

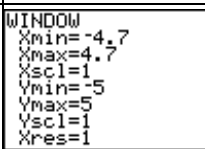
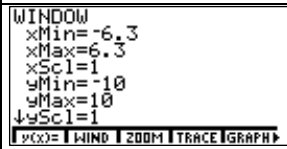


Calculator Functions for Math 0305 & Math 0310

Words in **BOLD** are calculator keys

Revised 6/21/06

	TI-83+/83/84+/84	TI-86
BASIC SETUP	MODE  <p>All values down the left-hand side should be highlighted. To return to the 'home' screen at any time 2nd MODE</p>	2nd MORE  <p>All values down the left-hand side should be highlighted. To return to the 'home' screen at any time 2nd EXIT Setting up custom menu: 2nd CUSTOM F1 scroll down to desired function(s) F3 then choose a blank space F1 - F5. Repeat for each desired function. You will need <i>abs</i>, FRAC and $\sqrt[y]{x}$. FRAC and $\sqrt[y]{x}$ at the end of the alphabet F1 (page down)</p>
To enter a rational expression	(numerator) / (denominator)	(numerator) / (denominator)
To raise a value (or variable) to a power (exponents)	For x^2 value x^2 For others value $^$ power	For x^2 value x^2 For others value $^$ power
To change a decimal to a fraction	MATH ENTER ENTER	CUSTOM F# ENTER
To find or enter the absolute value	MATH ► ENTER value or expression)	CUSTOM F# (value or expression)
To store a value for x	value STO X,T,θ ENTER	value STO x-var ENTER
To store a value for a variable other than x	value STO ALPHA choose variable from GREEN letters above keys ENTER	value STO ALPHA choose variable from GRAY letters above keys
To access π	2nd ^	2nd ^
To graph an equation	Y= enter the equation GRAPH	GRAPH F1 enter the equation 2nd F5
To change the viewing window for a graph	WINDOW enter values and desired scales	GRAPH F2 enter values and desired scales
"Friendly windows"	 <p>This (or any multiple of x values) will give all x integer values.</p>	 <p>This (or any multiple of x values) will give all x integer values.</p>
To trace along a graph (an equation must be entered)	TRACE ► ◀ as desired	F4 ► ◀ as desired
To access the VALUE/EVAL feature (an equation must be entered)	2nd TRACE ENTER value ENTER NOTE: Your x value must be within your viewing window. This process may be repeated by entering a new x -value.	From the Graph MORE MORE F1 value ENTER NOTE: Your x value must be within your viewing window.
To find the intersection of 2 graphs (2 equations must be entered)	2nd TRACE scroll to INTERSECT ENTER Adjust window if necessary to see the intersection. Using ► ◀ move cursor to approximate intersection ENTER ENTER ENTER NOTE: Your x value must be within your viewing window.	From the Graph MORE F1 MORE F3 Adjust window if necessary to see the intersection. Using ► ◀ move cursor to approximate intersection ENTER ENTER ENTER NOTE: Your x value must be within your viewing window.
To solve an equation by graphing (2 equations must be entered)	Enter left-hand side of equation in $y1$; right-hand side in $y2$ Graph and locate the point(s) of intersection.	Enter left-hand side of equation in $y1$; right-hand side in $y2$ Graph and locate the point(s) of intersection.
To find the x -intercept(s) (an equation must be entered)	2nd TRACE scroll to ZERO ENTER Enter a numerical value that lies to the LEFT of the point. ENTER and then a numerical value that lies to the RIGHT of the point. ENTER ENTER	From the Graph MORE F1 F1 Enter a numerical value that lies to the LEFT of the point ENTER and then a numerical values that lies to the RIGHT of the point ENTER ENTER
To change a decimal value obtained in a graph to a fraction	2nd MODE X,T,θ,n (for y ALPHA 1) MATH ENTER ENTER	2nd EXIT x-var CUSTOM F# ENTER (for y) 2nd CUSTOM F3 (scroll to lower case y) ENTER Custom F# ENTER (store y in your Custom menu for future ease)
To access a TABLE (one or more equations must be entered)	2nd GRAPH	TABLE F1
To adjust a TABLE (one or more equations must be entered)	2nd WINDOW Set start value (usually 0) and increment (usually 1). AUTO should be highlighted for both Indpnt and Depend	TABLE F2 Set start value and increment. AUTO should be highlighted for Indpnt

To find $\sqrt{\quad}$	2nd x^2 value Note: You will need to enter () when needed.	2nd x^2 value Note: You will need to enter () when needed.
To find $\sqrt[3]{\quad}$	MATH scroll to $\sqrt[3]{\quad}$ ENTER value Note: You will need to enter () when needed.	3 CUSTOM F# value Note: You will need to enter () when needed.
To find other roots ($\sqrt[x]{y}$)	root MATH scroll to $\sqrt[x]{\quad}$ value Note: You will need to enter () when needed.	x value CUSTOM F# y value Note: You will need to enter () when needed.
To find the maximum (minimum) point (an equation must be entered.)	2nd TRACE scroll to MAXIMUM (MINIMUM) ENTER Move cursor to LEFT of the point (the cursor may move up or down the graph) ENTER Move cursor to RIGHT of the point (the cursor may move up or down the graph) ENTER ENTER	From the graph MORE F1 F4 (F5) Move cursor to LEFT of the point (the cursor may move up or down the graph) ENTER Move cursor to RIGHT of the point (the cursor may move up or down the graph) ENTER ENTER
To solve inequalities in 2 variables (shading)	enter function into y1 \blacktriangleleft all the way to the left of y1 for $f(x) >$ ENTER ENTER GRAPH for $f(x) <$ ENTER ENTER ENTER GRAPH Repeat if solving a system of inequalities OR enter each function into y#, select each style, then graph	enter function into y1 MORE for $f(x) >$ F3 F3 2nd F5 for $f(x) <$ F3 F3 F3 2nd F5 Repeat if solving a system of inequalities OR enter each function into y#, select each style, then graph
To evaluate a function	an equation must be entered for Y# VARS \blacktriangleright Y-VARS ENTER Y# ENTER (value) ENTER OR Use the Value feature from the graph	(an equation is not necessary for y(x)) 2nd \div F1 expression , x-VAR , value) ENTER OR use EVAL feature from graph (an equation IS necessary for y(x))
C O M P L E X N U M B E R S		
To access i	2nd \bullet	The i is not available, but you can enter complex expressions by value1 operation value2 $\sqrt{\quad}$ -1 ENTER The display is (value1, value2). Value 1 is the real part and Value2 is the imaginary part.