


# Matrices on the Graphing Calculator

## TI-83 / TI-84

- matrix menu:**  $\boxed{2\text{nd}}$  MATRIX
- to enter a matrix:**  $\boxed{2\text{nd}}$  MATRIX  $\boxed{\blacktriangleright}$   $\boxed{\blacktriangleright}$  EDIT  
(select matrix name)  
edit dimensions  
edit entries  
\*  $\boxed{2\text{nd}}$  QUIT \*
- basic operations:**  $\boxed{2\text{nd}}$  MATRIX NAME:  
(name the matrix)  
use operation keys on calculator
- determinant:**  $\boxed{2\text{nd}}$  MATRIX  $\boxed{\blacktriangleright}$  MATH  
select 1: det  
 $\boxed{2\text{nd}}$  MATRIX NAME:  
(name the matrix)
- inverse matrix:**  $\boxed{2\text{nd}}$  MATRIX NAME:  
(name the matrix)  
 $\boxed{x^{-1}}$   
 $\boxed{\text{MATH}}$  1:  $\boxed{\blacktriangleright}$  FRAC  $\boxed{\text{ENTER}}$   $\boxed{\text{ENTER}}$   
to change entries to fractions)
- to solve a system:** write matrix equation by hand  
enter matrix [A] and matrix [B]  
enter on calculator  $[A]^{-1} \cdot [B]$   $\boxed{\text{ENTER}}$

## TI-Nspire

- from home menu, add a calculator page
- to create a matrix:** [MENU] 7: Matrix & Vector / 1: Create  
OR  
use the button that looks like ... 
- to store a matrix:** create a matrix  
[CTRL] sto→ (select a name for the matrix)
- basic operations:** use the names for the matrices and operation keys
- determinant:** [MENU] 7: Matrix & Vector / 3: Determinant  
OR  
type det(  
(name the matrix)
- inverse matrix:** (name the matrix)  $\boxed{\wedge}$  -1  $\boxed{\text{ENTER}}$
- to solve a system:** write matrix equation by hand  
enter on calculator  $[A]^{-1} \cdot [B]$   $\boxed{\text{ENTER}}$