

# appleSTEMs

Science Technology Engineering Math  
Software for iOS and OSX

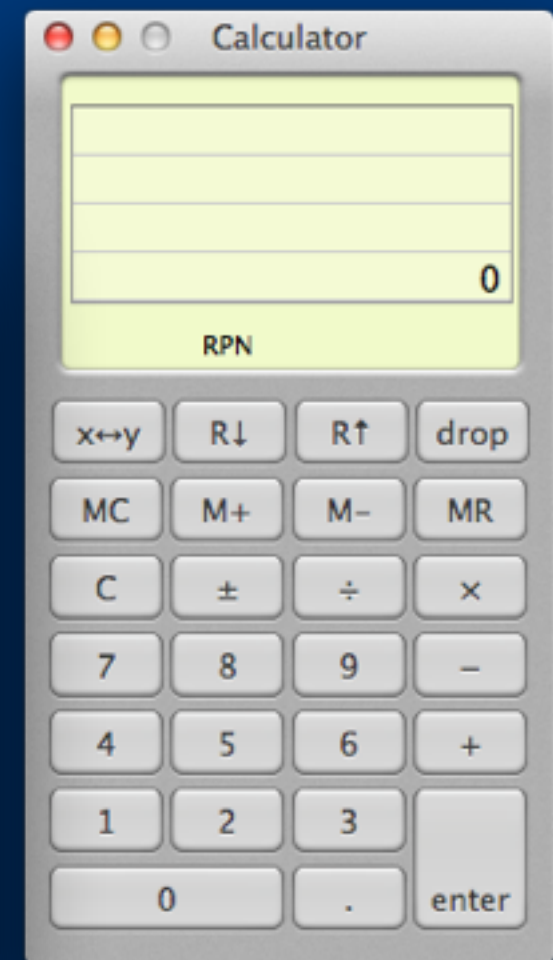
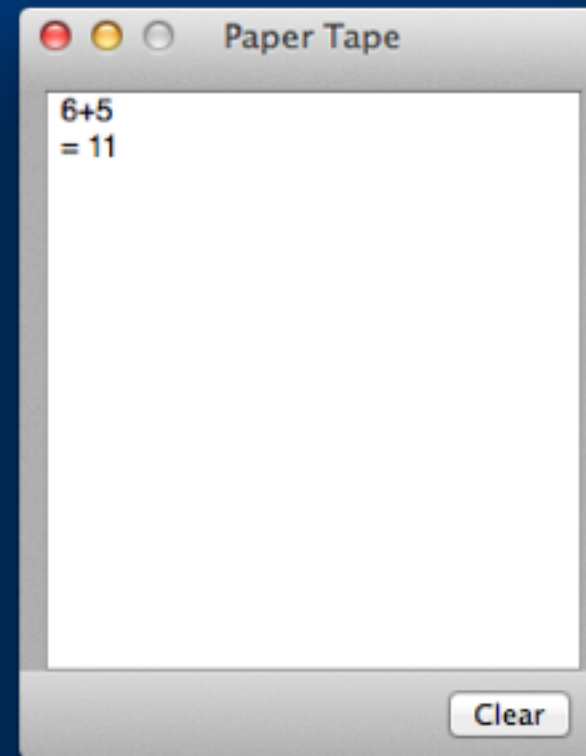
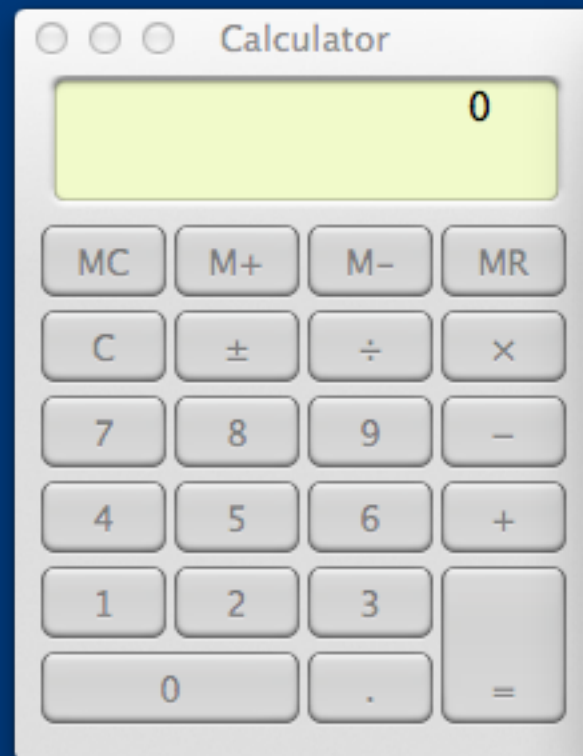
Warren W. James  
April 20, 2015

# STEM apps that Apple Forgot to Mention

- Calculator
  - Grapher
- 
- Both are included with OS X
  - Calculator can be found in the Applications Folder
  - Grapher can be found in the Applications/Utilities Folder

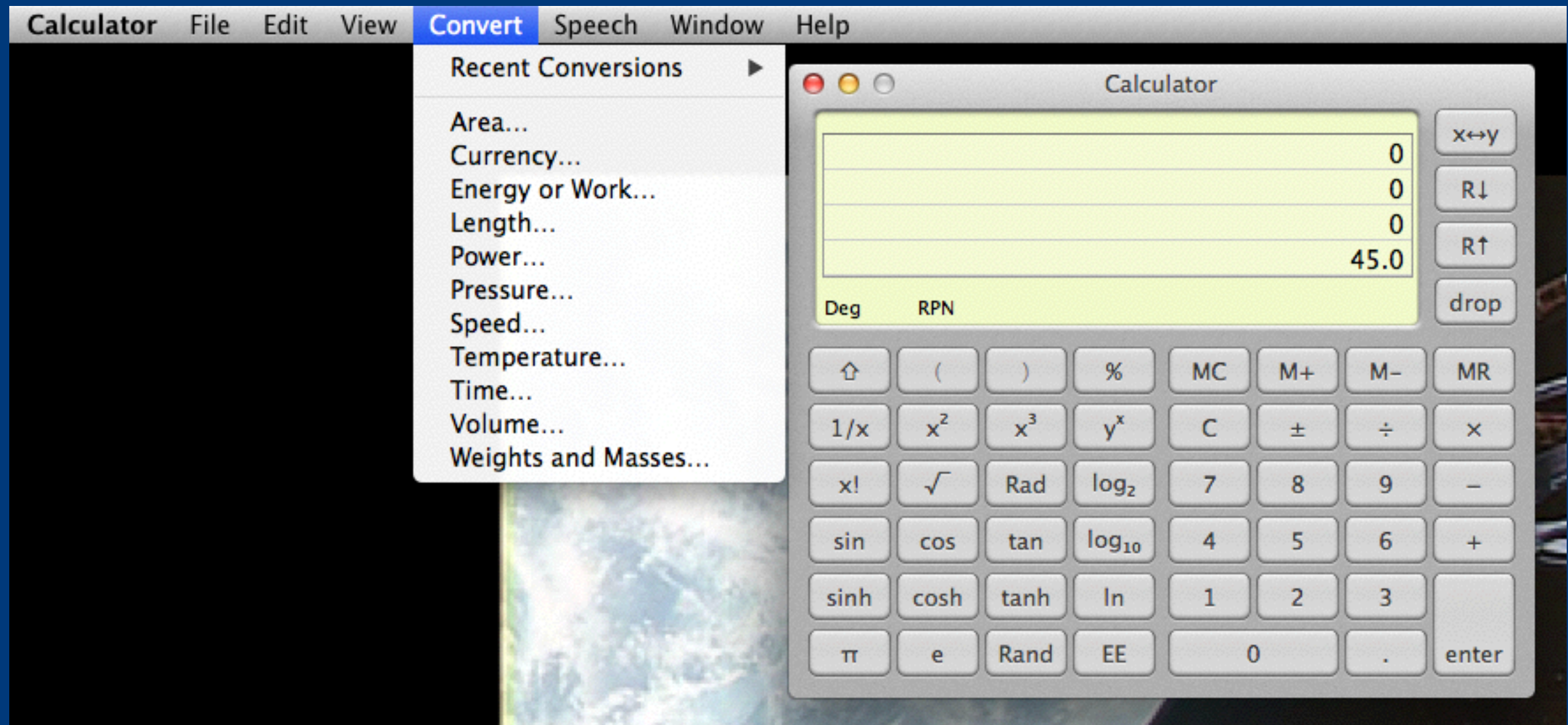
# Calculator

- A basic four function calculator
- Works in a 'conventional' way using an equals sign or in RPN mode
- Can display commas in the answer
- Selectable number of digits for display
- Your calculations can be recorded on a 'paper tape' that can be saved to disk or printed

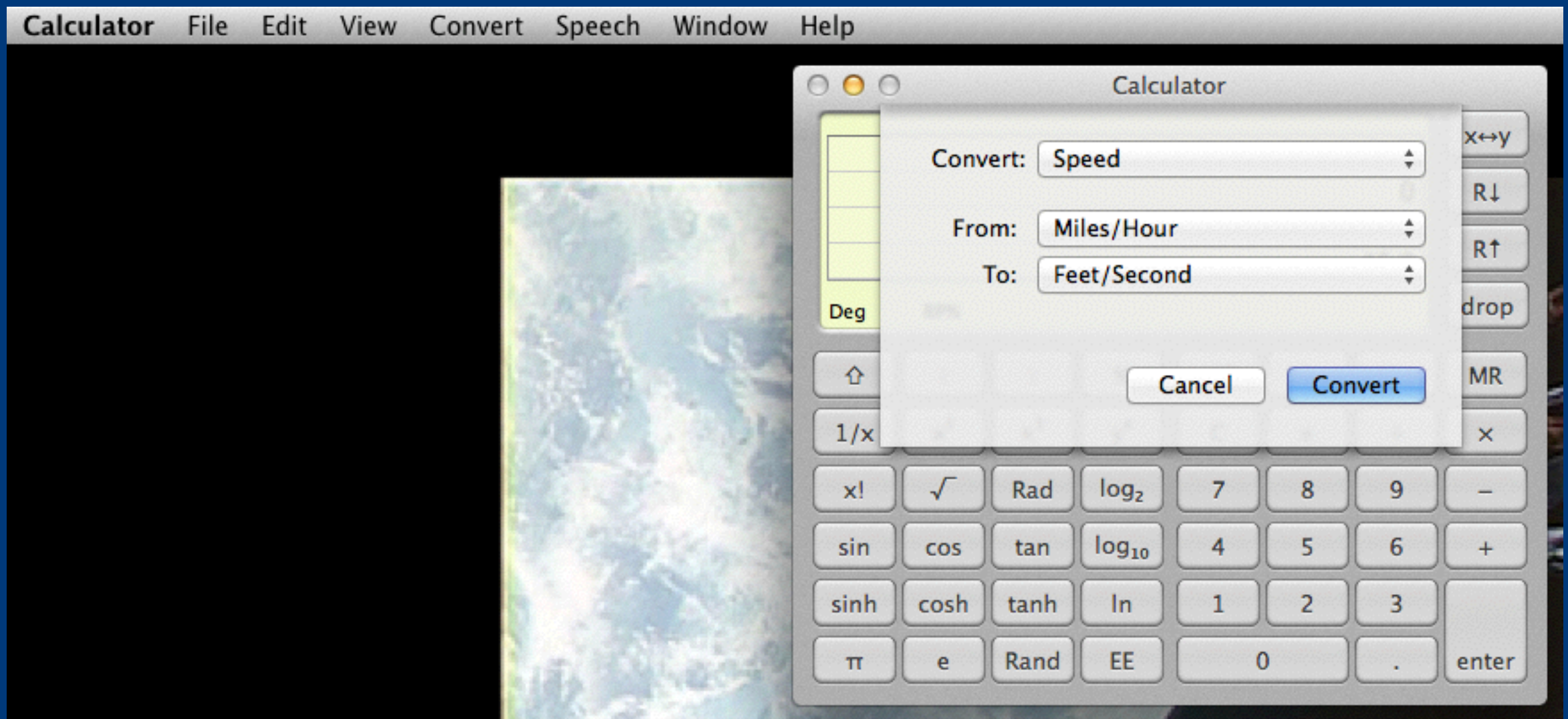


# Converting Units

- Built in units conversions

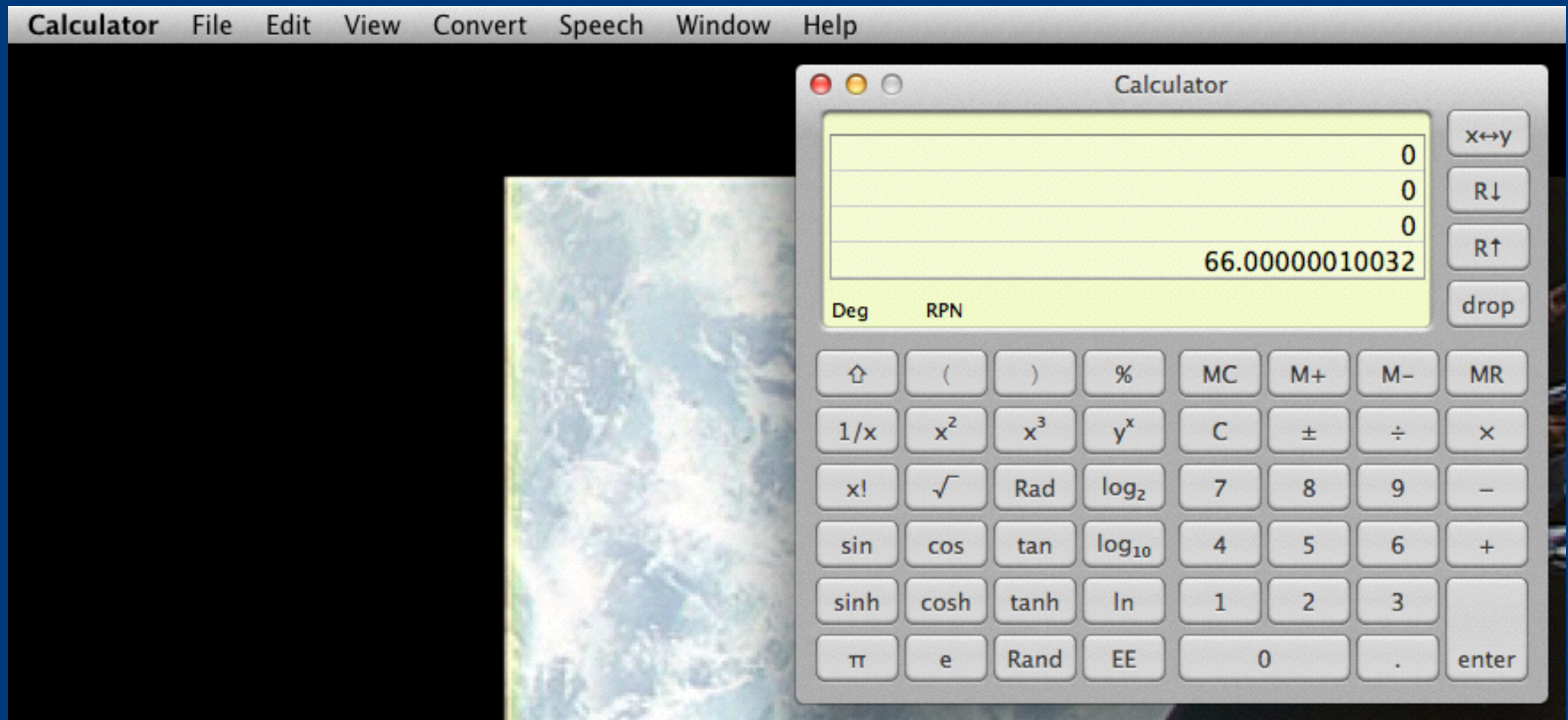


# Converting Units

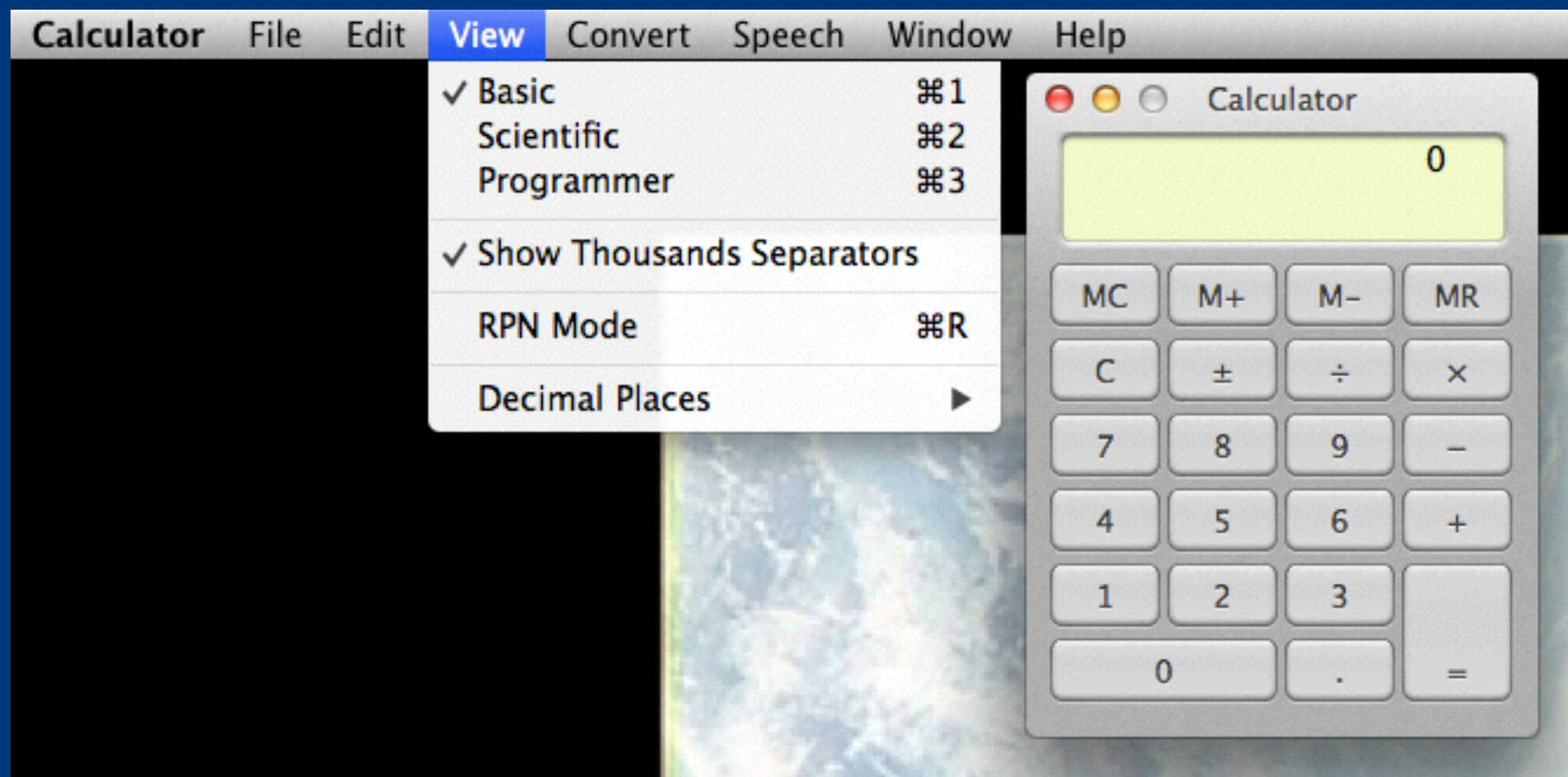




# Converting Units

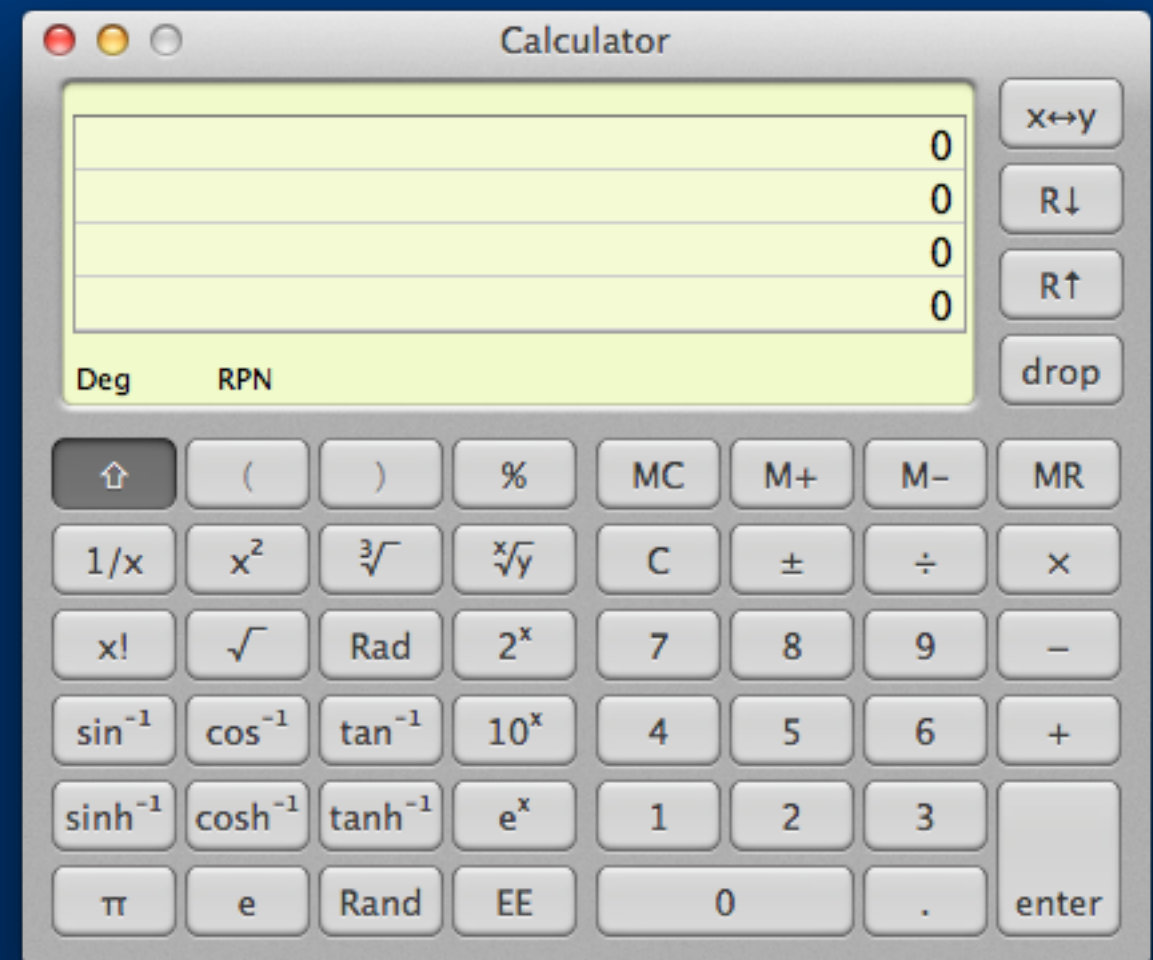
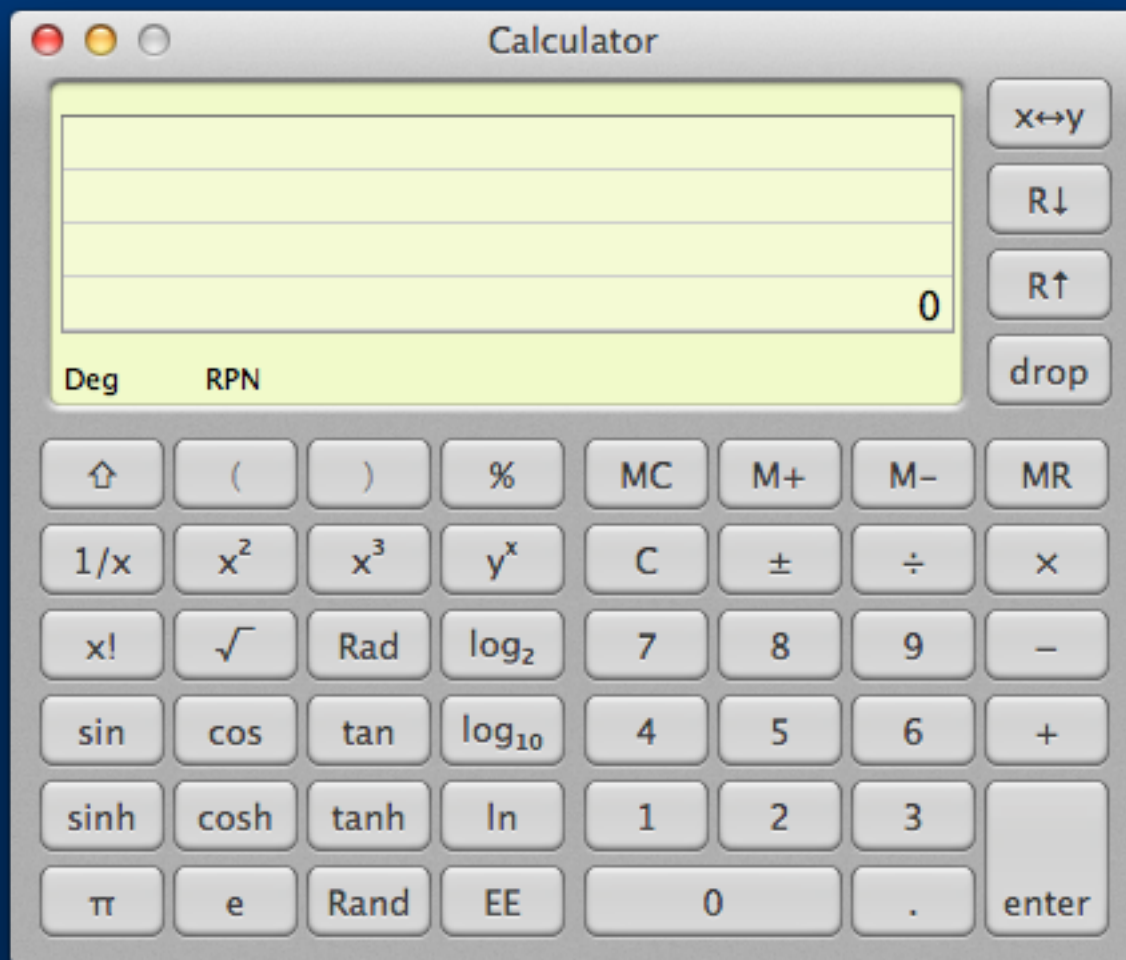


# More Calculators



# A Scientific Calculator

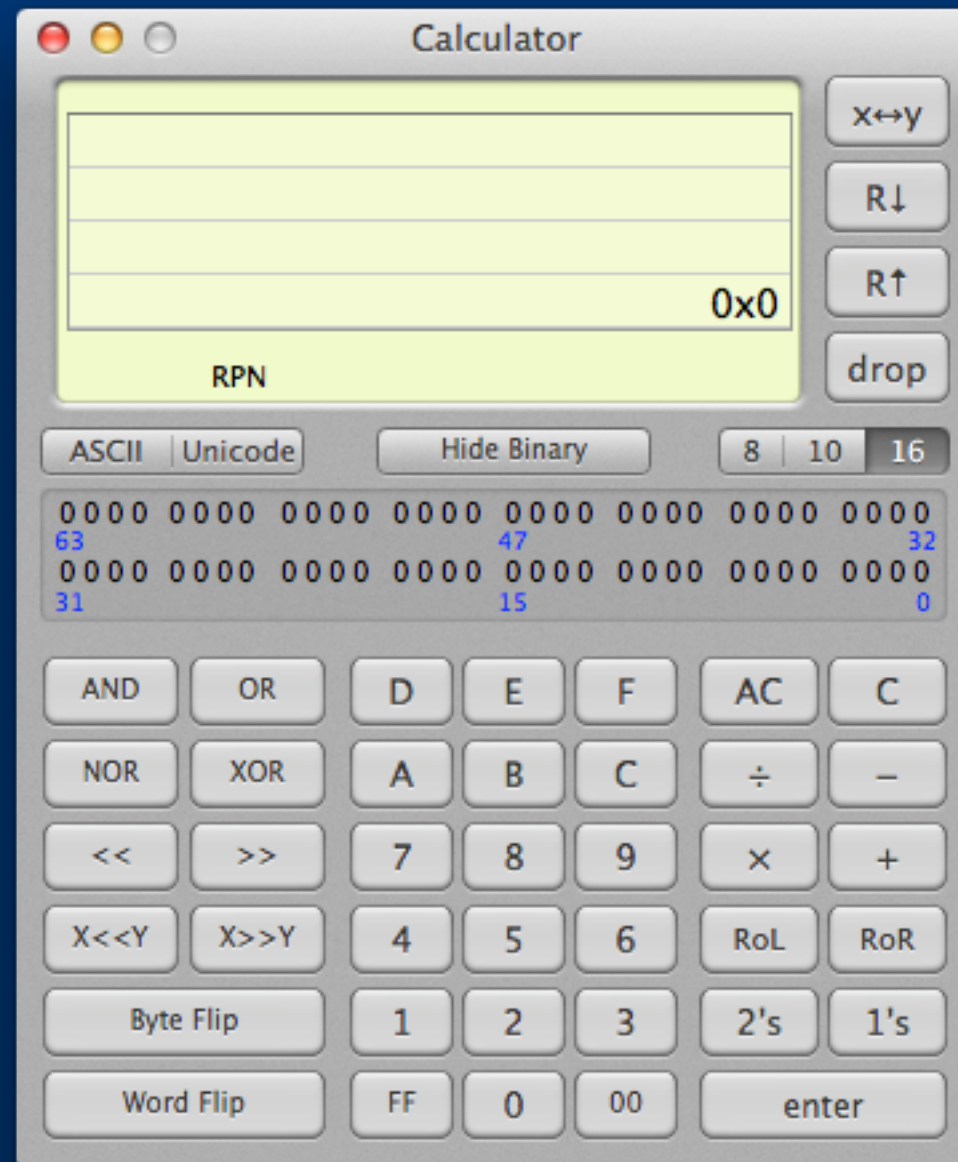
- A full function scientific calculator with all the expected functions and their inverses
- Can generate random numbers
- 'Conventional' or RPN
- Angles input in degrees or radians
- Unfortunately it is not programmable





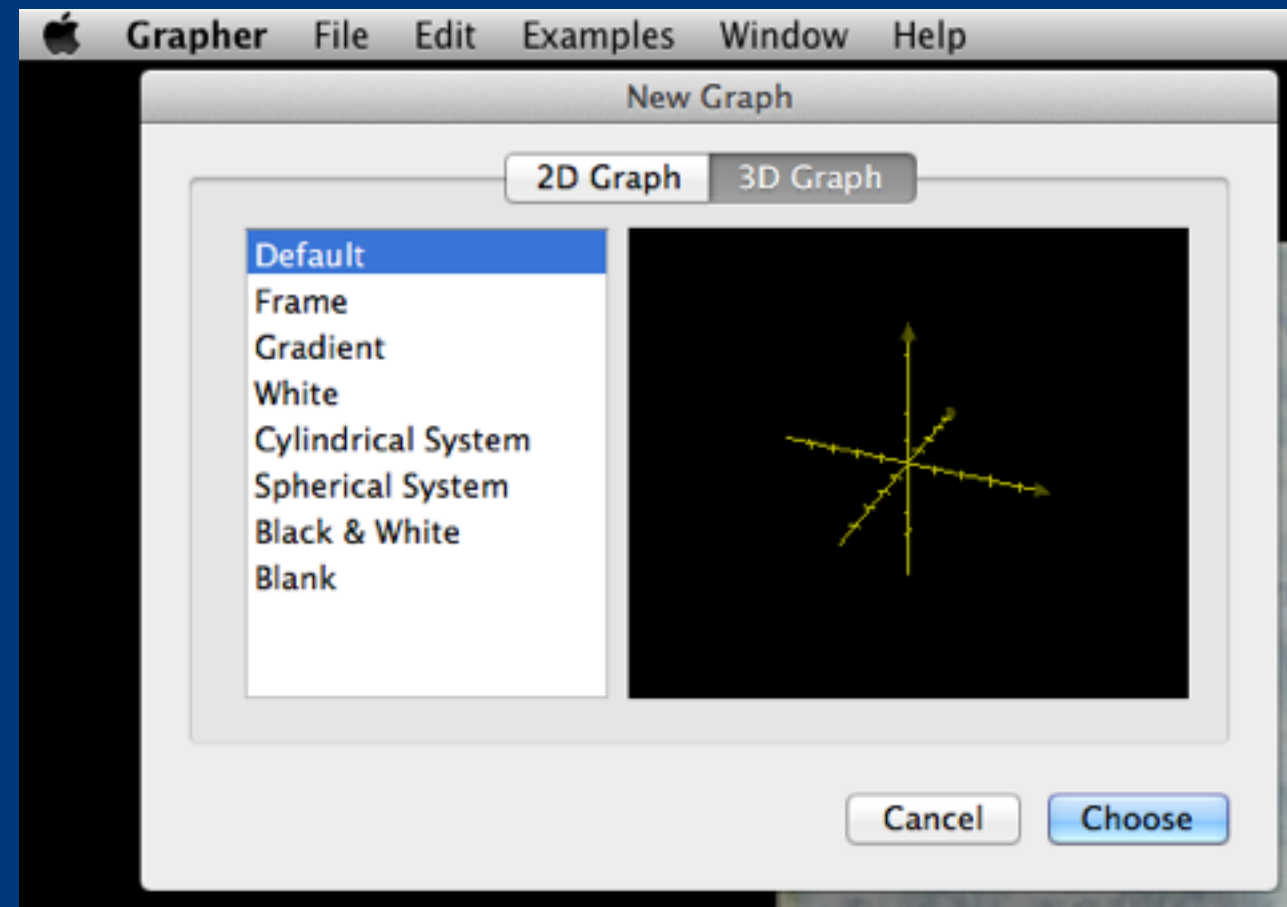
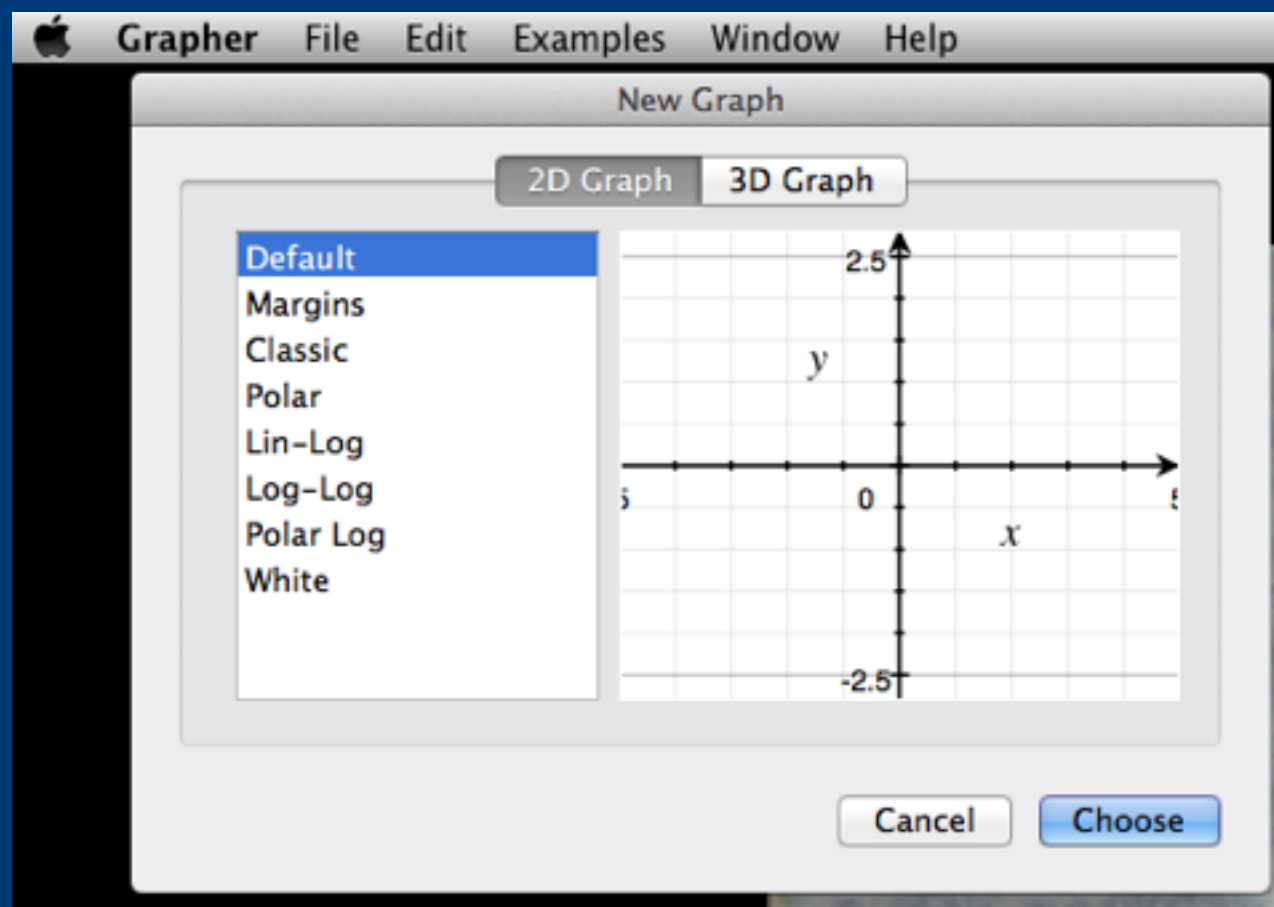
# Programmer's Calculator

- A calculator for dealing with math for programmers

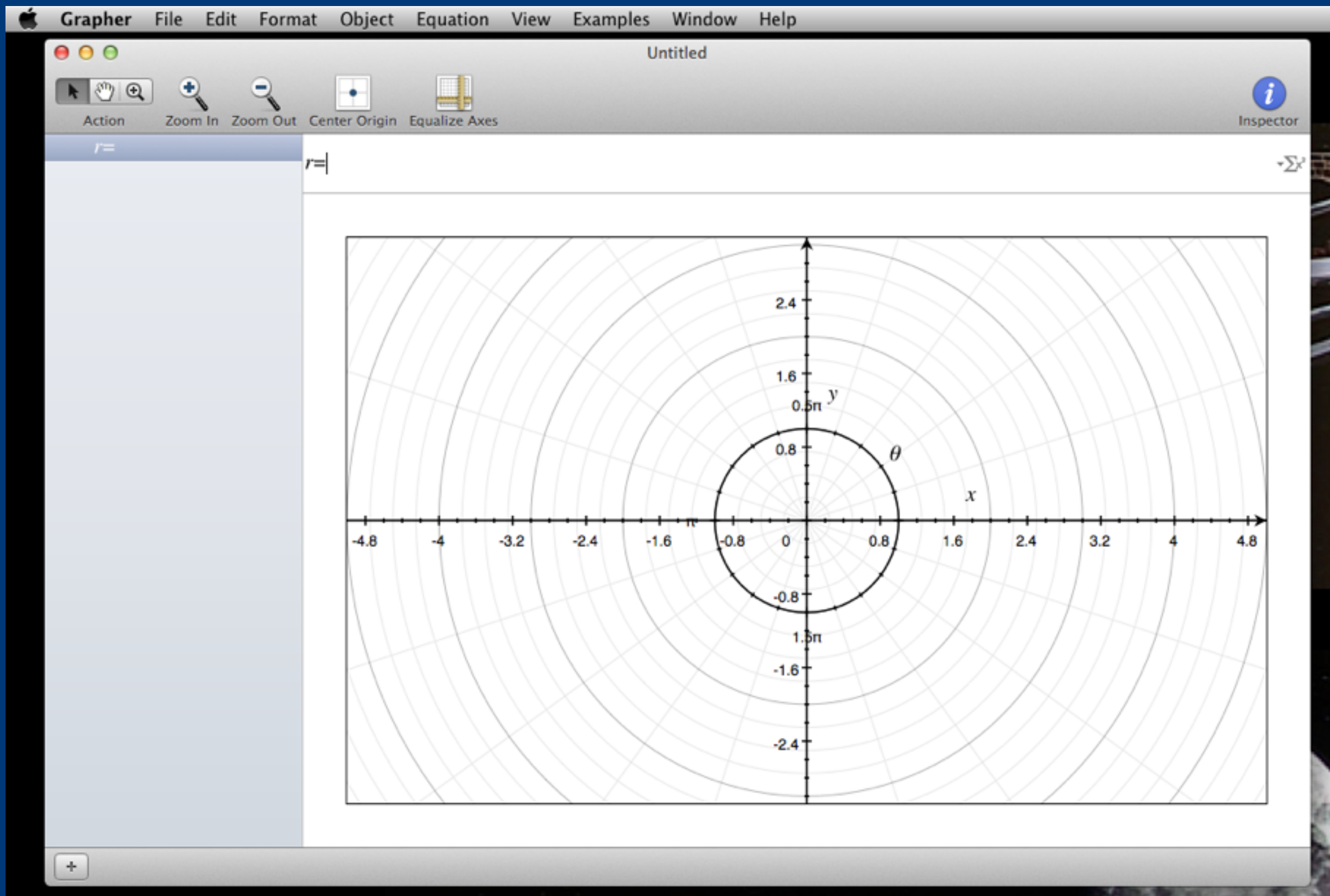


# Grapher

- A program for quickly plotting data, equations and functions

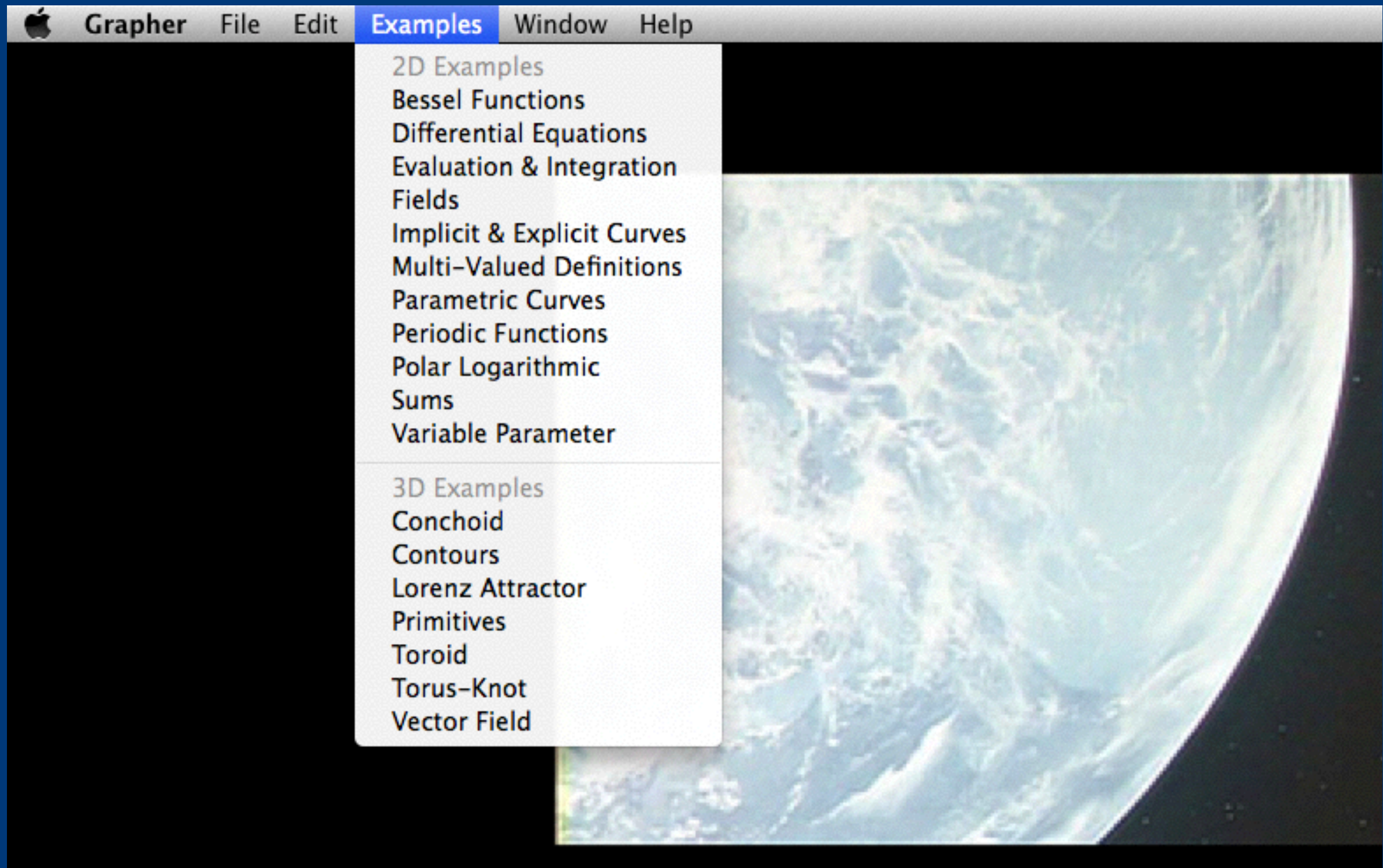


# Grapher





# Grapher



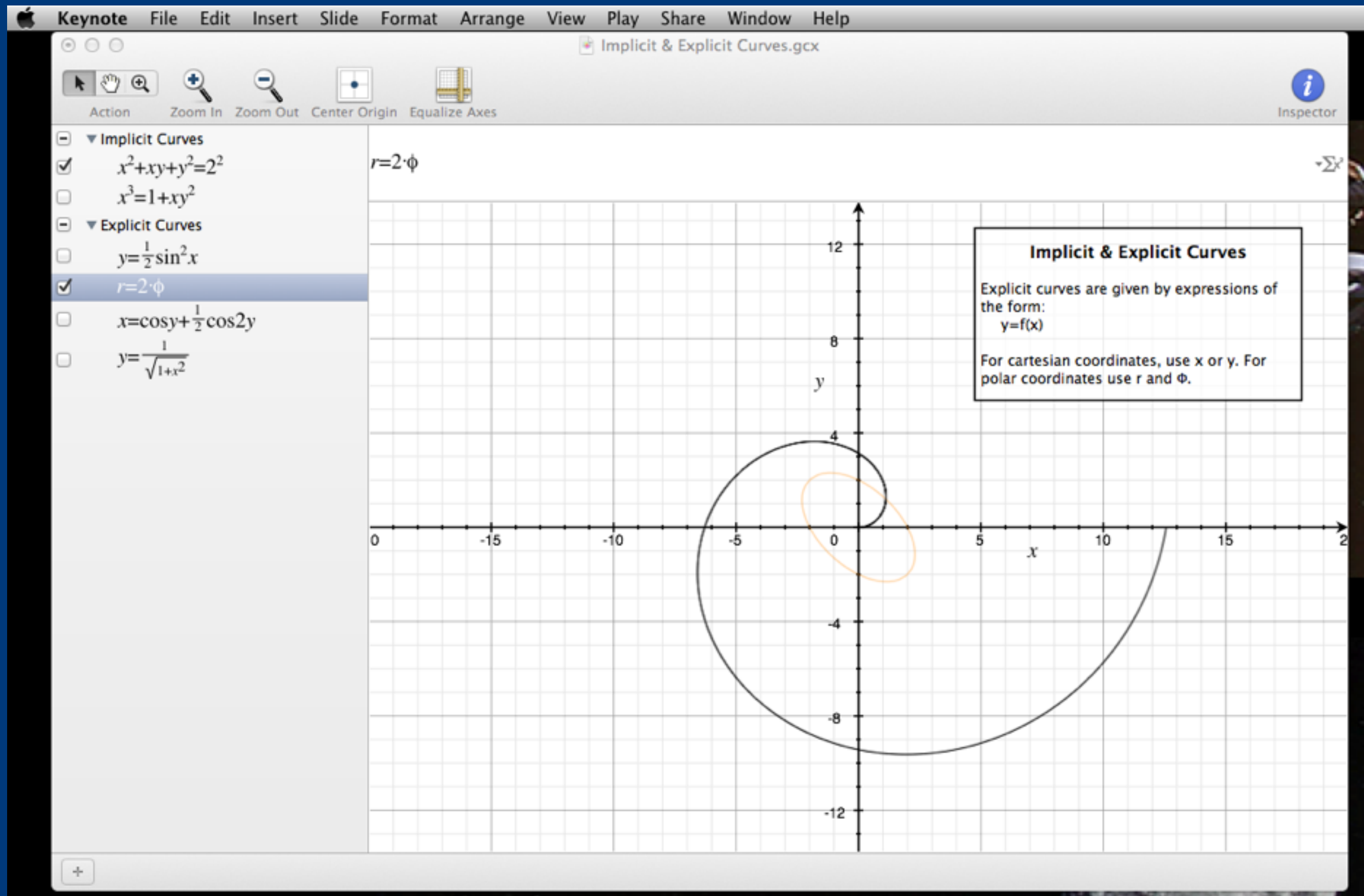
## 2D Examples

- Bessel Functions
- Differential Equations
- Evaluation & Integration
- Fields
- Implicit & Explicit Curves
- Multi-Valued Definitions
- Parametric Curves
- Periodic Functions
- Polar Logarithmic
- Sums
- Variable Parameter

## 3D Examples

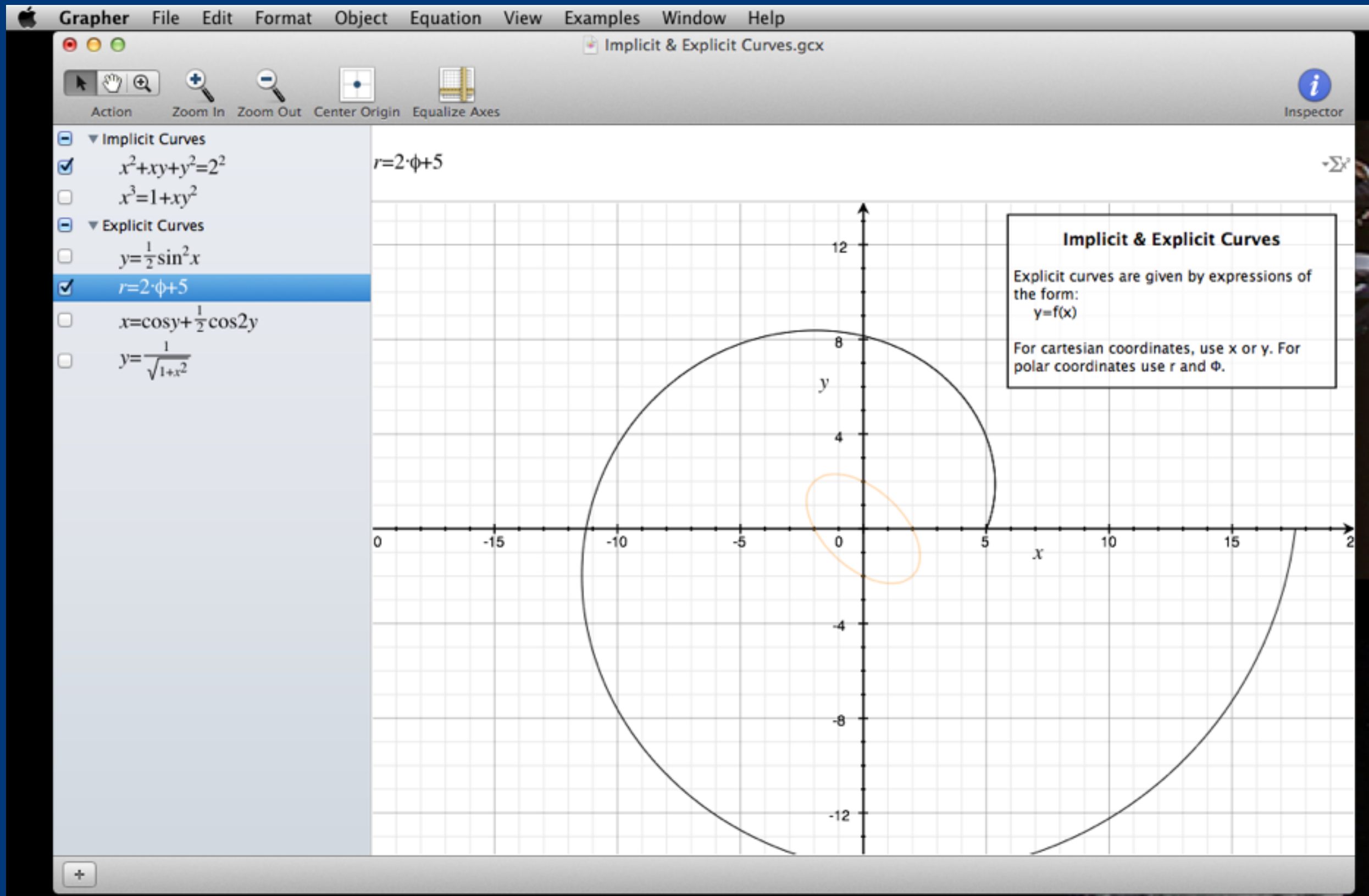
- Conchoid
- Contours
- Lorenz Attractor
- Primitives
- Toroid
- Torus-Knot
- Vector Field

# Grapher

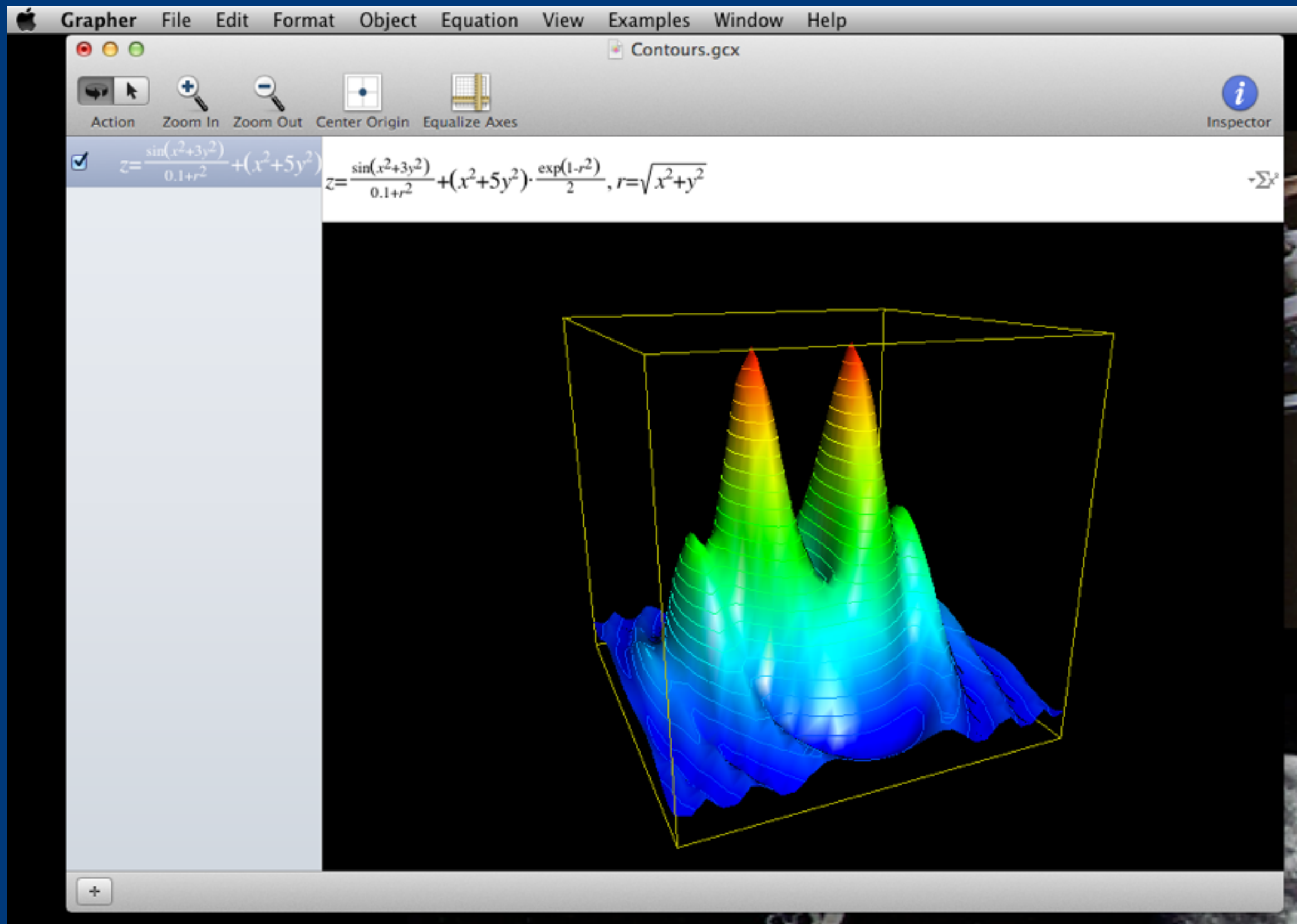




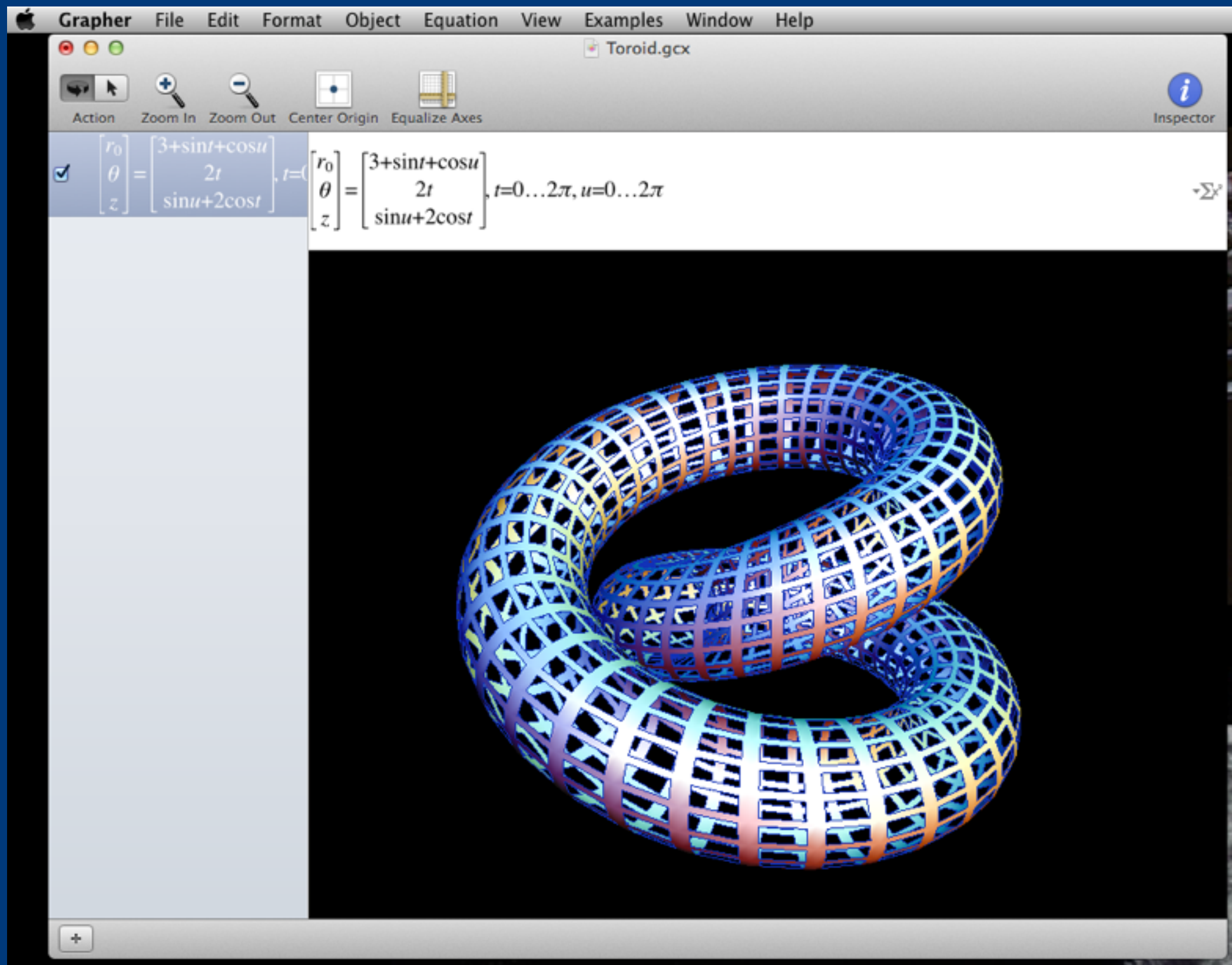
# Grapher



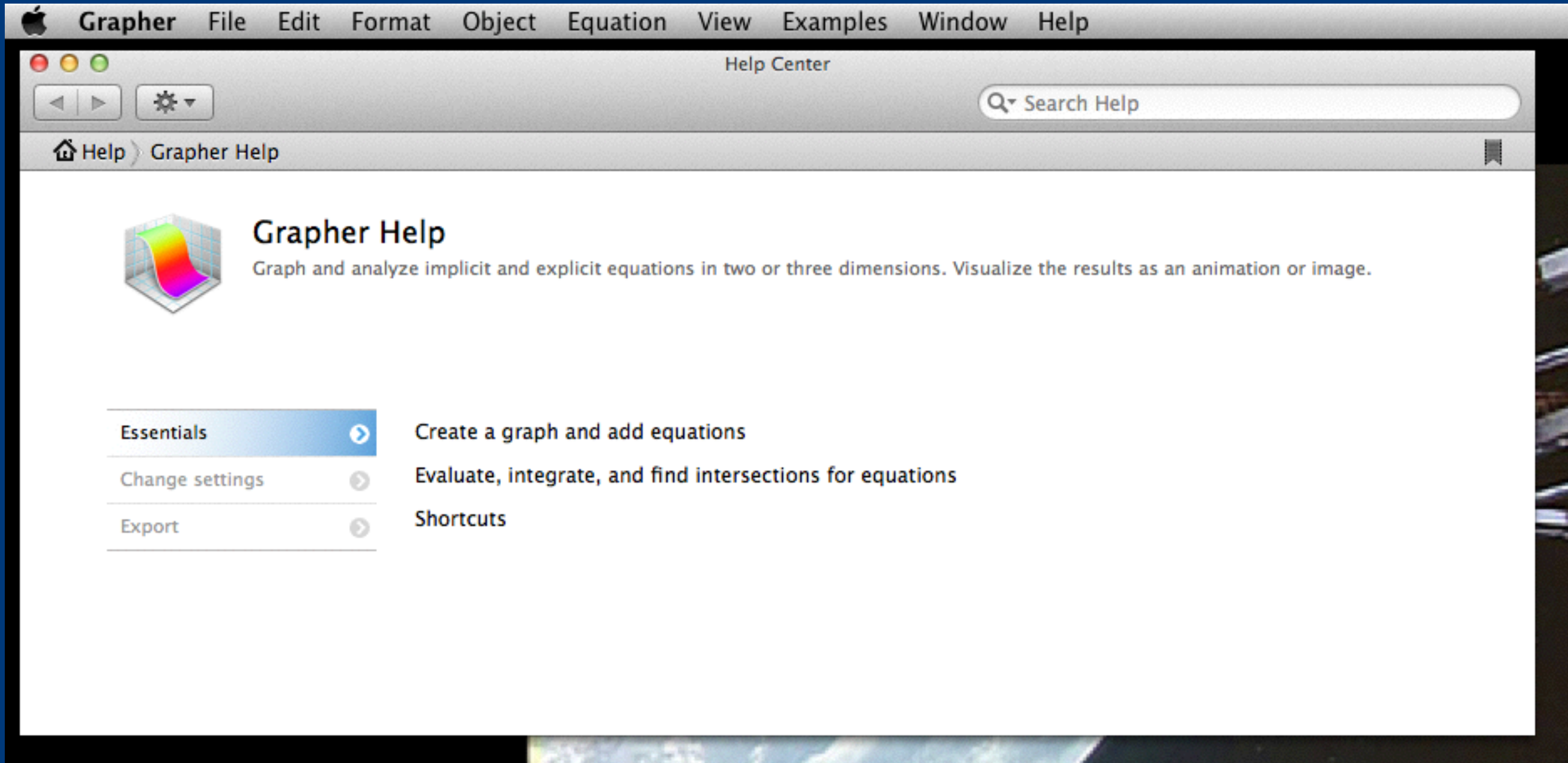
# Grapher



# Grapher



# Grapher



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Science Technology Engineering Math  
Software for iOS and OSX

If you have a favorite STEM app then tell me about it via email  
[wwjames@earthlink.net](mailto:wwjames@earthlink.net)