Starting Out with Casio ClassPad- MAWA Annual Conference 2020

A collection of 20 short videos that mirror this presentation can be accessed as part of a free course at

https://thetuitioncentre.com.au

Simply create an account, login and enrol in the course.

The slides that follow show the 19 applications available on ClassPad.

Charlie Watson

November 2020

charlie@charliewatson.com

Application Menu

- Two pages of apps
- E-CON3 and/or Physium
- Check OS Version
- Nov '20, Handheld v02.01.7....
- Touch Panel Alignment

Starting out with Casio ClassPad

Main

General calculations

$$\frac{\sqrt{x+5}}{x^2+1}|x = -2.2$$

Solving equations

$$x^3 = 2x + 1$$

• Simultaneous equations

$$2x + 3y = 1, x - 2y = 4$$

• CAS

2

$$\int \cos 4x \, dx$$

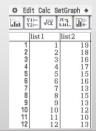
Starting out with Casio ClassPad

1

Statistics

- Summary statistics
- Linear regression
- Binomial probability

$$X \sim B(5, 0.6), P(X = 2)$$



Starting out with Casio ClassPad

Spreadsheet

• Edit -> Fill -> Range

E.g. Fibonacci sequence

- Some graph options
- File -> Save
- Open csv file

Starting out with Casio ClassPad

Graph & Table

• Sketch $y = x^2 - 3x$

Starting out with Casio ClassPad

Geometry

Coordinate geometry

Line segment from A(-1, -3) to B(2, 6)

Solve by scale drawing

Triangle with sides 12 cm, 25 cm and included angle of 105°.

Starting out with Casio ClassPad

5

Picture Plot

• Model the curve of the hammock in this photo.



Starting out with Casio ClassPad

Conics

- Complete the square
- Factor a circle

Starting out with Casio ClassPad

7

8

N		m		↑ I\	ve
-11	ш		. 71	"	v

Variables from Var tab

 $A = 2\pi r(r+h)$

Starting out with Casio ClassPad

eActivity

- Create your own
- Download and import eActivities written by others

Sites:

10

https://charliewatson.com

http://edu.casio.com

Starting out with Casio ClassPad

Starting out with Casio ClassPad

9

• Effective interest rate

Card debt attracts interest of 16.9% compounded daily.

Finance

Loan repayment

Loan at 8.4% pa of \$15 000 is repaid in 36 equal repayments.

Starting out with Casio ClassPad

Sequence

• Arithmetic sequence

 $T_{n+1} = T_n + 6, T_1 = 3$

Program

- Write your own code using Casio basic
- Download and import programs written by others

Starting out with Casio ClassPad

System

Initialise

Will wipe all existing data from ClassPad and reset all Apps – great for second-hand models.

 Use to import programs, eActivities and other data copied to ClassPad using a USB cable.

(Storage & Import = USB drive)

- Modify shift keys
- Set User Name

14

Starting out with Casio ClassPad

13

Communication

 Use a 3-pin cable to send programs, eActivities and other data between ClassPads

(Require 2.5mm jacks, earth-earth and cross-wired tip to middle)

• Exam mode (since OS v2.01)



Starting out with Casio ClassPad

3D Graph

• Visualise the surface z = xy.

Starting out with Casio ClassPad

DiffEq Graph

• Sketch the slope field through (0, 1) for

$$\frac{dy}{dx} = \frac{y}{x^2 + 1}$$

Starting out with Casio ClassPad

Interactive Diff Calc

• Investigate the slope of the graph $y = \sin x$.

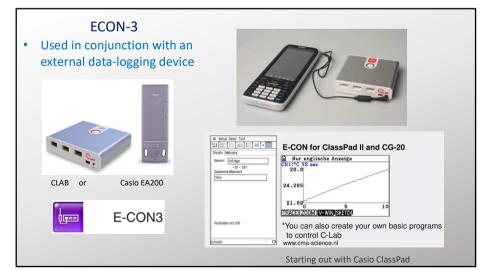
Starting out with Casio ClassPad

17

19

18

20



Physium

• A free Add-In App from Casio

Download from http://edu.casio.com

Physium

Starting out with Casio ClassPad