$3x - y - 2w = 0$$
$$-x + 5z + 3w = -1$$

| Standard E4. | Mark: |
|--------------|-------|
|--------------|-------|

$$x + 2y + 3z + w = 0$$
$$3x - y + z + w = 0$$
$$2x - 3y - 2z = 0$$

| Name: |            |
|-------|------------|
| J#:   | Dr. Clontz |
| Date: |            |

Math 237 – Linear Algebra Fall 2017

# Version 3

Show all work. Answers without work will not receive credit. You may use a calculator, but you must show all relevant work to receive credit for a standard.

Standard E1.

Mark:

Write an augmented matrix corresponding to the following system of linear equations.

$$x_1 + 4x_3 = 1$$
$$x_2 - x_3 = 7$$
$$x_1 - x_2 + 3x_3 = -1$$

Standard E3.

$$-3x + y = 2$$
$$-8x + 2y - z = 6$$
$$2y + 3z = -2$$

| Standard E4.  Mark: |
|---------------------|
|---------------------|

$$x + 3y + 3z + 7w = 0$$
$$x + 3y - z - w = 0$$
$$2x + 6y + 3z + 8w = 0$$
$$x + 3y - 2z - 3w = 0$$

| Name: |            |
|-------|------------|
| J#:   | Dr. Clontz |
| Date: |            |

Math 237 – Linear Algebra Fall 2017

# Version 4

Show all work. Answers without work will not receive credit. You may use a calculator, but you must show all relevant work to receive credit for a standard.

Standard E1.

Mark:

Write an augmented matrix corresponding to the following system of linear equations.

$$x_1 + 3x_2 - 4x_3 + x_4 = 5$$
$$3x_1 + 9x_2 + x_3 - 7x_4 = 0$$
$$x_1 - x_3 + x_4 = 1$$

Standard E3.

Solve the system of linear equations.

$$2x + y - z + w = 5$$
$$3x - y - 2w = 0$$
$$-x + 5z + 3w = -1$$

| Standard E4. | Mark: |
|--------------|-------|
|              |       |

$$x + 2y - 3z = 0$$
$$2x + y - 4z = 0$$
$$3y - 2z = 0$$
$$x - y - z = 0$$

| Name: |            |
|-------|------------|
| J#:   | Dr. Clontz |
| Date: |            |

Math 237 – Linear Algebra Fall 2017

### Version 5

Show all work. Answers without work will not receive credit. You may use a calculator, but you must show all relevant work to receive credit for a standard.

Standard E1.

Mark:

Write an augmented matrix corresponding to the following system of linear equations.

$$x_1 + 3x_2 - 4x_3 + x_4 = 5$$
$$3x_1 + 9x_2 + x_3 - 7x_4 = 0$$
$$x_1 - x_3 + x_4 = 1$$

Standard E3. Mark:

$$-3x + y = 2$$
$$-8x + 2y - z = 6$$
$$2y + 3z = -2$$

| Standard E4.  Mark: |
|---------------------|
|---------------------|

$$x + 3y + 3z + 7w = 0$$
$$x + 3y - z - w = 0$$
$$2x + 6y + 3z + 8w = 0$$
$$x + 3y - 2z - 3w = 0$$

| Name: |            |
|-------|------------|
| J#:   | Dr. Clontz |
| Date: |            |

Math 237 – Linear Algebra Fall 2017

### Version 6

Show all work. Answers without work will not receive credit. You may use a calculator, but you must show all relevant work to receive credit for a standard.

Standard E1.

Mark:

Write an augmented matrix corresponding to the following system of linear equations.

$$x_1 + 3x_2 - 4x_3 + x_4 = 5$$
$$3x_1 + 9x_2 + x_3 - 7x_4 = 0$$
$$x_1 - x_3 + x_4 = 1$$

Standard E3.

$$x + 3y - 4z = 5$$
$$3x + 9y + z = 2$$

| Standard E4. | Mark: |
|--------------|-------|
|              |       |

$$x + 2y + 3z + w = 0$$
$$3x - y + z + w = 0$$
$$2x - 3y - 2z = 0$$
$$-x + 2z + 5w = 0$$