

Graphing Calculator Keystroke Guide

Graphing calculators can solve equations, plot graphs, manipulate algebraic expressions, and so on. However, knowing how to manipulate the calculator to compute such feats can be tricky. Therefore, this guide is designed to help students navigate the calculator with a basic keystroke guide.

Basic Keystrokes

$\boxed{2^{ND}}$ — Accesses the secondary functions labelled in blue above the keys.

\boxed{ALPHA} — Accesses the green letters above the keys.

$\boxed{2^{ND}} \rightarrow \boxed{MODE}$ — Returns to the Home screen

$\boxed{2^{ND}} \rightarrow \boxed{ENTER}$ — Copies the last entry onto the Home screen.

$\boxed{STO} \rightarrow$ — Assigns a value to a variable.

\boxed{ZOOM} — Standard window for graphing

$\boxed{2^{ND}} \boxed{MATH}$ (TEST) — Shows inequality symbols

$\boxed{2^{ND}} \boxed{ENTER}$ (ENTRY) — Displays what you had typed in so you can arrow back and change values without re-typing everything in again

Decimals & Fractions

$\boxed{MATH} \rightarrow \boxed{FRAC}$ — turns decimals into fractions

$\boxed{MATH} \rightarrow \boxed{DEC}$ — turns fractions into decimals

Absolute Values

$\boxed{MATH} \rightarrow \boxed{NUM} \rightarrow 1. \boxed{ABS} (\rightarrow \text{input value} — \text{generates absolute values}$

Permutations & Combinations

Permutations: Input n on Home screen $\rightarrow \boxed{MATH} \rightarrow \boxed{PRB} \rightarrow \boxed{nPr} \rightarrow \boxed{ENTER} \rightarrow \text{Input } r \rightarrow \boxed{ENTER}$

Combinations: Input n on Home screen $\rightarrow \boxed{MATH} \rightarrow \boxed{PRB} \rightarrow \boxed{nCr} \rightarrow \boxed{ENTER} \rightarrow \text{Input } r \rightarrow \boxed{ENTER}$

Finding Predictions or Estimates

$\boxed{2^{ND}} \boxed{GRAPH}$ (TABLE) — finds predictions or estimates

See x and y values from graph. The "Ask" feature allows you to plug in a value for x , and the calculator will display the y -value.

Graphing

Minimum or Maximum:

1. Enter the equation $y = \dots$
2. $\boxed{2^{ND}} \boxed{TRACE}$ (CALC) \rightarrow select 3)min or 4)max

Zero (x - intercept): $\boxed{2^{ND}} \boxed{TRACE}$ (CALC) \rightarrow 2) zero

Left Bound: Arrow to the left of curve \rightarrow \boxed{ENTER}

Right Bound: Arrow to the right of curve \rightarrow \boxed{ENTER}

Guess: Get close to min/max \rightarrow \boxed{ENTER}

At the bottom of the screen, it will show x-values and y-values.

Linear Regression

For TI 83's and older TI 84's: $\boxed{2^{ND}} \rightarrow \boxed{0}$ (CATALOG) \rightarrow select "DIAGNOSTICS ON"

For the newer TI 84 Plus: \boxed{MODE} \rightarrow scroll to "STAT DIAGNOSTICS" and highlight \rightarrow select "ON"

1. \boxed{STAT} \rightarrow select 1)edit \rightarrow enter in List 1 and List 2
2. $\boxed{2^{ND}} \boxed{MODE}$ (QUIT)
3. \boxed{STAT} \rightarrow CALC \rightarrow select 4)linreg(ax+b) \rightarrow \boxed{ENTER}

The screen will show a value for a (slope) and b (y-intercept). It should also show up in the $y=$ slot.

Standard Deviation

1. \boxed{STAT} \rightarrow Edit \rightarrow enter data (or class midpoints) into L_1 (enter frequencies into L_2 , if any)
2. \boxed{STAT} \rightarrow CALC \rightarrow 1: 1-Var Stats \rightarrow $\boxed{2^{ND}} \boxed{STAT}$ 1: L_1 (if using frequencies, also enter "," \rightarrow $\boxed{2^{ND}}$ \boxed{STAT} \rightarrow select 2: L_2)
3. Press \boxed{ENTER}

Interpreting the Answers:

Mean: \bar{x}

Median: Med

Quartiles: Q_1 and Q_3

Total Number of Data Points: n

Standard Deviation: S_x (for sample) or σ_x (for population)

Variance

1. Find standard deviation using above method.
2. \boxed{VARS} \rightarrow Statistics \rightarrow 3: S_x (or 4: σ_x) \rightarrow X^2 \rightarrow \boxed{ENTER}