

NAME _____

TI-83 Calculator

Date _____ Period _____



ALGEBRA

Finding the Solution to a System of Equations

1. Push the MATRIX button, which is  . Push  twice to get to EDIT. Push .
2. Make sure MATRIX [A] is at 2 x 2. Push . Put in the numbers as it is shown below...

Example:

$$\begin{array}{l} 7x + 2y = 22 \\ 6x - 1y = 27 \end{array} \quad \begin{array}{l} \downarrow \qquad \downarrow \\ [\quad 7 \quad \quad 2 \quad] \\ \uparrow \qquad \uparrow \\ [\quad 6 \quad \quad -1 \quad] \end{array}$$

Push the MATRIX button, go to EDIT, push  to go to 2: [B]. Push .


Make sure MATRIX [B] is at 2 x 1. Enter the numbers...

$$\begin{array}{l} 7x + 2y = 22 \\ 6x - 1y = 27 \end{array} \quad \begin{array}{l} \downarrow \\ [\quad 22 \quad] \\ \uparrow \\ [\quad 27 \quad] \end{array}$$

Push   to get back to the main screen.

Push the MATRIX button, and then push .

Your screen should now look like this: [A]

Push the  (do not push 2nd first!).

Your screen should now look like this: [A]⁻¹

Push the MATRIX button, push  to get to 2: [B] and push .

Your screen should now look like this: [A]⁻¹[B].

Push .

Your screen should now look like this: [[x]

[y]

]

Answers:

x = this number

y = this number

