

Graphical Times.

Volume 11, Issue 52, 2014.



Welcome back to term 4, 2014!

What's in here!

Included in this terms newsletter are calculator activities for the Classpad, graphic and scientific calculators:

- **Worksheet for the Classpad and similar models: Some basic algebra!**
- **Worksheet for the FX9750GII and similar models: Dynamic functions and graphs**
- **Worksheet for the FX82AU+II and similar models: Random Walk Art**
- **Term 4 and 'Back to School' pricing valid from the 13th October 2014 until 28th February 2015.**

Workshop opportunities.

Workshop opportunities: If you would like to have a workshop for teachers and or students then please make contact with *Graphic Technologies*. A large number of schools are taking up this opportunity either singularly or as a cluster of schools (with both the graphic calculator and the ClassPad), to look at how the graphic calculator and CAS could impact on and be integrated into classroom practice. With NZQA having acknowledged that year 12 & 13 students without the use of a graphical calculator being disadvantaged, a large number of schools are taking up the opportunity to up skill teachers and students in using these mathematics/statistics technologies.



Classpad update.

The new ClassPad II [fx-CP400] was released during 2013 and features a much larger, backlit screen than the previous models, while keeping the same functionality. Major differences on the handheld unit are that the 3D Graphing and Presentation applications have been replaced by E-Con EA200 for data logging. Connectivity is much easier, and the ClassPad II acts as a USB drive when plugged into either a PC or Mac.

eActivities are a great way to store formulas and procedures on the ClassPad II. These can be downloaded and sent to the handheld model using a standard USB cable.

Programs can be written to extend the functionality of your ClassPad II

Visit: <http://www.classpad.com.au/index.html>



Program to support the use of the FX9750GII.

Casio Education NZ launched the 'Top Schools Program' to support schools using the FX82AUplus II scientific and FX9750GII graphic calculators. So please support Casio Education NZ program in 2014 and beyond to support schools currently using FX82AUplus II scientific and FX9750GII graphic calculators.

The goal is to have all senior students in New Zealand using a graphics calculator so that no one is disadvantaged during NCEA examinations. Professional development courses will be offered in conjunction with Graphic Technologies supporting this initiative. **Details of the program can be uploaded from:** www.casio.edu.monacocorp.co.nz

Please make sure that your schools stationery lists are updated for 2015.

Mathematics and Statistics faculty circulation [Pass it on to . . .]

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Graphic Technologies Specials for term 4, 2014 and 'Back to School', 2015.

Product	# of Units	Price per unit (excl GST)
FX9750GII graphic calculator (monochrome) RRP \$132.95 For Term 4 only, 2014 special – buy 20 and get 21 FX9750Gii, buy 40 and get 42 FX9750Gii etc. Ends 12 th December 2014. Note: While stocks last with a limit of 5 [maximum] free per school for this promotion.	NA	\$77.00
FX82AU plus II scientific calculator RRP \$33.95	NA	\$17.00
FX-CG20 GRAPHIC CALCULATOR New model	NA	\$200.00
FX991ES plus scientific calculator	NA	\$65.00
FX991ES plus emulator software school licence	NA	\$130.00
ClassPad II [fx-CP400]	NA	\$230.00

Note: Back to School promotions end 28th February, 2015.

Term 2-3, 2014 Casio XJM240 data projector promotion winner is ...

The winning school is **Glenfield College**, they will be receiving the schools prize in October 2014. Many thanks to all schools who purchased equipment during terms 2 and 3. Congratulations Graham Smith – the data projector is on its way to you. Enjoy!




Mercury-free, high-luminosity Hybrid Light Source



Casio projectors have been added to our product range. If you are thinking of replacing your current data projectors or looking for an additional unit(s) to meet your schools requirements please consider either of these units offered in our school pricing list. Additional information on these two data projectors is available on request.

Features Include:

- Ecologically sound and energy saving
- NEW mercury-free light source
- 2 × optical zoom
- Lamp-free technology with up to 20,000 hours continuous performance
- WLAN capability
- USB 2.0 for FX9750Gii graphic calculator can be connected directly into the projector [XJA145]
- USB data files can be connected directly into the projector
- The size of a ream of A4 paper!



See <http://www.casio-projectors.eu/euro/products/xjm240/> for technical details and the Graphic Technologies pricing list of the data projector models and types we are resellers for.

Product	# of Units	Price per unit (excl GST)
Data projector XJM241 New model	NA	\$1550.00
Data projector XJA242 New model	NA	\$1623.00
Data projector XJM251 New model	NA	\$1810.00
Data projector XJA252 New model	NA	\$1795.00
Data projector XJA257 New model	NA	\$2036.00

Websites of interest.

<http://www.charliewatson.com/casio/cplibrary.php>

Classpad update.

http://www.casio.edu.shriro.com.au/cr_classpad_corner.php

Worksheets downloaded off the web.

Visit Monaco Corporation and Graphic Technologies websites to view and download worksheets. There are links to other informative mathematics education websites too. For teachers we currently offer a large number of 'classroom ready' resources available and are designed primarily for the CASIO® FX82AU, FX9750Gii, FX9750G, FX9750G+, CFX9850GB, CFX9850GB+, CFX9850GC+, FX9750GA+ and FX9750Gii models of graphical calculators and the ALGEBRA 2.0. There is also a variety of activity sheets designed for the ClassPad300, 300+, 330A and 330A+ models. All of the activities and worksheets are designed for beginners to advanced users of the GC and CAS. More have been added to the website since the last newsletter.

Please visit: www.casio.edu.monacocorp.co.nz and <http://graphic-technologies.co.nz>

Casio fx-991ES plus Calculator

For use in the CIE Exams, IGCSE, A/AS. It is the most advanced CIE approved calculator on the market. Cambridge rules are:

- *Where the only issue with calculators used by schools is that they produce exact numerical irrational output, and otherwise do not have any of the prohibited features, then they are permitted.*

FEATURES INCLUDE:

Two way power	Matrix calculations / Vector calculations	CALC function / SOLVE function
417 Functions	Complex number calculation	List-based STAT data editor
Full Dot Display	Logarithm	Standard deviation
Integration / Differentiation	Base-n calculation	9 variable memories
Equation calculation	Fraction calculation	Logical operations
40 scientific constants	Combination and Permutation	Table function
New equation mode with $\sqrt{\quad}$ and fraction display	40 metric conversions (20 conversion pairs)	Paired-variable statistics regression analysis
New slide on hard case	Natural Textbook Display	Random integers

Allows surd, numeric, improper fractions, proper fractions and standard deviation form. Natural textbook display lets you input and display fractions, square roots, and other numeric expressions just as they appear in your textbook!

Visit: <http://edu.casio.com/products/adves/fx991esplus/> for more information.

Pop-quiz!

1. Three Properties of a Quadrilateral

Property D: It has diagonals of equal length.

Property S: It is a square.

Property R: It is a rectangle.

Which is true?

a. D implies S, which implies R.	b. D implies R, which implies S.	c. S implies R, which implies D
d. R implies D, which implies S.	e. R implies S, which implies D.	

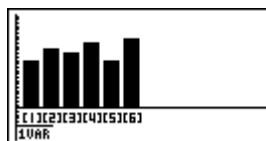
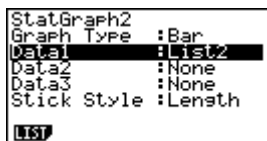
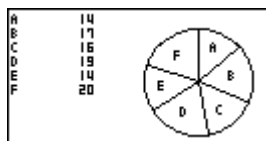
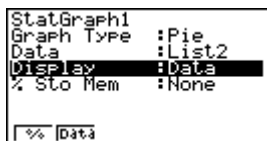
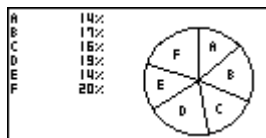
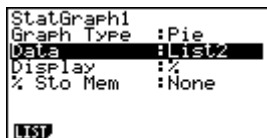
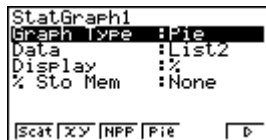
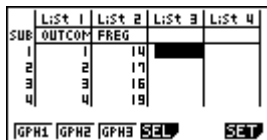
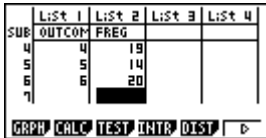
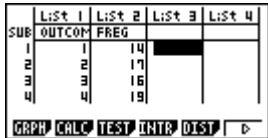
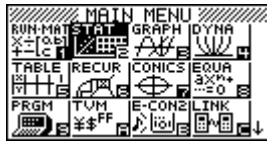
2. Which of the following statements about similarity are true and which are false?

a. Any two equilateral triangles are similar.	b. Any two rectangles are similar.
c. Any two squares are similar.	d. Any two isosceles triangles are similar.

Pie charts and Bar graphs drawn on the FX9750Gii.

Rolling a fair six-sided dice 100 times generated the following results.

Outcome	1	2	3	4	5	6
Frequency	14	17	16	19	14	20



Access to a selection of virtual dice:

http://www.bgfl.org/bgfl/custom/resources_ftp/client_ftp/ks1/maths/dice/index.htm

<http://www.random.org/dice/>

<http://www.roll-dice-online.com/>

<http://dice.miniwebapps.net/>

<http://www.print-and-play.com/extra/dice-roll-simulator.html>

A last word!

Well again, that's all I can fit onto the 4 pages! Enjoy term 4 and the Christmas – Summer holiday break! Hope to see you at some workshops or hear from you via this newsletter or otherwise! If you would like to contribute or have suggestions as to what you would like to have discussed via this medium, please do not hesitate to contact us either by snail-mail, email, website, telephone, text or fax.

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