

# CASIO Calculator Comparison

Functions/ Specifications	TI-83	CFX9850+	User Differences and Comments
Menus/ Ease of Use	pull-down	icon menu	CFX-9850+: When turned on, shows icons. On-screen directions to choose from TI-83: When turned on... blank screen. Use 2 <sup>nd</sup> functions to find hidden menus.
Display	Multiple Styles	Color	CFX-9850+: Color code graphs w/ equations or data, color shading and tracing. TI-83: Displays multiple graphs using different styles (i.e., circle, box, etc.)
Digits Displayed	8 x 16	8 x 21	Lines by character
Fraction key on keyboard		•	CFX-9850+: <b>Primary key for instant access to fractions in any calculation.</b>
Fraction ↔ Dec ↔ Mixed Number & Improper Fraction Calculations	F ↔ D only	•	CFX-9850+: <b>Toggle instantly b/t mixed numbers, improper fractions and even repeating decimals.</b>
Graph types	5 types	5 types	CFX-9850+: shades solution for up to 20 inequality functions. <i>All 5 graph types can be graphed at the same time &amp; same screen.</i>
Graphing functions	up to 10	up to 20	Functions defined, saved, graphed, analyzed at a time.
Graph analysis	•	•	Interactive analyses of function values, roots, maximums, minimums, intersections, intercepts, integrals, and derivatives. CFX-9850+: <i>needs no seeding values, or upper/lower bounds.</i> <i>Find all roots/intersections instantly without starting over.</i>
Dynamic Graphing		•	CFX-9850 +: <b>Graph actively changes as one coefficient in a user-defined function, varies in a given range of values.</b> User chooses equation and coefficient. (NCTM standards)
Conics Analyzer		•	CFX-9850+: <b>draws/analyzes ellipses, circles, hyperbolas, parabolas.</b> Finds...foci, line of symmetry, directrix, vertex, length
System of equations solver		•	CFX-9850+: <b>Use up to 6 equations and 6 unknowns simultaneously, then solve.</b>
Polynomial equations solver		•	CFX-9850+: <b>Instantly solve for all real and complex roots.</b>
Interactive equation solver		•	CFX-9850+: <b>Solve for different variables in user-entered equations.</b>
Integration	•	•	CFX-9850+: <i>Numerically calculates definite integral, no upper/lower bounds.</i> <i>Automatically shades area under the curve.</i> TI-83: <b>Must set upper and lower bounds from graph screen.</b>
Integration calculation method choice		•	CFX-9850+: <b>User may choose either Gauss-Kronrod or Simpson's method.</b>
Graph Window Scrolling		•	CFX-9850+: <b>Window scrolls, following cursor when it traces outside view area</b> <b>Equation(s) appear(s) with graph in viewing window with each graph.</b>
Auto-Range feature for statistical graphs	•	see comments	TI-83: <b>Has auto range feature for data graphs only.</b> CFX-9850+: <b>Save 6 favorite viewing-windows to recall later w/ any type graph.</b>
Dual Graph screens		•	CFX-9850+: Dual screen graphing allows analysis of separate graphs. Screen splits vertically allowing user to have different graphs & different viewing windows on each side. Ex. view all of function on 1 side & zoom of same function on the other side.
Split Screen	•	•	
Draws VERTICAL Lines (x=c)		•	
Sketch Features	•	•	Draws points, circles, tangent lines, horizontal lines.
Tables	• up to 6	• up to 20	Table shows numeric evaluation of functions in table format.
Matrix at least 20 x 20 matrix	•	•	CFX-9850+: <i>up to 27 matrices can be stored</i> TI-83: <i>up to 10 matrices can be stored</i>
Matrix operations	•	•	<b>Include:</b> Inverse, determinant, transpose, augmented & row operations. CFX-9850+: <b>Amazingly easy &amp; quick row operations. Even with fractions.</b>
Logistic and sinusoidal regressions	•	•	CFX-9850+: <b>Uses updated calculation methods developed by Clemson Univ.</b>
Delta List		•	<b>Examine change in elements of a list.</b>
Time-Value-Money features	• no bond calculations	•	TVM, cash flows, amortization CFX-9850+: allows for computation of simple and compound interest, conversions, cost/sell/margin, days calculations and <b>bond calculations</b> with tremendous ease. Also includes full screen worksheets with onscreen options for solving TVM problems.
Advanced statistics features	•	•	9 Hypothesis testing functions, 6 Confidence interval functions, ANOVA, Normal, Student-T, Chi-Square, Binomial, Poisson, and Geometric probability distribution.
List based one and two variable statistics	•	•	CFX-9850+: <b>36 lists. Transfer list to matrices or tables &amp; vice versa.</b> TI-83: <b># of lists dependant upon the memory available. User can name lists.</b>
Table ↔ List ↔ Matrix		•	<b>Transfer data from area to area for easier data manipulation.</b>
Data analysis GRAPHS	•	•	Histograms, scattergrams, and multiple regression equations. CFX-9850+: 3 stat graph memories & up to 6 stored pictures. TI-83: 3 stat graph memories & up to 10 stored pictures.
Box-whisker plots	1 type	2 types	CFX-9850+: <b>Mean and median box plots.</b> TI-83: <b>Median box only.</b>
Sequence Graphs: time series, & Cobweb	•	•	
Links to data collection device	•	•	Casio EA-100 needs no programming to run, and uses Venier probes.
Complex numbers	•	•	
Computer LINK and unit to unit link	•	•	<b>Both include:</b> Mac/IBM link, for printing & storage.
Overhead unit and Poster available	•	•	CFX-9850+: Infrared calc. transmits to OH panel up to 30 ft. away w/ no cords. Also, the overhead unit can be used with the 9850 as well.
Television Interface		•	CFX-9850+: exclusive "television interface calculator" for demonstrating the calculator in FULL color on ANY TV screen.
FREE TRAINING WORKSHOPS		•	<b>For district and school wide adoptions.</b>
Price Range	\$84.50	\$79.75	and up, from educational distributors

\*\*\*Functionality can be altered by writing a program.

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