MATRICES FUNCTION RESOURCE PAGE
(for use with a Casio 9850G or 9850G+ graphing calculator)

ENTERING DATA INTO A MATRIX:
(Your calculator must be in MAT MODE.)

Step 1. You must first set the size of your matrix. Suppose you want to work with a matrix \( A \): Highlight Mat A, then specify its dimensions: # of rows, [EXE], # of columns, [EXE].

Step 2. Your calculator should now be prompting you to begin entering your data.

Repeat steps 1 and 2 for each of your remaining matrices.

PERFORMING COMPUTATIONS WITH MATRICES:
(Your calculator must be in RUN MODE, and the sizes of your matrices must be compatible.)

For example, to add matrix \( A \) + matrix \( B \):

Press [OPTN], [F2](MAT) to bring up the matrix menu choices. Then press [F1](Mat), [ALPHA], \([X,\theta,T]\) (A), [+], [F1](Mat), [ALPHA], \([X,\theta,T]\) (B). Your screen should look as shown at right.

Now, press [EXE] and your sum should appear.

Matrix subtraction, matrix multiplication and multiplication by a scalar can be completed by making simple adjustments to the series of keystrokes given above.

Sometimes you will need to use the **inverse of a matrix**. To tell your calculator you want to use the inverse of matrix \( A \), for example, you must do the following:

Press [OPTN], [F2](MAT) to bring up the matrix menu choices, if it isn’t already in your window. Then press [F1](Mat), [ALPHA], \([X,\theta,T]\) (A) to tell your calculator you want matrix \( A \). And finally press [SHIFT], [ )] (x^{-1}). Your screen should look as shown at right: