**Icon Menu**

The icon menu makes it easy to select desired features.

**Intuitive Operation**

Intuitive and interactive operation makes it easy to use the features of CASIO scientific calculators.

**Display and Textbook-Linked Key Buttons**

Natural Textbook Display and textbook-linked key buttons make it easy to identify the desired keys.

SCHOOL & LAB.

These calculators are for users who require scientific calculation for use in schools, laboratories, or factories. Some models are equipped with financial and programming functions.



Casio advocates the philosophy "Support Classroom with Technology"
Casio supports teachers and students with a total education solution.

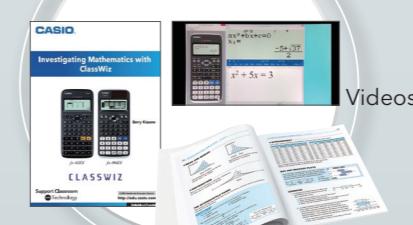
Support Classroom with Technology

Educational Information (WEW)


Worldwide Education Website
Website that provides information on products, educational resources, and support

Educational Information (WES)


Worldwide Education Service
Web service that uses QR Codes

Educational Resources


Activities Textbook
Videos

Support materials for teachers and students, including instructions in the effective use of scientific calculators for educational purposes

Software / App


Effective workshop and activities preparation

Education Tools

Education Tools

Science and Technology Education


Data-logger can be used with graphing calculators and is effective for both mathematics education and science and technology education.

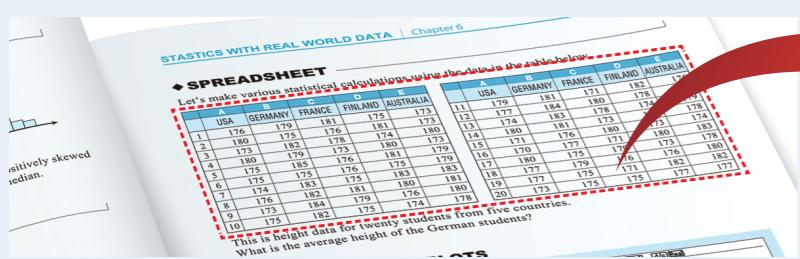
ClassWiz Series –Non-programmable–

CLASSWIZ A New Classroom Standard Created from High-resolution LCD Technology

High-resolution LCD drives further evolution!

Higher resolution increases the amount of information that can be displayed and improves usability. In addition, ClassWiz is equipped with a basic spreadsheet function for creating spreadsheets with up to 5 columns and 45 rows (maximum of 170 data items).

* Spreadsheet function is available only in the fx-570EX, fx-991EX, fx-570AR X, and fx-991AR X



Interface functions ideal for education

Icon display



fx-EX series

English display



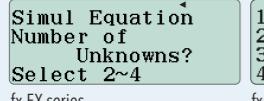
fx-EX series

Arabic and English display



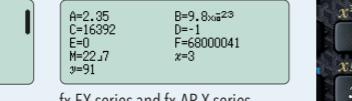
fx-AR X series

Interactive format



fx-EX series

List display



fx-EX series and fx-AR X series

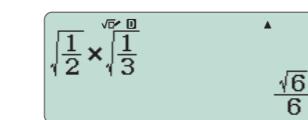
Natural Textbook Display



Input and display fractions, powers, logarithms, roots, and other mathematical formulas and symbols just as they appear in textbooks.

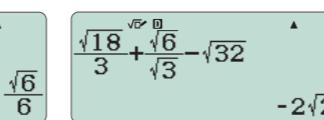
Natural input

Input expressions and arithmetic operations as they appear in written form.



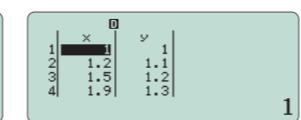
Natural output

Calculation results appear in the same format as they are written.



Full-dot display

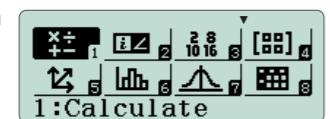
Equations and statistical data are displayed in a clear, easy-to-read format.



Intuitive, easy-to-learn icon display

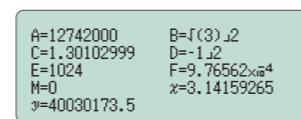
The use of icons on the menu screen improves viewability. Selection of the desired function is quick and easy.

* The photo shows the fx-991EX.



List display function for thorough, speedy learning

Variables and statistical calculation results stored in memory can be displayed in lists. There's no need to recall and confirm individual values as with previous models.



High computational competence for performing even advanced mathematics

fx-991EX fx-570EX fx-991AR X fx-570AR X fx-95AR X

ClassWiz contains calculation functions that support even advanced mathematical operations, including spreadsheet calculations, 4 × 4 matrix calculations, calculation of simultaneous equations with four unknowns and quartic equations, and advanced statistical distribution calculations.

* fx-95AR X equipped with simultaneous equations with 4 unknowns and quartic equations only
* Advanced statistical distribution calculations (fx-991EX, fx-570EX only)

* Functions for which specific models are not indicated are available in all models.

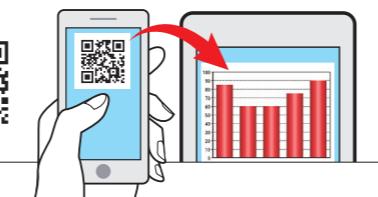
Online Visualization Service Using QR Code

Generate QR Codes of equations input into the calculator by a simple operation. Graphs and other graphics can be displayed on smartphone or tablet screens.

fx-991EX fx-570EX fx-991AR X fx-570AR X

QR Code portal site
<https://wes.casio.com>

* QR Code® is a registered trademark of DENSO WAVE INCORPORATED.



AAA-size (R03) battery



fx-82EX

AAA-size (LR03) battery



fx-350EX

AAA-size (R03) battery



fx-570EX

Solar & Battery



fx-991EX

274
FUNCTIONS

Natural Textbook Display List-based STAT Multi-replay 10+2 DIGITS DOT MATRIX Plastic Keys

Main functions

- Variables list
- Prime factorization
- Random integers
- Coordinate transformation
- Power calculation
- Trigonometry
- UNDO
- Fraction calculations
- Digit separator
- Combination and permutation

552
FUNCTIONS

Natural Textbook Display List-based STAT Multi-replay 10+2 DIGITS DOT MATRIX Plastic Keys

Functions in addition to fx-82EX/fx-350EX functions

- Matrix calculations
- Vector calculations
- Scientific constants
- Metric conversions
- Advanced statistical distribution calculations
- Inequality calculations
- Ratio calculations • QR Code
- Engineering symbol calculations

Arabic language display –fx-AR X Series of Models Specifically for the Arabic-Speaking Region

World's First Standard Scientific Calculator* Supported with Arabic Menu

* A scientific calculator without programming functions

AAA-size (R03) battery



fx-82AR X

AAA-size (R03) battery



fx-95AR X

AAA-size (R03) battery



fx-570AR X

Solar & Battery



fx-991AR X

Main functions

- Variables list
- Prime factorization
- Random integers
- Coordinate transformation
- Power calculation
- Trigonometry
- UNDO
- Fraction calculations
- Digit separator
- Combination and permutation

Functions in addition to fx-82AR X/fx-95AR X functions

- Spreadsheet calculations
- Integration calculations
- Differential calculations
- CALC function
- SOLVE function
- Complex number calculations
- Base-n calculation
- Equation calculations*
- Matrix calculations
- Vector calculations
- Scientific constants
- Metric conversions
- Inequality calculations*
- Ratio calculations*
- QR Code
- Engineering symbol calculations

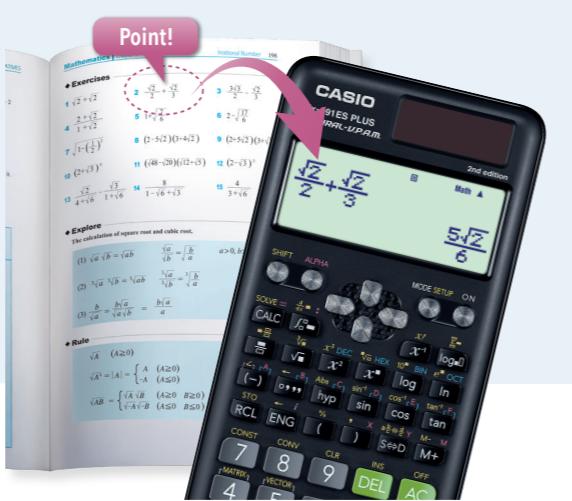
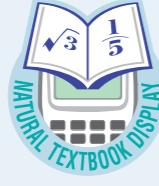
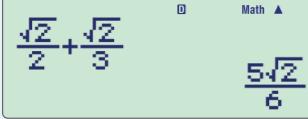
Please visit the website for details. ► <https://edu.casio.com/products/cwiz/>



ES PLUS Series –Non-programmable–

Scientific Calculators with Natural Textbook Display

Natural Textbook Display makes it possible to display fractions, exponents, logarithms, powers, and square roots just as they are written in textbooks.



fx-ES PLUS 2nd edition

AAA-size (R03) battery

NEW

252 FUNCTIONS



Solar & Battery

NEW



LR44 battery

NEW



fx-82ES PLUS-2

Solar & Battery

NEW

417 FUNCTIONS



AAA-size (R03) battery

NEW



Functions in addition to fx-82ES PLUS-2

Main functions

- Integration calculations
- Differential calculations
- Equation calculations
- Vector calculations
- CALC function
- Matrix calculations
- SOLVE function
- Scientific constants
- Metric conversions
- Complex number calculations
- Base-n calculation

417 FUNCTIONS

Natural Textbook Display List-based STAT Multi-replay 10+2 DIGITS DOT MATRIX Plastic Keys

fx-991ES PLUS-2

fx-570ES PLUS-2

* This function is available only with the fx-82ES PLUS-2, fx-85ES PLUS-2, fx-350ES PLUS-2, and fx-95ES PLUS-2.

Please visit the website for details. ► <https://edu.casio.com/products/ntd/>

MS Series –Non-programmable–

The new CASIO MS series is a family of scientific calculators that offer three key advantages useful in educational settings.



fx-MS 2nd edition

AAA-size (R03) battery

240 FUNCTIONS



Solar & Battery

LR44 battery

AAA-size (R03) battery



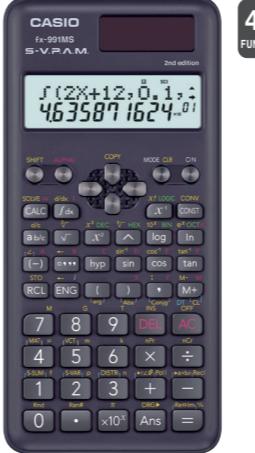
fx-82MS-2

fx-350MS-2

fx-95MS-2

Solar & Battery

401 FUNCTIONS



AAA-size (R03) battery

AAA-size (R03) battery



fx-991MS-2

fx-570MS-2

fx-100MS-2

Main functions

- Fraction calculations
- Combination and permutation
- Statistics (STAT-data editor, Standard deviation, Regression analysis)
- 9 variables

fx-95MS-2 only

- Equation calculations



Main functions

- Fraction calculations
- Combination and permutation
- Statistics (STAT-data editor, Standard deviation, Regression analysis)
- 9 variables
- Equation calculations
- Integration/differential calculations
- Base-n calculations/conversions
- Complex number calculations
- CALC function
- SOLVE function

fx-991MS-2 / fx-570MS-2 only

- Matrix calculations • Vector calculations
- Scientific constants • Metric conversions



Design

Simple and easy to use

Simple design focusing on how the device is held, as well as how easy it is to read and use

Highly visible, easy-to-press cursor keys and function keys



Hard case that's attachable and detachable in any direction for greater ease of use



Quality

Excellent quality and Authenticity Check

CASIO has established three criteria to ensure excellent quality in the MS series.

1. Wear-resistant printing
2. Drop-resistant body
3. Environmentally friendly, RoHS compliant

Web Authenticity Check System

A product can be authenticated by scanning the QR Code and confirming it using the Web Authenticity Check System and examining the hologram.

* The example shown is a simulated QR Code.

* "QR Code" is a registered trademark of DENSO WAVE INCORPORATED.

Function

Packed with essential functions

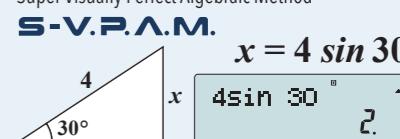
MS series calculators come with scientific calculation, statistical calculation, differential* and integration* functions.

* fx-991MS 2nd edition, fx-570MS 2nd edition, fx-100MS 2nd edition only

Exponent notation is the same as the notation in textbooks.



Super Visually Perfect Algebraic Method



Please visit the website for details. ► <https://edu.casio.com/products/standard/>



GRAPHING MODELS

Graphing calculators with an innovative Color display, 3D Graph and Python.

Learning algorithmic thinking with Python*

The fx-CG50 comes built-in with Python, a programming language used in the development of Internet search engines, social media sites, robots, etc.

Python is attracting attention in the field of education as a learning tool that cultivates algorithmic thinking and has been adopted for use in textbooks.

* Python is a registered trademark of the Python Software Foundation.
Python mode supports a version of MicroPython Version 1.9.4, which has been adapted to run on this calculator. Please note that MicroPython is different from the Python that runs on a computer.

$y = |x| \begin{cases} x \geq 0 \rightarrow |x| = x \\ x < 0 \rightarrow |x| = -x \end{cases}$

By Python

```
equ3.py 001/007
x=int(input("x="))
if x>=0:
    x=x
else:
    x=-x
print("y=",x)
```

Answer

 $x=2 \rightarrow |x|=2$
 $x=-2 \rightarrow |x|=-(-2)=2$

Answer

```
>>>from equ3 import *
x=2
y=2
>>>from equ3 import *
x=-2
y=2
```

FILE RUN SYMBOL CHAR A⇒a ▶

Input programs can be run on a PC.

Connect the fx-CG50 to a PC to run programs written on the calculator on the PC.

Colored text and command search capability support program input.

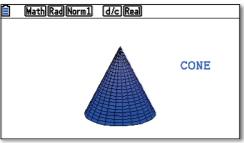
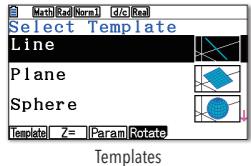
The high-visibility colored text promotes error-free, accurate program input.

Speed up input by using the catalog function to search for commands.

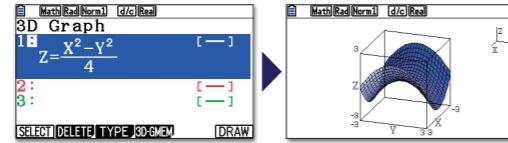
3D Graph increases learning comprehension.

Draw and display 3D graphs. 3D graphs can be drawn in various ways.

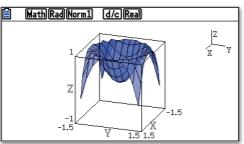
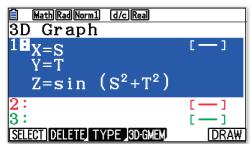
1. Using templates



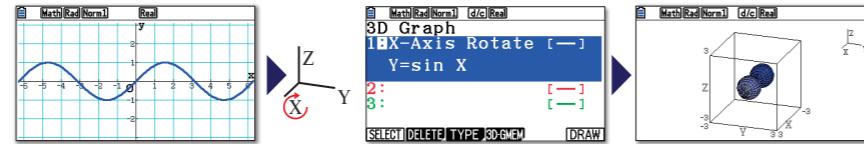
2. Z=graph



3. Parametric graphs

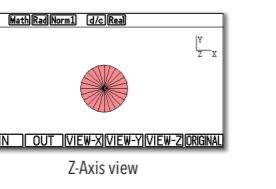
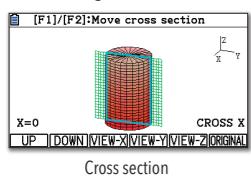


4. Rotating body graphs (around X-Axis)

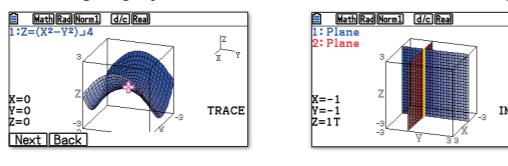


Explore 3D graphs mathematically. These functions are effective in exploring 3D Graphs geometrically.

1. Viewing from various directions

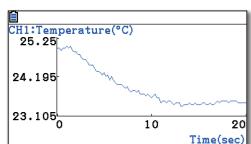


2. Tracing of graphs



E-CON4

This feature, with a simple user interface, is effective for collecting data for use in classroom science and technology lessons.



This feature has Auto-ID recognition, which enables automatic drawing of graphs of collected data with no complicated settings.



Catalog Function

1. Select the desired command easily and quickly using the catalog function.
2. You can access an online manual via smartphone or tablet using a QR Code.

* QR Code® is a registered trademark of DENSO WAVE INCORPORATED.

Examination Mode

This mode allows you to quickly prepare your calculator for exams. This mode restricts access to memory, programs, functions and applications, so that these features would not be available during exams.

Please visit the website for details. ► <https://edu.casio.com/products/graphic/fxcg50/>



Graphing calculators with Natural Textbook Display, spreadsheet and Python.

fx-CG50

AP/SAT/SAT Subject/PSAT/NMSQT/ACT/IB

NEW

fx-9860GIII

175.5mm

83.5mm

* Comes with slide-on hard case

User-friendly Interface

- Large display (128 × 64 dots) • High-resolution LCD • High-speed CPU
- Rectangular coordinate graphing, Polar coordinate graphing
- Parametric function graphing, Inequality graphing
- Table and Graph • Dual graph (table and graph, graph and graph)
- Solve (root, minimum, maximum, intersection, integration)
- Dynamic graph • Conic section graph • Recursion graph
- eActivity • Geometry
- Statistical plot (scatter plot, xyLine, normal probability plot, histogram, box plot)
- Statistical regression graphs (linear, med-med, quadratic, cubic, quartic, logarithmic, exponential, power, sinusoidal, logistic regression)
- Advanced mathematical calculations: tests, intervals, distributions
- Pie chart • Bar graph • Spreadsheet and statistical plot
- Numeric equation solver, Simultaneous equations, Polynomial equations
- Financial functions • Programming • Python • Examination Mode • Catalog Function
- Data communication • Out-of-the-box USB operations
- Direct connection to a projector
- User memory: 62,000 bytes, User storage memory: 3 M bytes



Learning algorithmic thinking with Python*

fx-9860GIII comes built-in with Python, a programming language used in the development of Internet search engines, social media sites, robots, etc.

Python is attracting attention in the field of education as a learning tool that cultivates algorithmic thinking and has been adopted for use in textbooks.

* Python is a registered trademark of the Python Software Foundation.
Python mode supports a version of MicroPython Version 1.9.4, which has been adapted to run on this calculator. Please note that MicroPython is different from the Python that runs on a computer.



POWER GRAPHING

- High-definition display (128×64 dots)
- Inequality Graphing • Polar Graph • X= Graph
- Graph Solve Function (Root, Intersection)
- Sketch (Tangent) • Bar Graph/Pie Chart
- Random Number Function • Quotient, Remainder
- String Functions • Unit Conversion
- Solve Calculations (EQUA mode) • GCD/LCM
- 12 Types of Regression • Complex Calculations
- Catalog Function • Polynomial Function (EQUA mode)
- Simultaneous Functions (EQUA mode)
- Base-n Calculation • Display Language Setting
- Data communication (requires optional 3-pin cable)

Main Functions

- Inequality Graphing • Polar Graph • Graph & Table
- Graph Solve Function • Pie Chart • Bar Graph

fx-7400GIII

AP/SAT/SAT Subject/PSAT/NMSQT/ACT/IB

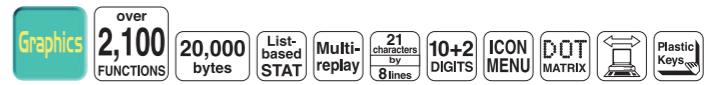
NEW

fx-7400GIII

175.5mm

83.5mm

* Comes with slide-on hard case



Please visit the website for details. ► <https://edu.casio.com/products/graphic/>



fx-CG50, 9860GIII are suitable for AP/SAT/SAT Subject/PSAT/NMSQT/ACT/IB examinations.



CAS GRAPHING MODELS

With CAS Graphing calculators you can use symbolic as well as numerical expressions.
CAS is Computer Algebra System.

Vivid Color Display and Touch Panel for Superb Usability

A top-of-the-line model that effectively supports the learning of functions

Color Display

Touch Panel

Powerful Applications

Pinch in /out
Intuitive pinch-in/pinch-out zoom operation makes it possible to adjust graphs to the desired display size. You can enlarge or reduce graphs without having to learn an additional operation.

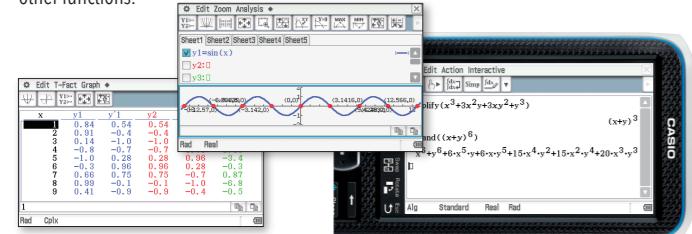
Beautiful 4.8-inch color display
Formulas, graphs, and other graphics are sharp and clear. The display has resolution of 528 x 320 pixels (more than 65,000 colors), 4.4 times higher than ClassPad 330 PLUS.

Pen-touch Operation
Quickly and easily create graphs using drag and drop.



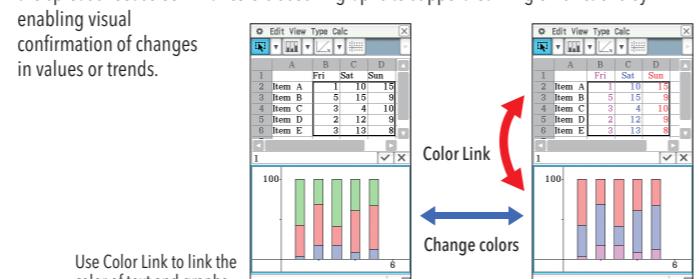
Supports horizontal screen view

Switch the display between an upright screen view and a horizontal screen view by simply touching an icon on the panel. Horizontal screen view is convenient for displaying a long formula on a single line and observing the characteristics of graphs of trigonometric and other functions.



Color Link

The fx-CP400 features the Color Link function, which automatically links colors specified on the spreadsheet screen with colors used in graphs to support learning of functions by enabling visual confirmation of changes in values or trends.



Computer Algebra System (CAS)

The CAS supports everything from Expand, Factor, Solve, and other basic commands to advanced commands like Fourier and Laplace transforms.

Fourier transforms

Laplace transforms

Graphing function

Display formulas and related graphs in the same color and highlight graph characteristics by displaying scale marks, grids, and coordinate values. The vivid color display of the fx-CP400 improves the visibility of graphs and formulas.

Area of inequality shading, grid lines, numbers on axes

jd^x intersection

Spreadsheet application

Collected data can be organized and tabulated for analysis after statistical graphing is complete. Spreadsheet data also can be used in table calculations. In addition, the fx-CP400 supports the following functions: search, sort, data import from and export to lists, matrices, and variables, Cellif, and Histogram/Box-whisker graphing.

Interactive Differential Calculus

Visual, intuitive operation makes it possible to learn the concept of hard-to-understand differentials.

- Learn that the secant line approaches the tangent line by causing Point D of the secant line to approach Point E.
- Learn the concept of differential functions by linking the points that define the slope of a tangent line.

3D Graph application

The 3D Graph application lets you draw rectangular coordinate graphs ($z=f(x, y)$) and parametric function graphs ($xst=f(s, t)$, $yst=f(s, t)$, $zst=f(s, t)$). The large color display facilitates understanding of hard-to-visualize 3D graphs.

E-CON3 Application

E-CON is an application used to operate a data logger, a device used to collect data. E-CON makes it easy to collect data for use in classroom science and technology lessons.



This feature is useful in science experiments.

Exam Mode

This mode enables a calculator to be quickly prepared for exams. It restricts access to memory, programs, functions, and applications so these features are not available during exams.

Please visit the website for details. ►
<https://edu.casio.com/products/cg/>



PROGRAMMABLE MODELS

Versatile programmable calculators for every purpose from high school and university classes to professional applications



**SUPER-FX PLUS
fx-5800P**

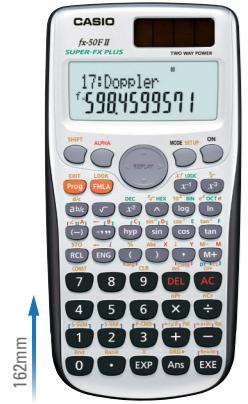
Natural Textbook Display, More Powerful Program Functions, 4-line Display

- Program functions • Matrix calculations
- Differential and integration • Recursions
- Solve function • Complex number calculations
- Base- n calculations
- Data transmission between two fx-5800P calculators
- 26 to 2398 variables • Fraction calculations
- 40 scientific constants • 128 built-in formulas
- Multi-replay function
- Statistics (List-based statistics, Standard deviation, Regression analysis)
- Integrated hard case swings back a full 360 degrees.

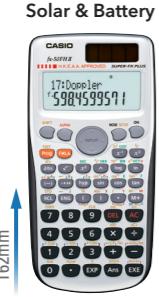
664 FUNCTIONS
28,500 bytes
Natural Textbook Display
List-based STAT
Multi-replay

10+2 DIGITS **DOT MATRIX** **Plastic Keys**

Solar & Battery



fx-50F II

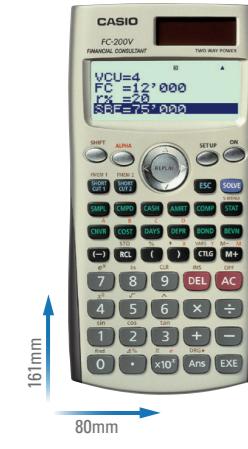


fx-50FH II

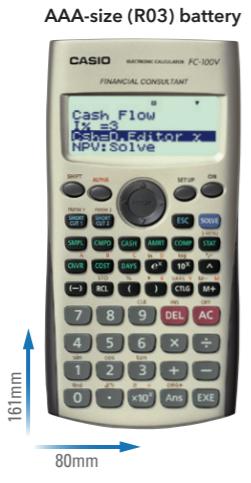
HKEAA approved model

406 FUNCTIONS
680 bytes
STAT-data
Multi-replay
2-LINE BIG DISPLAY
10+2 DIGITS
DOT MATRIX
Plastic Keys

Solar & Battery



**FINANCIAL CONSULTANT
FC-200V**



**FINANCIAL CONSULTANT
FC-100V**

Powerful, original Financial Consultant features take much of the work out of financial calculations!

- Plastic keys
- Comes with new slide-on hard case.
- Power supply:
FC-200V: Solar cell and a single G13 type button battery (LR44)
FC-100V: One AAA-size battery (R03)
- Approximate battery life:
FC-200V: 3 years (1 hour of operation per day)
FC-100V: 17,000 hours continuous display of flashing cursor
- Dimensions:
FC-200V: 12.2 (H) × 80 (W) × 161 (D) mm
FC-100V: 13.7 (H) × 80 (W) × 161 (D) mm
- Approximate weight: FC-200V: 105g; FC-100V: 110g

4-LINE DISPLAY **10+2 DIGITS** **DOT MATRIX** **Plastic Keys**

Please visit the website for details. ► <https://edu.casio.com/products/financial/>

SOFTWARE / APP

Emulator and Manager <Subscription type>

Emulator and Manager are software programs that emulate the operation of scientific calculators, including graphing models.

They enable teachers to prepare teaching materials (activities) and present them in the classroom using a projector (workshops).



NEW fx-ES PLUS Emulator Subscription for fx-ES PLUS Series

• Emulation of fx-82EX / fx-350EX / fx-570EX / fx-991EX / fx-82AR X / fx-95AR X / fx-570AR X / fx-991AR X / fx-82LAX / fx-350LAX / fx-570LAX / fx-991LAX / fx-97SG X / fx-580VN X for Windows

Licensing Options



Online

CARD

Licensing Options

CARD

License expiration period: 1 year

- FA-CW1-W1A (Single License)
- FA-CW1-SB (10 Licenses)
- FA-CW1-SC (30 Licenses)
- FA-CW1-SD (100 Licenses)

License expiration period: 3 years

- FA-CW1-W3A (Single License)
- FA-CW1-SB (10 Licenses)
- FA-CW1-SC (30 Licenses)
- FA-CW1-SD (100 Licenses)

fx-CG Manager PLUS Subscription for fx-CG Series

• fx-CG50 Calculator Emulation for Windows for Mac

Licensing Options



Online

CARD

Licensing Options

CARD

License expiration period: 1 year

- FA-CG1-W1A (Single License)
- FA-CG1-SB (10 Licenses)
- FA-CG1-SC (30 Licenses)
- FA-CG1-SD (100 Licenses)

Licenses expiration period: 3 years

- FA-CG1-W3A (Single License)
- FA-CG1-SB (10 Licenses)
- FA-CG1-SC (30 Licenses)
- FA-CG1-SD (100 Licenses)

ClassPad Manager Subscription for ClassPad II Series

• ClassPad II fx-CP400 Emulation for Windows for Mac

Licensing Options



Online

CARD

Licensing Options

CARD

License expiration period: 1 year

- FA-CP400-W1A (Single License)
- FA-CP400-SB (10 Licenses)
- FA-CP400-SC (30 Licenses)
- FA-CP400-SD (100 Licenses)

License expiration period: 1 year

- FA-CP400-W3A (Single License)
- FA-CP400-W1B (10 Licenses)
- FA-CP400-W3B (10 Licenses)
- FA-CP400-W1C (30 Licenses)
- FA-CP400-W3C (30 Licenses)
- FA-CP400-W1D (100 Licenses)

License expiration period: 3 years

- FA-CP40053A (Single License)

License expiration period: 3 years

- FA-CP400-W3A (Single License)
- FA-CP400-W1B (10 Licenses)
- FA-CP400-W3B (10 Licenses)
- FA-CP400-W1C (30 Licenses)
- FA-CP400-W3C (30 Licenses)
- FA-CP400-W1D (100 Licenses)

Note: The above information applies to the use of a single account by a single user.
If you would like to allow multiple users to use a single account, check the Network License information on the education website.

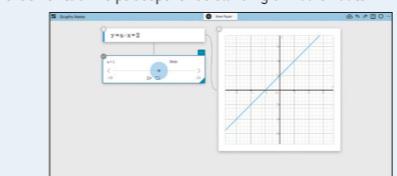
ClassPad.net The Web version can be used free of charge.

New Educational Math App

CASIO ClassPad.net enables you to create various mathematic contents with intuitive and simple operation – and share your contents with others around the world!

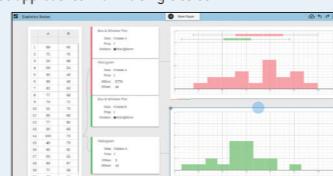
Graphing Functions

ClassPad.net offers mathematical functions required for education, and various graphing capability. The simultaneous display of graphs and a slider function helps deeper understanding of mathematics.



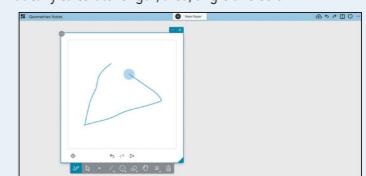
Statistics and Analytics

Spreadsheet can be used in combination with a graphing function to draw statistical graphs. It allows you to analyze statistical data using various approaches within a single screen.



Geometry Functions

You can create freehand graphics using the Geometry functions including the ability to freely alter the shape of graphics and automatically calculate length, area, angle and so on.



Please visit the website for details. ► <https://classpad.net/>



Please visit the website for details. ► <https://edu.casio.com/products/classroom/>



SCHOOL & LAB. Specifications

Category		ClassWiz Series								ES PLUS Series					
Model		fx-82EX	fx-350EX	fx-570EX	fx-991EX	fx-82AR X	fx-95AR X	fx-570AR X	fx-991AR X	fx-82ES PLUS-2	fx-85ES PLUS-2	fx-350ES PLUS-2	fx-95ES PLUS-2	fx-570ES PLUS-2	fx-991ES PLUS-2
Specifications	Number of functions	274	274	552	552	275	304	542	542	252	252	252	274	417	417
	Power supply (Main)	AAA × 1 (R03)	AAA × 1 (LR03)	AAA × 1 (R03)	Solar + Battery (Solar + LR44 × 1)	AAA × 1 (R03)	AAA × 1 (R03)	AAA × 1 (R03)	Solar + Battery (Solar + LR44 × 1)	AAA × 1 (R03)	Solar & Battery (Solar + LR44 × 1)	LR44 × 1	AAA × 1 (R03)	AAA × 1 (R03)	Solar & Battery (Solar + LR44 × 1)
	Approximate battery life Main (hours)	2 years* ¹	1 year* ¹	2 years* ¹	2 years (LR44)* ¹	2 years* ¹	2 years* ¹	2 years* ¹	2 years (LR44)* ¹	2 years* ¹	3 years* ¹	3 years* ¹	2 years* ¹	2 years* ¹	3 years* ¹
	Dimensions H×W×D (mm)	13.8 × 77 × 165.5	13.8 × 77 × 165.5	13.8 × 77 × 165.5	11.1 × 77 × 165.5	13.8 × 77 × 165.5	13.8 × 77 × 165.5	13.8 × 77 × 165.5	11.1 × 77 × 165.5	13.8 × 77 × 161.5	11.1 × 77 × 161.5	11.1 × 77 × 161.5	13.8 × 77 × 161.5	13.8 × 77 × 161.5	11.1 × 77 × 161.5
	Approximate weight(g)	100	100	100	90	100	100	100	90	105	95	95	105	105	95
	Case style	Slide-on hard	Slide-on hard	Slide-on hard	Slide-on hard	Slide-on hard	Slide-on hard	Slide-on hard	Slide-on hard	Slide-on hard	Slide-on hard	Slide-on hard	Slide-on hard	Slide-on hard	Slide-on hard
	Display	63 × 192 dots	63 × 192 dots	63 × 192 dots	63 × 192 dots	63 × 192 dots	63 × 192 dots	63 × 192 dots	63 × 192 dots	31 × 96 dots	31 × 96 dots	31 × 96 dots	31 × 96 dots	31 × 96 dots	31 × 96 dots
	Display capacity (characters)	17 / 32	17 / 32	17 / 32	17 / 32	17 / 32	17 / 32	17 / 32	17 / 32	16	16	16	16	16	16
	Mantissa + exponent digits	10 + 2	10 + 2	10 + 2	10 + 2	10 + 2	10 + 2	10 + 2	10 + 2	10 + 2	10 + 2	10 + 2	10 + 2	10 + 2	10 + 2
	Icon menus	●	●	●	●	●	●	●	●	—	—	—	—	—	—
Programming Functions	Internal operation digits	15	15	15	15	15	15	15	15	15	15	15	15	15	15
	Nested parentheses levels	24	24	24	24	24	24	24	24	24	24	24	24	24	24
	Program logic	—	—	—	—	—	—	—	—	—	—	—	—	—	—
	Memory (bytes)	(Non programmable)	(Non programmable)	(Non programmable)	(Non programmable)	(Non programmable)	(Non programmable)	(Non programmable)	(Non programmable)	(Non programmable)	(Non programmable)	(Non programmable)	(Non programmable)	(Non programmable)	(Non programmable)
	Program areas	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Utilities	Storage memory area (Flash memory)	—	—	—	—	—	—	—	—	—	—	—	—	—	—
	Built-in formulas	—	—	—	—	—	—	—	—	—	—	—	—	—	—
	Natural Textbook Display	●	●	●	●	●	●	●	●	●	●	●	●	●	●
	Key rollover function	●	●	●	●	●	●	●	●	●	●	●	●	●	●
	Replay function	●	●	●	●	●	●	●	●	●	●	●	●	●	●
	Multi-replay functions	●	●	●	●	●	●	●	●	●	●	●	●	●	●
	Backspace	●	●	●	●	●	●	●	●	●	●	●	●	●	●
	CALC function	—	—	—	●	—	—	●	—	—	—	—	—	●	—
	SOLVE function	—	—	—	●	—	—	●	—	—	—	—	—	●	—
	Answer function	●	●	●	●	●	●	●	●	●	●	●	●	●	●
Special Features	Variables	9	9	9	9	9	9	9	9	9	9	9	9	9	9
	Auto power off	●	●	●	●	●	●	●	●	●	●	●	●	●	●
	Base-n calculations (Binary/Octal/Hexadecimal)	—	—	●	●	—	—	●	—	—	—	—	●	●	●
	Logical operations	—	—	●	●	—	—	●	—	—	—	—	●	●	—
	Engineering symbol calculations	—	—	—	●	—	—	●	—	—	—	—	—	—	—
Basic Functions	Engineering notation (ENG/ENGLISH)	●	●	●	●	●	●	●	●	●	●	●	●	●	●
	Scientific constants	—	—	—	47	47	—	—	47	47	—	—	—	40	40
	Metric conversions	—	—	—	40	40	—	—	40	40	—	—	—	40	40
	Trigonometric, inverse trigonometric (sin/cos/tan/sin ⁻¹ /cos ⁻¹ /tan ⁻¹)	●	●	●	●	●	●	●	●	●	●	●	●	●	●
	Hyperbolic, inverse hyperbolic (sinh/cosh/tanh/sinh ⁻¹ /cosh ⁻¹ /tanh ⁻¹)	●	●	●	●	●	●	●	●	●	●	●	●	●	●
	Exponential, logarithmic (log, ln, 10 ^x , e ^x)	●	●	●	●	●	●	●	●	●	●	●	●	●	●
	Base specified logarithmic	●	●	●	●	●	●	●	●	●	●	●	●	●	●
	Power and radical root (x ^y /x ^{1/y})	●	●	●	●	●	●	●	●	●	●	●	●	●	●
	Fraction	●	●	●	●	●	●	●	●	●	●	●	●	●	●
	Percentage calculation (%)	●	●	●	●	●	●	●	●	●	●	●	●	●	●
Calculus	Rounding	●	●	●	●	●	●	●	●	●	●	●	●	●	●
	Sexagesimal ↔ decimal	●	●	●	●	●	●	●	●	●	●	●	●	●	●
	Display format (FIX, SCI)	●	●	●	●	●	●	●	●	●	●	●	●	●	●
Algebra	Angle unit (Deg, Rad, Grad)	●	●	●	●	●	●	●	●	●	●	●	●	●	●
	Angle unit conversion (Deg, Rad, Grad)	●	●	●	●	●	●	●	●	●	●	●	●	●	●
	Factorization into prime factors	●	●	●	●	●	●	●	●	●	●	●	●	—	—
	Ratio calculation	—	—	—	—	—	—	—	—	—	—	—	—	—	—
	Differential calculation	—	—	—	—	—	—	—	—	—	—	—	●	●	●
Geometry	Integration calculation	—	—	—	—	—	—	—	—	—	—	—	—	●	●
	Simultaneous equation	—	—	● (4 unknowns)	● (4 unknowns)	—	● (4 unknowns)	● (4 unknowns)	● (4 unknowns)	—	—	—	● (3 unknowns)	● (3 unknowns)	● (3 unknowns)
	Polynomial equation	—	—	● (Degree 2, 3, 4)	● (Degree 2, 3, 4)	—	● (Degree 2, 3, 4)	● (Degree 2, 3, 4)	● (Degree 2, 3, 4)	—	—	—	● (Degree 2, 3)	● (Degree 2, 3)	● (Degree 2, 3)
	Inequality calculation	—	—	●	●	—	●	●	●	—	—	—	●	—	—
	Table function	●	●	●	●	●	●	●	●	●	●	●	●	●	●
Probability	Matrix calculations	—	—	●	●	—	—	●	●	—	—	—	—	●	●
	Complex number calculation	—	—	●	●	—	—	●	●	—	—	—	—	●	●
	Coordinate conversion (Pol, Rec)	●	●	●	●	●									

SCHOOL & LAB. Specifications

Category	MS Series							Graphing Models				Programmable Models			
	Model	fx-82MS-2	fx-85MS-2	fx-350MS-2	fx-95MS-2	fx-991MS-2	fx-570MS-2	fx-100MS-2	fx-CG50	fx-9860GIII	fx-7400GIII	ClassPad II fx-CP400	fx-5800P	fx-50F II fx-50FH II	fx-3650P II
Specifications	Number of functions	240	240	240	244	401	401	300	(Over 2,900)* ²	(Over 2,900)* ²	(Over 2,100)	—	664	406	308
	Power supply (Main)	AAA × 1 (R03)	Solar & Battery (Solar + LR44 × 1)	LR44 × 1	AAA × 1 (R03)	Solar & Battery (Solar + LR44 × 1)	AAA × 1 (R03)	AAA × 1 (R03)	AAA × 4 (Rechargeable battery support)	AAA × 4	AAA × 4 (Rechargeable battery support)	AAA × 4 (Rechargeable battery support)	AAA × 1 (LR03)	Solar & Battery (Solar + LR44 × 1)	Solar & Battery (Solar + LR44 × 1)
	Approximate battery life Main (hours)	2 years* ¹	3 years (LR44)* ¹	3 years* ¹	2 years* ¹	3 years (LR44)* ¹	2 years* ¹	2 years* ¹	170 (LR03)* ³ 100 (Rechargeable battery)* ³	230 (LR03)* ⁴	230 (LR03)* ⁴	100 (LR03)* ⁴ 60 (Rechargeable battery)* ⁴	1 year* ¹	3 years (LR44)* ¹	3 years (LR44)* ¹
	Dimensions H×W×D (mm)	13.8 × 77 × 161.5	11.1 × 77 × 161.5	11.1 × 77 × 161.5	13.8 × 77 × 161.5	11.1 × 77 × 161.5	13.8 × 77 × 161.5	13.8 × 77 × 161.5	18.6 × 89 × 188.5	18.7 × 83.5 × 175.5	18.7 × 83.5 × 175.5	21.1 × 89 × 206	15.1 × 81.5 × 163	11.1 × 80 × 162	11.1 × 80 × 162
	Approximate weight (g)	105	95	95	105	95	105	105	230	190	190	315	150	95	95
	Case style	Slide-on hard	Slide-on hard	Slide-on hard	Slide-on hard	Slide-on hard	Slide-on hard	Slide-on hard	Slide-on hard	Slide-on hard	Slide-on hard	Slide-on hard	Integrated hard	Slide-on hard	Slide-on hard
	Display	12 characters and 10 + 2 digits	12 characters and 10 + 2 digits	12 characters and 10 + 2 digits	12 characters and 10 + 2 digits	12 characters and 10 + 2 digits	12 characters and 10 + 2 digits	12 characters and 10 + 2 digits	216 × 384 dots/color	64 × 128 dots/monochrome	64 × 128 dots/monochrome	528 × 320 dots/color	31 × 96 dots	5 × 7 dots × 16 digits	5 × 7 dots × 16 digits
	Display capacity (characters)	12	12	12	12	12	12	12	21 × 8	21 × 8	25 × 15	16	16	16	16
	Mantissa + exponent digits	10 + 2	10 + 2	10 + 2	10 + 2	10 + 2	10 + 2	10 + 2	10 + 2	10 + 2	10 + 3	10 + 2	10 + 2	10 + 2	10 + 2
Programming Functions	Icon menus	—	—	—	—	—	—	●	●	●	●	—	—	—	—
	Internal operation digits	15	15	15	15	15	15	15	15	15	15	15	15	15	15
	Nested parentheses levels	24	24	24	24	24	24	24	26	26	Up to memory	26	24	24	24
	Program logic	—	—	—	—	—	—	● (BASIC-like)	● (BASIC-like)	● (BASIC-like)	● (BASIC-like)	● (BASIC-like)	● (BASIC-like)	● (BASIC-like)	● (BASIC-like)
	Memory (bytes)	—	—	—	—	—	—	—	61,000	62,000	20,000	515,000	28,500	680	390
	Program areas	—	(Non programmable)	(Non programmable)	(Non programmable)	(Non programmable)	(Non programmable)	(Non programmable)	Up to memory	Up to memory	Up to memory	Up to memory	Up to memory	4	4
	Storage memory area (Flash memory)	—	(Non programmable)	(Non programmable)	(Non programmable)	(Non programmable)	(Non programmable)	(Non programmable)	16MB	3MB	—	5.5MB Flash ROM for eActivity, 24MB USB Flash Drive	—	—	—
Utilities	Built-in formulas	—	—	—	—	—	—	—	—	—	—	128	23	—	—
	Python	—	—	—	—	—	—	●	●	—	—	—	—	—	—
	Natural Textbook Display	—	—	—	—	—	—	—	●	—	●	●	●	—	—
	Key rollover function	●	●	●	●	●	●	●	●	●	●	●	●	●	●
	Replay function	●	●	●	●	●	●	●	●	●	●	●	●	●	●
	Multi-replay functions	●	●	●	●	●	●	●	●	●	●	●	●	●	●
	Replay copy	—	—	—	—	—	—	●	—	—	—	—	—	—	—
Special Features	Backspace	●	●	●	●	●	●	●	●	●	●	●	●	●	●
	CALC function	—	—	—	—	—	—	●	—	—	—	—	—	—	—
	SOLVE function	—	—	—	—	—	—	●	●	●	●	●	●	—	—
	Answer function	●	●	●	●	●	●	●	●	●	●	●	●	●	●
	Variables	9	9	9	9	9	9	9	28	28	28	Up to memory	26 – 2398	7	7
	Auto power off	●	●	●	●	●	●	●	●	●	●	●	●	●	●
	Base-n calculations (Binary/Octal/Hexadecimal)	—	—	—	—	●	●	●	●	●	●	●	●	●	●
Basic Functions	Logical operations	—	—	—	—	●	●	●	●	●	●	●	●	●	●
	Engineering symbol calculations	—	—	—	—	●	●	●	●	●	●	●	●	—	—
	Engineering notation (ENG/ENGLISH)	●	●	●	●	●	●	●	●	●	●	●	●	●	●
	Scientific constants	—	—	—	—	—	—	—	—	—	—	—	40	40	—
	Metric conversions	—	—	—	—	—	—	●	●	●	●	●	—	—	—
	Computer Algebra System	—	—	—	—	—	—	—	—	—	●	—	—	—	—
	Trigonometric, inverse trigonometric (sin/cos/tan/sin ⁻¹ /cos ⁻¹ /tan ⁻¹)	●	●	●	●	●	●	●	●	●	●	●	●	●	●
Basic Functions	Hyperbolic, inverse hyperbolic (sinh/cosh/tanh/sinh ⁻¹ /cosh ⁻¹ /tanh ⁻¹)	●	●	●	●	●	●	●	●	●	●	●	●	●	●
	Exponential, logarithmic (log, ln, 10 ^x , e ^x)	●	●	●	●	●	●	●	●	●	●	●	●	●	●
	Base specified logarithmic	—	—	—	—	—	—	—	●	●	●	●	●	●	●
	Power and radical root (x ^y / \sqrt{x})	●	●	●	●	●	●	●	●	●	●	●	●	●	●
	Fraction	●	●	●	●	●	●	●	●	●	●	●	●	●	●
	Percentage calculation (%)	●	●	●	●	●	●	●	—	—	●	●	●	●	●
	Rounding	●	●	●	●	●	●	●	●	●	●	●	●	●	●
Calculus	Simplification	—	—	—	—	—	—	—	—	—	—	—	—	—	—
	Integer division	—	—	—	—	—	—	—	—	—	—	—	—	—	—
	GCD/LCM	—	—	—	—	—	—	—	—	—	—	—	—	—	—
	Sexagesimal ↔ decimal	●	●	●	●	●	●	●	●	●	●	●	●	●	●
	Display format (FIX, SCI)	●	●	●	●	●	●	●	●	●	●	●	●	●	●
	Angle unit (Deg, Rad, Grad)	●	●	●	●	●	●	●	●	●	●	●	●	●	●
	Angle unit conversion (Deg, Rad, Grad)	●	●	●	●	●	●	●	●	●	●	●	●	●	●
Algebra	Factorization into prime factors	—	—	—	—	—	—	—	—	—	—	—	—	—	—
	Differential calculation	—	—	—	—	—	—	—	●	●	●	●	●	●	●
	Integration calculation	—	—	—	—	—	—	●	●	●	●	●	●	●	●
	Simultaneous equation	—	—	● (3 unknowns)											