

Name: _____ Instructor: _____

Matrix Worksheet
Solving a System of Equations using a Matrix
Math 099

Your graphing calculator can help you solve a system of equations.

Given the equations:

$$3x + 2y = 12$$

$$4x - 4y = 16$$

Written as a matrix, these equations would look like the following:

3 2 12 3 represents the number in Row 1, column 1

4 -4 16 16 represents the number in row 2, column 3

To put this information into the computer:

1. Press [MATRIX] (The matrix function is a second function with x⁻¹)

2. Press to display the EDIT menu.

```
NAMES MATH EDIT
1: [A] 2 X 4
2: [B]
3: [C]
4: [D]
5: [E]
```

3. This is a 2 X 3 matrix so press 2 3

```
MATRIX [A] 2 X 3
[ 0  0  0  -
[ 0  0  0  -
1, 1 = 0
```

4. Press 3 to enter the first element. The rectangular cursor moves to the next element of row 1.

```
MATRIX [A] 2 X 3
[ 3  0  0  -
[ 0  0  0  -
1, 1 = 3
```