

Matrix Solution of Systems by CALCULATOR

Step 1) Write the system of equations as an augmented matrix.

Step 2) Enter the augmented matrix into the calculator.

TI 83/84

Press **2nd** **MATRIX**

► EDIT

Select: <Name> **ENTER**

Set dimensions

Enter elements

Press **2nd** **QUIT**

TI 85/86

Press **2nd** **MATRIX**

The menu keys will then be labeled in the following way.

NAMES **EDIT** **MATH** **OPS** **CPLX**

Press **F2**

Type: <Name> **ENTER**

Set dimensions

Enter elements

Press **2nd** **QUIT**

TI 89/92

Press **APPS**

6: Data/Matrix Editor

3: New (or Current)

Type: Matrix

Variable: **ALPHA** <Name>

Row Dim: <#>

Col Dim: <#>

Press **ENTER**

Enter items

Press **2nd** **QUIT**

Step 3) Display the matrix and check for errors. Edit if necessary. (See **Step 2**)

Press **2nd** **MATRIX**

Select: <Name> **ENTER**

Press **ENTER**

Press **ALPHA** <Name>

Press **ENTER**

Press **alpha** <Name>

Press **ENTER**

Step 4) Place the matrix in reduced row echelon form.

Press **2nd** **MATRIX**

► MATH

Select: rref(**ENTER**

Press **2nd** **MATRIX**

Select: <Name> **ENTER**

Press **ENTER**

The solution appears.

Press **2nd** **MATRIX**

Press **F4**

dim **Fill** **ident** **ref** **rref**

Press **F5**

Press **ALPHA** <Name>

Press **ENTER**

The solution appears.

Type on the keyboard:

rref (<Name>)

Press **ENTER**

The solution appears.