

# Scavenger Hunt

## Concepts

- Explore the keys and menus on the TI-84 Plus

## Overview

This activity will allow the participant to explore the functions of the keys and menus on the TI-84 Plus. It will also acquaint participants with some of the language used to navigate on the TI-84 Plus.

## Materials

- TI-84 Plus

## Getting Started

1. Press **MODE**, and change the decimal to 3 places.

Note: The arrow keys **←** **→** **↓** **↑** allow you to navigate, and the **ENTER** key will select the changes you have made.

2. Return to the Home Screen by pressing **2nd** **[QUIT]**.

- The **[QUIT]** key is the **2nd** function of the **MODE** key.

Note: In general, when you want to “Quit and go Home,” **2nd** **[QUIT]** will take you back to the Home Screen.

3. Do the following calculation on the Home Screen:  
 $25.6893^2$

- Key in 25.6893 and press the  **$x^2$**  key.
- Press **ENTER**.

4. Press **MODE**, and change the decimal to FLOAT.

- Go back to the Home Screen, and press **ENTER**. What happens?
- Press **ENTER**. Compare this number to the one you got in your calculation in question 3 above.
- Press **CLEAR**. What happens?

## Plotting

1. Find the  $\boxed{Y=}$  key, and press it.
  - How many Y= slots are there? Use your arrow keys!
  - Quit and go Home ( $\boxed{2nd}$   $\boxed{QUIT}$ ).
2. Go to the  $\boxed{STAT PLOT}$  menu by pressing  $\boxed{2nd}$   $\boxed{Y=}$ .
  - Turn off all of the STAT PLOTs with one keystroke.
  - Go back to your  $\boxed{STAT PLOT}$ s. Press  $\boxed{ENTER}$  on Plot1.
  - How many different types of graphs can you make?
  - What do the Xlist and Ylist mean?
  - Scroll to Type, and then highlight the third type of graph. What type of graph is this?
  - When you press  $\boxed{ENTER}$  on this type of graph, what changes do you see on the  $\boxed{STAT PLOT}$  screen? Why?
  - Quit and go Home.

## Function Keys

1. Press  $\boxed{2nd}$   $\boxed{ZOOM}$ . What screen did you just access?
  - Make sure everything on the left is highlighted.
  - Use the arrow keys and the  $\boxed{ENTER}$  key to make any changes.
2. Press  $\boxed{STAT}$   $\boxed{ENTER}$ . What do you see?
  - Use the arrow keys and see how many columns there are.
  - Go back to the Home Screen.
3. Press the  $\boxed{APPS}$  key, and make note of what you see here.
4. Access the unit's memory by pressing  $\boxed{2nd}$   $\boxed{+}$ .
  - Move the cursor to 2 and press  $\boxed{ENTER}$ , or simply press the number  $\boxed{2}$ .
  - Make note of the amount of memory you have in both RAM and ARC.
  - What do you think these two things mean?
  - Go back to the memory by pressing  $\boxed{2nd}$   $\boxed{+}$ , and notice #4.
  - What do you think this will do?
  - Quit and go Home.

5. Press **[VARS]**. Then scroll right to Y-VARS.
  - What do you see?
  - Press **[ENTER]** on 1:Function. Now what do you see?
  - Quit and go Home.
  - Press **[CLEAR]**.

### Home Screen Calculations

1. Perform the following calculation just as it is written below

**[8] [+] [4] [x] [5] [ENTER]**

- What answer appears on the screen?

2. Now do the same calculation but include some parentheses as follows:

**[ ( [8] [+] [4] ) [x] [5] [ENTER]**

- What answer appears on the screen?
- Why is it different from the one you got before?

3. Key in  $(-2)^2$ ,

**[ ( [-] [2] ) [^] [2]**

Note: The negative symbol **[ - ]** is near the **[ENTER]** key.

- Press **[ENTER]**.
  - What is your answer?
4. Now enter  $-2^2$  (without the parenthesis), and press **[ENTER]**.
    - What do you notice?
    - Why is there a difference?