

# Activity 2

## Introduction to the Casio fx-9750G

### Part 2

#### TEACHER NOTES

**Topic Area: Numbers and Operations**

**NCTM Standard:** Develop fluency in operations with real numbers, vectors, and matrices, using mental computation or paper-and-pencil calculations for simple cases and technology for more-complicated cases.

**Objective:** The student will be able to utilize the Casio fx-9750G Plus calculator in the various activities included in this unit.

**Introduction:** Most low-achieving math students do not want to use a graphing calculator because it is too complicated. In most cases, this attitude is due to the fact that they have never been instructed to operate the basic functions. The Casio fx-9750G Plus is extremely student friendly once they understand how to navigate around the modes.

This activity has a two-fold purpose. First, it is designed to give the students the basic techniques needed to navigate around the modes needed for the activities in this unit. And second, it is designed to save you time when presenting these activities.

An Introduction to the Casio fx-9750G involves too many topics to cover in just one activity. This activity will cover just Part 2.

## Calculator Notes for Activity 2

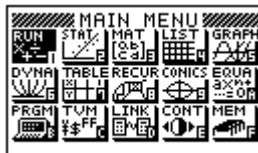
### Objective

The student will be able to utilize the Casio fx-9750G Plus calculator in the various activities included in this unit.

Note: Part 1 introduced you to the basic calculator operations. Part 2 will introduce you to the techniques needed to navigate through the screens.

### Steps for the Introduction to Casio fx-9750G Plus Graphing Calculator: Part 2

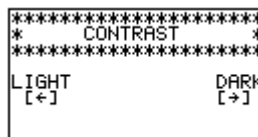
1. Take a look at the menu screen:



Please notice that there is a number or letter at the bottom right of each menu mode. You can choose the desired mode by using the **Replay Keys** to darken the desired mode and press the **EXE Key** or use the number or letter in the bottom right.

To return to the main menu press the **Menu Key**. The different modes will be discussed when used in their respective activities.

2. In the main menu, choose the **CONT Mode**. CONT represents contrast. You should see the following screen:



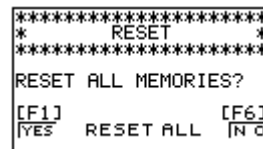
This mode is used to lighten or darken the screen. To lighten your screen press the **Replay Keys**, to darken

the screen press the **Replay Keys**. Adjust your screen to the level of contrast you prefer.

- Return to the main menu by pressing the **Menu Key**. This time choose the **MEM Mode**. Your screen should look like the following screen:

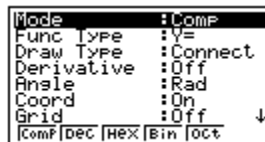


This mode is used to reset the memory of your calculator. If you share your calculator with other students or other classes, you should make a habit of clearing the memory before starting because you do not know what settings the previous student was using. To do this, use the Replay Keys to darken the word Reset. Press the **EXE Key**. Press **F1**.



Your screen should read memory cleared. Return to the main menu.

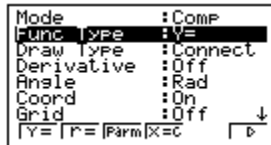
- From the main menu, choose the **RUN Mode**. Press **Shift**, and then the **Menu Key**. This will take you to the **SET UP** screen (notice the yellow word SET UP above the Menu Key). Your screen should look like this:



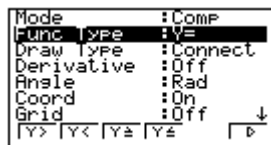
Notice the arrow at the bottom right of your screen that is pointing down. This means that by pressing the Replay Key, you can scroll down to more choices.



When you get to the bottom of the choices, there is an up arrow in the top right corner which means you can use the Replay Keys to scroll up the list of choices. Each screen gives you different choices at the bottom of the screen. For instance, in the first screen which was Mode, you were given the choices of Comp, Dec, Hex, Bin, or Oct. The choices are above the Function Keys (F1, F2, F3, F4, F5 and F6). If you want Bin, press F4, if you want Hex, press F3, etc. The last screen, Integration, gives you only two choices: Gaus (F1) or Simp (F2). Leave your calculator set at Gauss. Now, go to the second screen which is Func Type:



This screen gives you four choices, Y= (F1), r = (F2), Parm (F3) and x = c (F4). It gives you another choice, the arrow above the F6 key means that there are more choices. Press the F6 key.



At the bottom you are given four more choices and another arrow over the F6 Key. Press the F6 Key again. You return to your original choices. You may want to take the time to become acquainted with the numerous SET UP choices. When you are done, press the EXIT Key to return to the main menu.

- Go to the RUN mode. Press **SHIFT** and **F3**. This is the **V-Window** or the View Window. Your screen should look like the following:



This is your initial (INIT) screen. In order to explain this screen and how to change it, it would be easier to start from the standard screen (STD). Press **F3** (STD). This is the screen you will see:



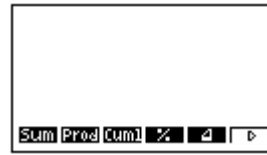
This means that if you were graphing, the x-axis would extend from -10 (xmin) to 10 (max) with 1 notch between each number (scale: 1). The y-axis extends from -10 (ymin) to 10 (max) with 1 notch between each number (scale: 1). You will see more when you work with the **GRAPH** Mode in future activities.

- Return to the main menu. Go to the **RUN Mode**. Press the **OPTN** Key which is your options key. Notice that you are given more choices with the F6 key. The choices you will see are in the following three screens:

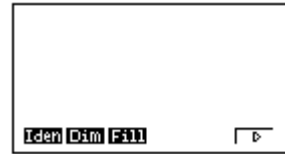


Each of these choices will give you more choices. The screens for each choice are listed below. You may want to keep these screens for future reference.

LIST Screens:



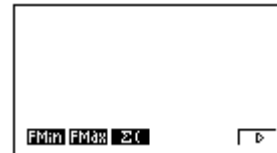
Mat Screens:



CPLX Screen:



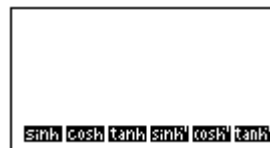
CALC Screens:



STAT Screen:



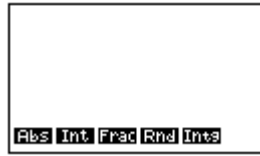
HYP Screen:



PROB Screens:



NUM Screen:



ANGL Screens:



ESYM Screens:



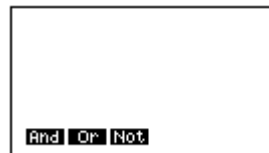
PICT Screen:



FMEM Screen:



LOGIC Screen:



There are other screens, also. These are the most common screens that you will need in the various activities. Once you learn to navigate through these screens, you will understand how to navigate in the other screens. Remember to press **EXIT** to go back to the previous screen and to press **MENU** to return to the main menu.

Name \_\_\_\_\_ Class \_\_\_\_\_ Date \_\_\_\_\_

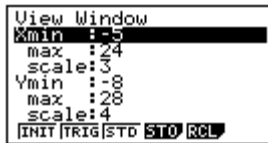
## Activity 2: Worksheet

### Introduction to the Casio fx-9750G: Part 2

1. What steps do you use to lighter or darken the screen?
2. How do you clear the memory?
3. Where will you find the screen to turn off the axes?
4. How would you change the calculator to degrees instead of radians?
5. How would you change the type of function to  $y > ?$
6. Change the viewing window to:
  - xmin = -5
  - xmax = 24
  - xscale = 3
  - ymin = -8
  - ymax = 28
  - yscale = 4
7. Find the following:
  - a. cosh
  - b. Abs
  - c. Fill
  - d. nPr
  - e. r

## Answers to Activity 2 Worksheet

1. Main Menu, **CONT** Key, **EXE** Key, **Replay** Keys.
2. Main Menu, **MEM** Mode, **Reset**, **EXE** Key, **F1**.
3. Main Menu, **RUN Menu**, **Shift**, **MENU**, scroll down to **Axes**, **F2**.
4. Main Menu, **RUN Menu**, **Shift**, **MENU**, scroll down to **Angle**, **F1**.
5. Main Menu, **RUN Menu**, **Shift**, **MENU**, scroll down to **Func Type**, **F6**, **F1**.
6. Your V-Window should look like this:



7.
  - a. Main Menu, **RUN** Mode, **EXE** Key, **OPTN**, **F6**, **F2**, **F2**.
  - b. Main Menu, **RUN** Mode, **EXE** Key, **OPTN**, **F3**, **F2**.
  - c. Main Menu, **RUN** Mode, **EXE** Key, **OPTN**, **F2**, **F6**, **F3**.
  - d. Main Menu, **RUN** Mode, **EXE** Key, **OPTN**, **F6**, **F3**, **F2**.
  - e. Main Menu, **RUN** Mode, **EXE** Key, **OPTN**, **F6**, **F5**, **F2**.