# **Lesson Objective**

1. Find the inverse of a matrix using TI-84/83 Plus calculator.

# Find the Inverse of a Matrix – using TI-84/83 Plus calculator

This assignment will go fairly quickly for you, as long as you have your calculator.

No matter what the directions say in the questions, \_\_\_\_\_\_\_\_\_\_\_\_ use the calculator, not by hand.

* **EXAMPLE:** For , find ~~without using a calculator~~. [6.6.19]

Psst! Use the calculator – \_\_\_\_\_\_\_\_\_\_\_\_\_ do this by hand!

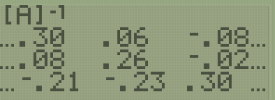
NOTE: is read as “the \_\_\_\_\_\_\_\_\_\_\_\_\_ matrix of *A*,” or more simply “*A*-inverse.”

|  |  |  |  |
| --- | --- | --- | --- |
| STEP 1: Enter matrix into calculator. | STEP 2: Return to home screen and recall matrix A. | Step 3: Press the button to get the – 1 exponent, then ENTER. | |
|  |  |  | |
| (After Step 3)  Note the ellipsis marks at the right (the three dots in a row … ). That means there’s more information. Press the right arrow to see more. | Step 4 (if needed): Convert decimals to fractions by pressing **MATH, ENTER, ENTER**. | | Solution |

* **EXAMPLE:** Let *A* be the given matrix. Find with a calculator. [6.6.31-GC]

(Round to the nearest hundredth, as needed).

To help with rounding for this problem, press **MODE**, go to the “FLOAT” row, and select number “2,” for 2 decimal places, since you are rounding to hundredth.

Solution:

Sources Used:

1. Pearson MyLab Math *College Algebra with Modeling and Visualization, 6th Edition*, Rockswold
2. Wabbitemu calculator emulator version 1.9.5.21 by Revolution Software, BootFree ©2006-2014 Ben Moody, Rom8x ©2005-2014 Andree Chea. Website <https://archive.codeplex.com/?p=wabbit>