

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
```