

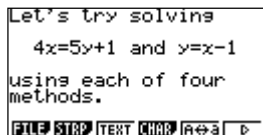
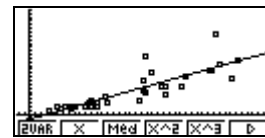
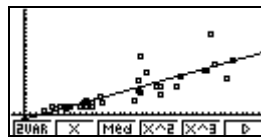
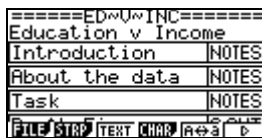
eActivities

This edition of fxNews contains 3 new eActivities.



STATS contains three LIST strips, each already setup for the most common ways data is presented to students for analysis in upper school. This eActivity is aimed at helping students working efficiently through an assessment.

ED~V~INC. Using data from the Australian 2001 Census, this eActivity gives students the opportunity to explore bivariate data presented in a spreadsheet.



SIM~EQNS. This eActivity explores four ways of solving simultaneous equations with two variables using the fx-9860G.

Easy to customise.

Once in their own fx-9860, all eActivities can be modified by teachers or students to suit their own individual requirements. Examples can be deleted, notes can be edited or added to and so on.

Working with eActivities

After loading into your fx-9860 (see feature 'How to load fxNews from CD into your fx-9860'), choose eACT from the Main Menu. Highlight the FXN07V1 folder, tap EXE, highlight the eActivity you require and tap EXE again.

Scroll down through the eActivity. When you arrive at a 'strip' it will highlight itself. Tap EXE to jump into the application and work on it, just as you would if you had entered through the main menu. Note that each strip is an individual and unique copy of one of the applications available from the Main Menu.

To return to the eActivity (🔒), tap SHIFT then ⏪ (the arrow key below the tan key).

Once within a strip, to jump to another strip (🔒) tap SHIFT then , (the comma key below the cos key).

To leave an eActivity tap EXIT. You will be asked whether you want to save changes to the eActivity. To leave the eActivity unchanged, tap F6 (No).

eActivities in this edition

Below is a brief description of each of the included eActivities.

Name	Description
------	-------------

STATS	This eActivity contains three LIST strips, each already setup for the three common ways data is presented to students for analysis in upper school.
--------------	---

```

=====STATS =====
Choose data type:NOTES
One variable:LIST
One var freq:LIST
Two variables:LIST
FILE STRG INS CHAR Read D
    
```

One variable – Calc Setup – Graph Setup (Boxplot)

Sub	List 1	List 2	List 3	List 4
1	Data			
2	0			
3				
4				

GRAPH CALC TEST INTR DIST D

```

1Var XList :List1
1Var Freq :1
2Var XList :List1
2Var YList :List2
2Var Freq :1
LIST
    
```

```

StatGraph1
Graph Type :MedBox
XList :List1
Frequency :1
Outliers :Off
GPH1 GPH2 GPH3
    
```

One var freq is Setup for x in List 1, frequency in List 2 and to draw a boxplot.

Sub	List 1	List 2	List 3	List 4
1	Data	Freq		
2	0	0		
3				
4				

GRAPH CALC TEST INTR DIST D

```

1Var XList :List1
1Var Freq :List2
2Var XList :List1
2Var YList :List2
2Var Freq :1
LIST
    
```

```

StatGraph1
Graph Type :MedBox
XList :List1
Frequency :List2
Outliers :Off
GPH1 GPH2 GPH3
    
```

Two variables is Setup for x in List 1, y in List 2 and to draw a scatterplot.

Sub	List 1	List 2	List 3	List 4
1	X-Data	Y-Data		
2	0	0		
3				
4				

GRAPH CALC TEST INTR DIST D

```

1Var XList :List1
1Var Freq :1
2Var XList :List1
2Var YList :List2
2Var Freq :1
LIST
    
```

```

StatGraph1
Graph Type :Scatter
XList :List1
YList :List2
Frequency :1
Mark Type :
GPH1 GPH2 GPH3
    
```

In an assessment situation, when students solely rely on using the STAT mode of the calculator, they typically have to delete data from previous questions, enter the new data and change the Setup before obtaining relevant statistics or graph.

By using the STATS eActivity, all that is required is for students to access the appropriate strip, enter the data and proceed, confident that the Setup is correct for this type of data.

The Sub headings are used to remind students of the type of data required for each list.

ED~V~INC

This eActivity ties in with the Spreadsheets and Graphing Tutorial in this edition.

The task gives students the opportunity to explore bivariate data in a spreadsheet, drawn from the Australian 2001 Census for the Perth Statistical Division.

In the spreadsheet Column A lists the 37 Local Areas, Column C contains the percentage of persons with Postgraduate Degree, Graduate Diploma and Graduate Certificate and Bachelor Degree Level and Column D contains the percentage of persons with Individual Income (Weekly) of \$1500 or more.

=====ED~V~INC=====	
Education v Income	
Introduction	NOTES
About the data	NOTES
Task	NOTES
FILE STRP	TEXT CHAR A↔B D

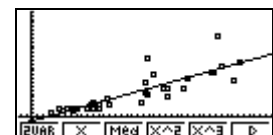
Task	NOTES
Perth Figures	SSHT
Comments	NOTES
Data source	NOTES
FILE STRP	TEXT CHAR A↔B D

If a relationship does exist, can you quantify it? Can you then use such a relationship to predict the % of persons with an income

The SETUP for graphing is slightly different to when data is presented in lists in STAT mode – see Tutorial.

SHEET	A	B	C	D
1	LOCAL AREA	T ED	H INC	
2	Cambridge	32.2	11.64	
3	Claremont	32.5	11.67	
4	Cottesloe	37.4	14.59	
5	Mosman Park	28.1	10.22	
			10.22	
FILE	EDIT	DEL	INS	CLR D

StatGraph1
Graph Type: Scatter
XCellRanse: C2:C35
YCellRanse: D2:D35
Frequency : 1
Mark Type : *
GPHE GPHE GPHE



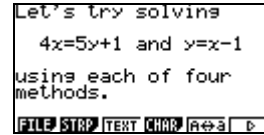
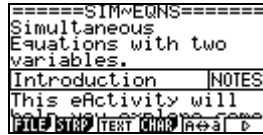
The figures for Column D are missing the last three values for weekly income, and part of the student's task is to suggest what these might be. Again, the Tutorial explains how to use the inbuilt prediction routine.

SHEET	A	B	C	D
35	South Perth	29.5	7.15	
36	GoSmells	6		
37	Serpentine	6.5		
38	Victoria Park	16.1		
39				
GPHE	GPHE	GPHE	SEL	SET

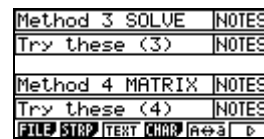
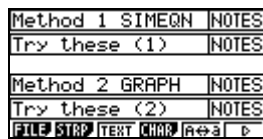
1.167515365

SIM~EQNS

This eActivity explores four ways of solving simultaneous equations with two variables using the fx-9860G.



- Using the Simultaneous Equation solver
- Using a Graphical method
- Using Solver
- Using Matrices (Extension)



SIM~EQNS also uses the facility to jump between strips.

Students start each method within a NOTES strip, but then jump using SHIFT then , (the comma key) to other linked strips as required.

At the end are a few examples for students to select their preferred method.



Not all equations presented have unique solutions – encourage students to use the graphical method to explain why.