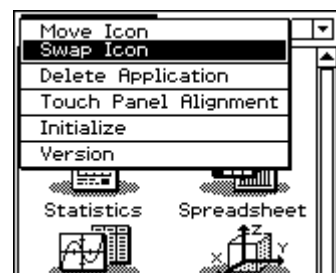




## ClassPad Tips and Tricks 2012

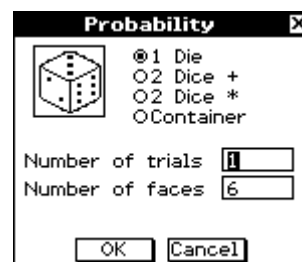
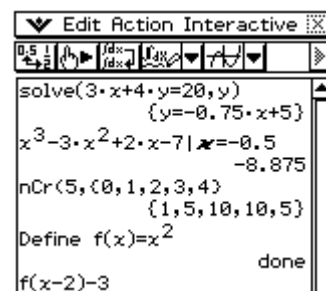
### Menu

- Use MENU/Swap Icons to bring Sequence and Finance into top half of screen.



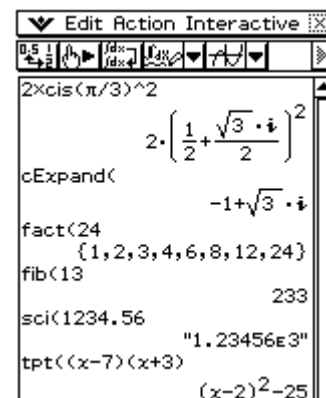
### Main

- Settings, Basic Format, Number Format - best set to **Normal 2** which suppresses scientific notation display
- Quick ways to **solve** and **diff** - remember assumptions/defaults
- Shift keys - Set (-) as shift key and assign shortcuts in System
- Use solve to rearrange equations for a variable
- Substitute using | from the OPTN menu
- Graph functions using split screen, especially those implicitly defined
- Use lists - {0,1,2,3} - in functions to return multiple values
- Define f(x) and use for function transformation
- Use  from  for quick simulations
- Use 'ans' for previous result/equation/expression/etc
- Use [a,b] or [x,y,z] format for quick 2D or 3D vector entry
- Over-ride radians with degrees when using trig functions
- Solve inequalities with setup as Real not Cplx



**User created functions - accessible in all applications and also in eActivities when copied into 'Library' folder.**

- cis( <angle>
- fact( <whole number>
- fib( <whole number> (Decimal rather than Standard mode)
- sci( <number>
- tpt( <quadratic expression> (Quadratic in any form)



### eActivities

- Split screen with Main when in a NumSolve to avoid closing strip
- Normal problems (mean/sd) using P=normCDF(L,U,S,M) in NumSolve
- Checkout Help eActivities for FM and MM courses (download from website, help-sheets page)

### Downloads

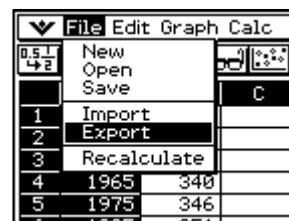
- Download an eActivity, program, mini-program, function, etc, from [www.charliewatson.com/classpad](http://www.charliewatson.com/classpad) onto your desktop, drag onto ClassPad Manager and it will install and save itself. A help-sheet on the site explains how to get items from the Manager to a Handheld.

### Programs

- New programs available from website this year include **AP** (solves arithmetic progression problems), **GP** (solves GP's), **mav** (for analysis of time series data), **repay** and **saving** (for analysis of reducible interest and savings schemes).

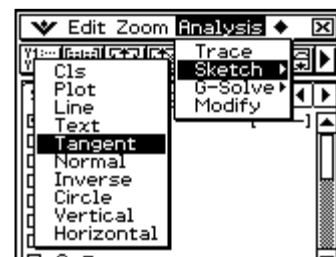
## Statistics

- Make a prediction from the displayed regression line using trace
- Binomial, normal and other distributions can be viewed graphically
- Open lists exported from Main, Table, Sequence and Spreadsheet



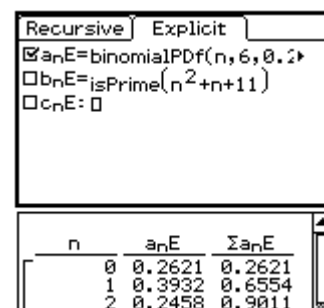
## Spreadsheet

- Two types of selection before dragging - white or black cell border
- Create time series by dragging data points
- Refer to cell row using row() in formula, eg  $x^{\text{row}(A5)}$  returns  $x^5$
- Drag and drop between spreadsheets and Office applications. Copy formulas from Excel by using Ctrl+~ to display cell contents as formulas rather than values.



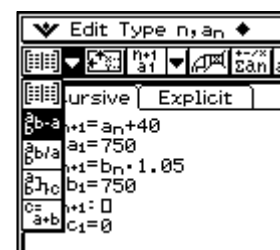
## Graph and Table

- Use auto-scale sensibly by setting x-min and x-max first
- Jump to any x-value on a graph by using the keyboard
- Use Sketch, Tangent to draw tangent or Inverse to draw inverse



## Sequence

- Explicit tab useful - eg isPrime( $n^2+n+11$ ), BinomialPDF( $n, N, p$ )
- Use sum, difference and quotient tools
- Sequence RUN  $\frac{a_{n+1}}{a_n}$  useful for quick calculations
- rSolve converts recursive formulas to explicit form



## Geometry

- Draw a triangle to scale and find all sides, angles and area
- Solve coordinate geometry problems
- Learn basic constructions from Draw, Construct menu

## Financial

- Set PV as -ve amount, with +ve value for PMT for loan repayments and -ve value for PMT for savings accrual. (*Or vice-versa!*)



## System

- Customise ClassPad Name and Ending Screens (*screens can be any picture saved in ClassPad*)
- Set Shift Keys - download 'how-to' sheet from website
- Power Properties and Font Select (Regular fits more text on screen)
- Reset and Initialise - use to sort out unsolvable ClassPad issues! Initialise means back to factory settings (*won't roll-back OS update though*)

