ClassPad 101

for ClassPad Version 3.00+

LESSON 1

Introduction to the ClassPad Manager Software

Welcome

During this course, you will learn many great features of the ClassPad Manager software and gain the skills needed to use the ClassPad in every future mathematics course you take. Each lesson is designed to introduce you to a new feature of the ClassPad and at the same time review features from previous lessons. Each lesson will also involve math, the fun part. We have tried to introduce many areas of mathematics within the lessons, and hope that they will encourage you to explore mathematics more. But remember, your main goal is to master the new feature in each lesson and enjoy the mathematics along the way.

Lesson Goals

- To become acquainted with your ClassPad Manager Software
- To master drag and drop
- To learn how to graph an equation

In Lesson 1, you will learn how to:

- Turn the ClassPad Manager on and off
- Open an application from the Menu
- Input and edit data
- Drag and drop
- Draw a graph

Upon completion of this lesson, you will be able to answer the following questions:

1. What is the main menu used for?
2. How do you clear a window?
3. How do we select an expression?
4. How do you drag and drop an expression or equation?
5. What does “ans” do?
6. What is an emulator?

Time required

About 60 minutes.

Getting Started

The easiest way to learn how to use the ClassPad Manager (your virtual calculator), or any software is to practice! As you work through the steps below, please try each part a few times. If you make a mistake, great, you are trying. The ClassPad Manager is software, just like other applications. The more you explore, the more you will learn.

PART I

And now, it is time to become acquainted with the ClassPad Manager…
The ClassPad Manager is a type of **emulator** for the handheld ClassPad 300. In this instance, an **emulator** is software that lets us run programs written for a handheld on a computer. Emulators for handhelds are sometimes called **virtual calculators.**

1. Double click

(a shortcut on your desktop). You should see:

To enlarge the ClassPad, **right click** anywhere on it and select **Zoom 2x** or **LCD**.

Scroll to see other applications.

Click **Menu** at any time to return to the main menu. This is sometimes called the **launcher menu.**

Click **ON / OFF** to close the ClassPad Manager.

Clicking **EXE** is the same as pressing **Enter** on your computer keyboard.

2. Opening an Application

a. Click on Menu

b. Scroll up, if needed

c. Click on Main to open the Main application

Your Main window may not be empty, but it is ok!

d. Click the small box (you will see the cursor blink)

e. Type in **123+4** and press EXE or Enter

3. Clearing an Application

a. Click on **Edit** to open **Edit menu**

b. Select **Clear All**

c. Click **OK**

Your Main math window should now be empty.

4. Inputting/Editing Data

*You can use your keyboard or the ClassPad keypad to input data.

a. Type in **2+34** and press EXE or Enter

b. Click between **3** and **4** (You will see the cursor)

c. Press • or type a **.** to change **34** to **3.4**

d. Press EXE or Enter

Where are you? Watch for the cursor blinking to find the answer!

5. Drag and Drop

a. Click following **2+3.4**

b. **Drag** to the left to **select it**

c. **<u>Release the mouse</u>**

d. **Next, press on selection** (do not let go) and **drag** to next line

e. Press twice (or press the back arrow on your keyboard)

f. Press EXE or Enter

g. Repeat a-f a few times.

PART I
Practice Exercises

Before beginning the practice exercises, open a word document, type in the following information and then *save it as Lesson1 in your CASIO folder within My Documents*:

- Date: (enter today's date)
- To: (put your instructor's name here)
- From: (put your name here)
- Re: Lesson 1

1. Clear your Main window.
2. Evaluate 125+234.
3. Change 125+234 to 825+534 and evaluate again.
4. Drag your answer to the next line and divide by 9. Evaluate.
5. Get a **screen capture** and paste it into your Lesson1 document (under a title of PART I).

   [**Hint:** To get a screen capture, right click on the ClassPad Manager and select Capture Screen. OR, just press the F8 key.]
6. On the next line, type in 10+ans and press EXE or Enter.

7. Next, just type in +10. Notice ans is automatically placed in front of the + sign for you. Press EXE or Enter.
8. Get a **screen capture.** ***Please*** add two blank spaces following the first screen capture and then paste this one.
9. What is ans? Make a note to yourself so that you can answer this in the near future.
10. Clear your Main window again.
11. Type in seq(x,x,1,10) and press EXE.
12. Drag and drop seq(x,x,1,10) to the next line and change it to seq(1/x,x,1,5). Press EXE.
13. Type in *5 (you will see ans*5) and press EXE.
14. Type in sortA(ans) and press EXE.
15. Get a **screen capture.** Add two blank spaces following the second screen capture and then paste this one.

Note: Drag and drop is easy ONCE you have succeeded a few times. Please let me know right away if you are having trouble with this. We can work on it together.

Important: Before beginning part II, we should make sure our ClassPad settings are the same. Does your status bar look the same as the one in the picture below?

Setting the Result Type

1. Click on Menu and then Main
2. Really easy ☺ **Click** on a name in the **status bar** to change it
3. Another way: Select 0 and then **Basic Format**
4. Make sure your **Basic Format settings** are the same as the ones shown
5. Select **Set**
6. Notice that some of your Basic Format settings show in the **status bar**

Just click a **mode** name to change!

PART II

In this part you will explore graphs in 2-Dimensional space.

1. Graphing in 2-Dimension

a. Click m and then W (Graph&tab…)

b. Click in the **box** following **y1**

c. Type in **x^2-1**

d. Press E or Enter

*Notice that the box preceding y1 became checked.

e. Click $on the toolbar

2. Line Style

a. Click on the **line inside the [ ]'s** to the right of y1

*A dialog should open.

b. Select a different line style by clicking on it (your choice)

c. Click **OK**

d. Graph y1 again

*Clicking $ will graph all checked equations.

3. Inequalities

a. Click on the **= sign** directly following **y1**

*A dialog should open.

b. Select an inequality type by clicking it (your choice again)

c. Graph y1 again

d. Change your line style again

e. Graph y1 again (notice the shading changed)

PART II
Practice Exercises

1. Open the 2-D Graph application and **clear its equations**.

2. Graph **y1=sin(x).**

3. Change the line style of y1 and graph it again.

4. Drag and drop the sin(x) to the small box following y2. Change y2 to 2sin(x), press Enter and click the graph button. Think about how the graphs differ.

5. Change the line style of y1 and y2 so that they are different. Graph y1 and y2 again to see the line change.

6. Add the title PART II to your Lesson1 document just below the three screen captures.

7. Get a **screen capture** and paste it into your Lesson1 document (under the PART II title).

8. Uncheck y1 by clicking on its check mark. Click the button for graphing. Notice only y2 is graphed.

9. Uncheck y2 and then input and graph just **y3 < 2*x* – 1**.

10. Get a **screen capture.** Add two blank spaces following the last screen capture and then paste this one.

11. Uncheck y3.

12. Input and graph y4=x^2– 4. Be sure to check the box.

13. While the Graph window has focus, open the Zoom menu and select Quick Standard.

14. Open the Analysis menu and select Trace. Move the cross-hair cursor around by pressing the left and right arrows on your keyboard.

15. Get a **screen capture.** Add two blank spaces following the last screen capture and then paste this one.

16. Spend a few minutes graphing. You can edit y1, y2 and y3, or enter different equations. Also, look in the Analysis menu (this is a very useful menu). Have fun!

PART III

In this part, you will explore graphs in 3-Dimensional space.

1. Graphing in 3-Dimension

a. Click Menu to return to the main menu and then click on 3D Graph

b. Clear the window, if needed (Edit/Clear All)

c. Click in the **box** following **z1**

d. Type in **1/(x^2+y^2)**

e. Press EXE or Enter

f. Click on the toolbar

g. Press the **+** key to zoom in

h. Press the **–** key to zoom out

i. Press the **=** sign a few times

Click in the graph window and **drag to rotate** your graph!

2. Another Graph

a. Click in the **box** following **z2**

b. Type in **sin(x*y)/x**

c. Press E or Enter

d. Click %on the toolbar to graph **z2**

e. Open the ~ **menu**

f. Select **Rotating** ' then **LeftRRight**

*Click ESC to stop early

g. Select **Zoom/View-Init** to return to initial view

PART III
Practice Exercises

1. Click

to open the Main Launcher and then click

(3D Graph).

2. Click in the window with z1, z2, etc., and **clear** its **equations** [Edit / Clear All].

3. Graph **z1=sin(x*y)/x.**

4. Rotate the graph by clicking directly in the graph window and dragging. Continue this until you like your graph.

5. Add the title PART III to your Lesson1 document just below the three screen captures for PART II.

6. Get a **screen capture** and paste it into your Lesson1 document (under a title of PART III).

   [**Remember:** To get a screen capture, right click on the ClassPad Manager and select Capture Screen. **OR**, just press the **F8** key.]

7. Open the **Zoom menu** and select **View-y**.

8. Get a **screen capture.** Add two blank spaces following the last screen capture and then paste this one.

9. Experiment with other items in the Zoom menu and also rotating the graph.

10. Get a **screen capture.** Add two blank spaces following the last screen capture and then paste this one.

PART IV

Reflection Exercises

You have just completed the first lesson in ClassPad 101, congratulations! Please take a few moments to copy and paste the following three questions at the end of your Lesson1 document and answer them.

1. Approximately how long did it take you to complete this lesson?
2. Which activity did you enjoy the most? Why?
3. Which part of this activity did you find difficult to follow? How did you overcome the difficulty?

Assessment 1: Introduction to the ClassPad Manager Software

- **Checkpoint**: Your word processed document, titled "Lesson1", should contain the following activities:
  1. Three screen captures from PART I.
  2. Three screen captures from PART II.
  3. Three screen captures from PART III.
  4. Three reflection questions with answers from PART IV.

- **Submit** your **Lesson1 document** to your instructor for grading. Once your lesson is submitted, your lesson for ClassPad 101 “Introduction to the ClassPad Manager” is complete.