HOW TO USE THE CASIO FXCG20 GRAPHIC CALCULATOR TO DRAW GRAPHS

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TARGET AUDIENCE: FET Band Mathematics teachers & Engineering

DURATION: 2-hour workshop

MAXIMUM NUMBER OF PARTICIPANTS: 30

MOTIVATION:

A practical approach to Mathematics using the FX-CG20 Calculator.

The Graphic application is for the graphical representation of functions and their investigation. It has two main windows: the Graphic editor to enter the function terms, and the Graphic window to show graphs of functions. In the Graphic editor, up to 20 terms can be entered (Y1-Y20)

Graphic calculators are complex and powerful tools for the modern teaching of mathematics. This brief guide is intended provide an introduction on the key applications and functionality of the Fx-CG20

CONTENT OF THE WORKSHOP:

1. *Graph*
2. *Graphics application,*
3. *graphical representation*
4. *functions, graphical analysis*

ABSTRACT:

Students can create a wide variety of graphs over real-life visual backgrounds. The use of real-life visuals makes it fun and easy to study various aspects of geometry, including the drawing of shapes, movement, and similarity relations. Students can search for and plot curves found in nature and their surroundings. Analysis of the plotted data deepens understanding of the function.

BASIC FUNCTIONS:

Graphing

- Rectangular coordinate graphing, Polar coordinate graphing
- Integration graph
- Parametric function graphing, Inequality graphing
- Trace, Zoom (box zoom, zoom in, zoom out, auto zoom)
- Table and Graph
- Dual Graph (table and graph, graph and graph)
- Sketch (tangent line, normal line, inverse function)
- Solve (root, minimum, maximum, intersection, integration)
- Dynamic graph
- Conic section graph
- Recursion graph
- Picture Plot (pre-installed software)