

MIT OpenCourseWare  
<http://ocw.mit.edu>

11.481J / 1.284J / ESD.192J Analyzing and Accounting for Regional Economic Growth  
Spring 2009

For information about citing these materials or our Terms of Use, visit: <http://ocw.mit.edu/terms>.

## **How to invert a matrix in Microsoft Excel:**

There are two very important conditions: (1) the matrices have to be square, and (2) with no blank cells or cells with non-numbers.

First, HIGHLIGHT ALL THE CELLS WHERE THE INVERTED MATRIX IS GOING TO BE CALCULATED INTO, which must be the same size as the matrix that is being inverted (makes sense!). For example, if it is a 5x5 matrix, then select 5x5 cells in your Excel spreadsheet for output. Then type in the MINVERSE equation as follows: **=MINVERSE (a1:e5)**, where a1:e5 are the cells where the original matrix is at. Or you may select data cells by dragging a window as you usually do in Excel. Your equation will appear on the upper left-hand cell of the highlighted cells where the inverted matrix is going to be.

Once you type in the function, and this is very important, instead of just pressing enter (this will give you back just one result, placed on the upper left hand cell), **YOU MUST PRESS CTRL-SHIFT-ENTER at the same time, NOT JUST ENTER.** This will then give you the inverted matrix in ALL the highlighted cells.