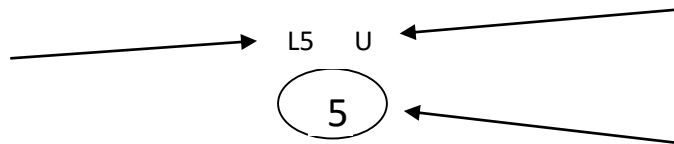


Introduction to the TI-83/84 Calculator

Directions: Read each statement or question. Follow the directions each problem gives you.

Basic Buttons

- 1st Function Keys: Normal buttons
- 2nd Function Keys: Top Left of Calculator (Color: _____)
- Alpha Keys: Top Left of Calculator (Color: _____)



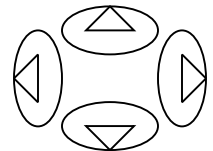
1. Find the **ON** key.
 - a. Where is it located? _____
 - b. 1st or 2nd function?

2. Find the **Off** key.
 - a. Where is it located? _____
 - b. 1st or 2nd function?

3. Find the **ENTER** button
 - a. Where is it located? _____
 - b. 1st or 2nd function?

4. Turn on the calculator. Now turn it off.
 What are the buttons to TURN IT OFF: _____

5. Note there are four arrow keys.
 - a. Where are they located? _____
 - b. These keys are similar to the keys on a computer.
 - c. Let's explore these:
 - Turn the calculator on
 - Type the number 35
 - Press the left arrow once so that the cursor is blinking over the 5
 - Press the number 7. The number on the screen is now _____.
 - Press +68 and **ENTER**. What is on the screen now? _____



Edit Keys

There are two edit keys that you should be familiar with: **DEL** and **CLEAR**

1. Find **DEL** on the calculator.
 - a. Where is it located? _____ b. 1st or 2nd function? _____
 - i. Type 7528.
 - ii. Move the cursor so that the 5 is blinking
 - iii. Press **DEL**. Press **ENTER**. What number is now on the screen? _____
2. Find **CLEAR** on the calculator.
 - a. Where is it located? _____ b. 1st or 2nd function? _____
 - i. Type **5678**
 - ii. Press **CLEAR**. What happened? _____

4. What is the difference between **DEL** and **CLEAR**?

DEL button _____ **CLEAR**
button _____

Situations:

CLEAR or **DEL**: Change $5 + 7$ to $5 - 7$

CLEAR or **DEL**: Change **5625** to **9812**

CLEAR or **DEL**: Change **755555555555** to **855555555555**

ALPHA Keys

1. Find the ALPHA Key
 - a. Press ALPHA and 4 then ALPHA and multiplication sign (x): _____
2. Find the A-Lock Key, what keys do you need to press to use to activate A-Lock: _____
3. The number zero (0) is a space bar
4. Clear your calculator screen and spell out : _____

Arithmetic Keys

What do these symbols mean?

+	_____	-	_____
×	_____	÷	_____
()	_____	ENTER	_____
	(-) _____		

Type the following into your calculator: **56(-)8 =**

Write what appears on your screen in the box below.

-Syntax Error means that something is typed that the calculator does not understand
-NEGATIVE and MINUS are NOT the same buttons

Practice: Type the following into your calculator

a. $8 + 56 =$ _____ b. $8 - 56 =$ _____

c. $8 + (-) 56 =$ _____ d. $8 \times 56 =$ _____

e. $(-)8 - 56 =$ _____ f. $8 - (-) 56 =$ _____

g. $56 \div 8 =$ _____ h. $(-)56 + 8 =$ _____

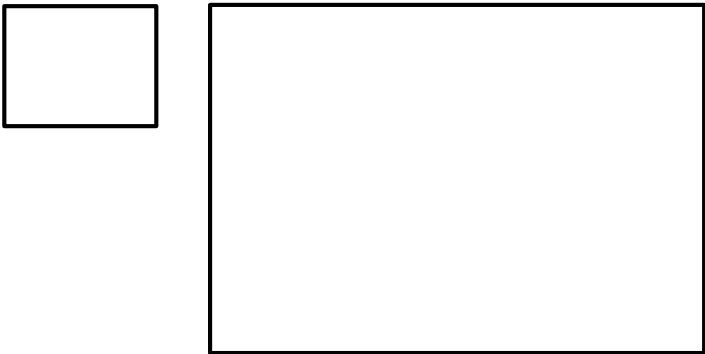
i. $\frac{4}{2} =$ _____ j. $\frac{5}{10} =$ _____

Graphing

Before you do anything, press the following keys: (Clear the RAM)



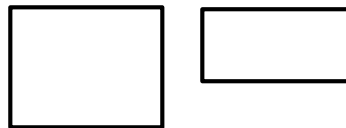
To plug in the equation for graphs and tables:



To graph:



For tables:



Graphing Inequalities:

Which calculator are you using?

TI-83

TI-84

TI-Nspire

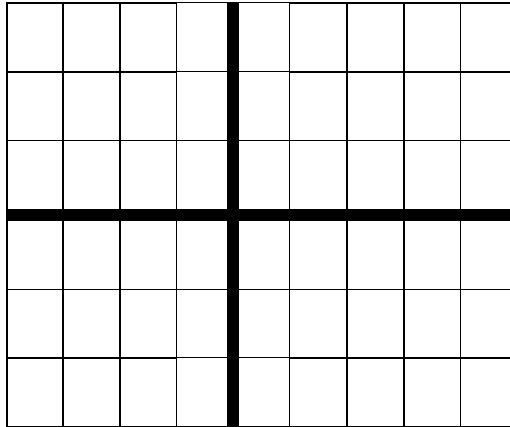
TI-89

Write down the instructions for your particular calculator here: (make sure to include what the keys look like and which order to push them in.)

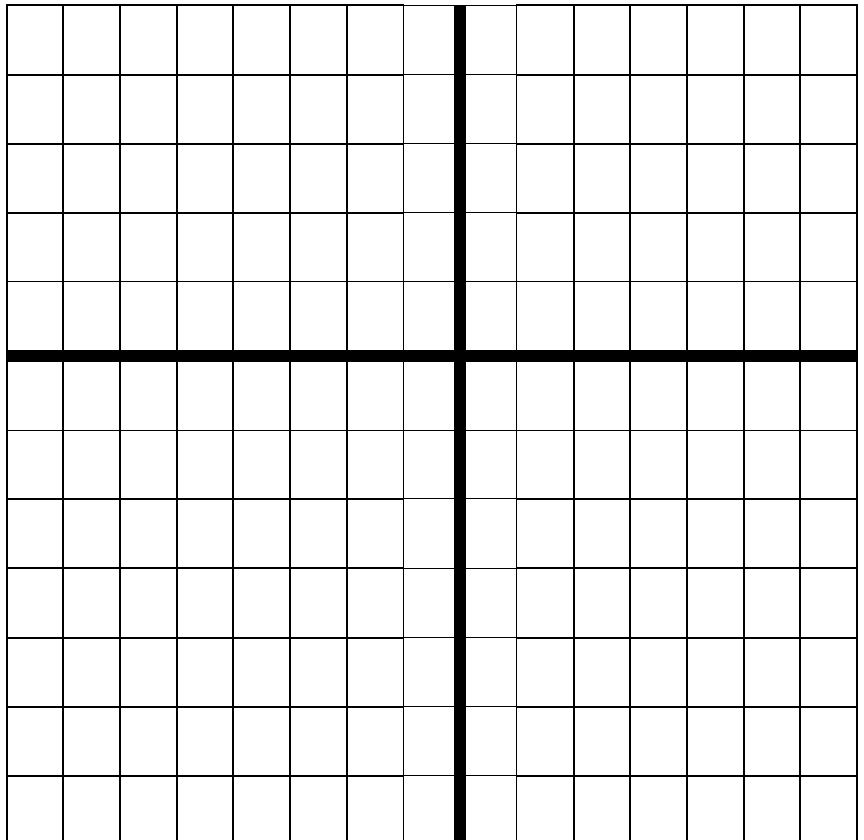


Math Basics

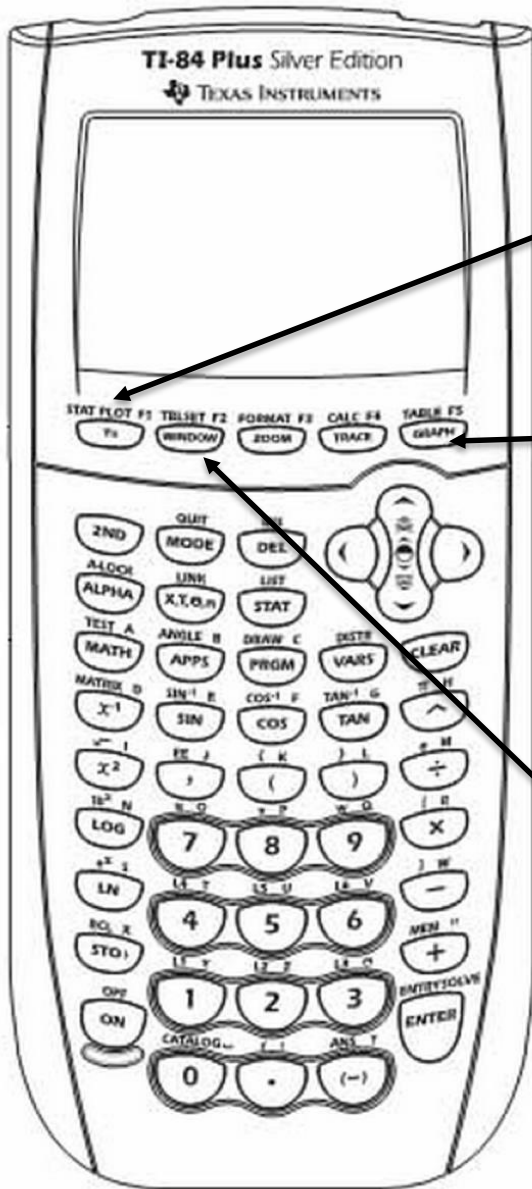
Plotting Coordinates

 (x, y) $(1, 2)$ $(-4, -3)$ $(2, -2)$ $(-1, 0)$ 

Plot each point, and then draw a line to the next point

 $(-2, 4)$ $(1, 4)$ $(2, 1)$ $(1, 1)$ $(3, -2)$ $(2, -2)$ $(4, -6)$ $(-1, -2)$ $(0, -2)$ $(-2, 1)$ $(-1, 1)$ $(-2, 4)$ 

Graphing Systems



Using your calculator hit the $y =$ button. Enter the following system in your calculator:

$$y_1 = 2x - 3$$

$$y_2 = \frac{1}{2}x + 2$$

Then hit **GRAPH**. Once the function has graphed press

2ND + TRACE + 5 then press **ENTER** three times.

Write the intersection here: (_____ , _____)

Do the same for the following systems if the intersection doesn't show in the window change the **WINDOW** settings.

1.
$$\begin{cases} y = 5x - 4 \\ y = \frac{1}{3}x + 2 \end{cases}$$
2.
$$\begin{cases} y = -7x + 2 \\ y = \frac{1}{8}x - 1 \end{cases}$$
3.
$$\begin{cases} y = 4x - .25 \\ y = \frac{2}{5}x + 4 \end{cases}$$

Interesting Calculator Facts:

Exit:

How you can exit out of ANY screen back to the main screen: _____

Fractions:

How can you make the answers fractions?

1. Hit the MATH menu: then select >Frac

2. OR change the mode: _____

How to type a fraction $\frac{3}{5}$ in your calculator: _____

STO>

How to make a variable equal a specific Value:

Press: 5 STO> X,T,θ,n or a different letter ENTER

Now type 6 X,T,θ,n or a different letter -4 ENTER write the answer: _____

Use the above method to do the following:

$$f(x) = -3x + 4 - 2x^2$$

a) $f(-2) =$

b) $f(3) =$

c) $f\left(\frac{2}{3}\right) =$

d) $f(0) =$

Insert:

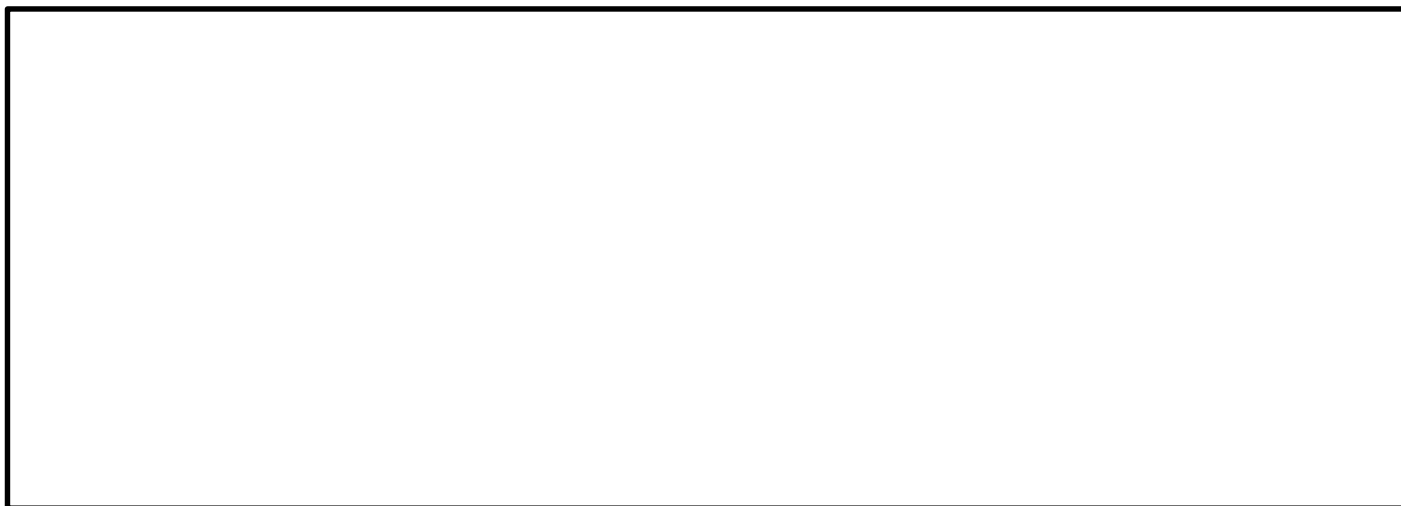
If you have forgotten something in an equation what could you use? _____

Type : 6-2*4-3

Now without clearing the whole thing change it to 6-17-2*4-3 what is the answer: _____

Matrices:

ENTER a matrix into your calculator:



How TO SOLVE A SYSTEM using your calculator:

