

NEW SPECIAL fx

THE CASIO fx-8200 AU



NESA
APPROVED

BOOKLIST FOR BACK TO SCHOOL 2025

CASIO
EDUCATION

THE NEW CASIO fx-8200 AU

Retaining all the great features of the fx-82AU PLUS II and fx-100AU PLUS 2nd edition, the fx-8200 AU brings a significant increase in functionality and user experience, bringing Australia's leading scientific calculator into the 21st century.

While the much-loved fx-82AU PLUS II 2nd edition continues to be a staple of Australian mathematics technology, Casio has worked with Australian teachers to evolve and design a tool that better suits the needs of scientific calculator users in Australia.



ALL SUMMARY STATISTICS
AND REGRESSION INFORMATION
IN LESS KEY PRESSES AND
DISPLAYED ALL AT ONCE

Calculate the summary statistics for the data set: 4, 4, 4, 5, 5, 5, 5, 7, 9, 15, 25, 50.

1	x	Freq	3
4	4	4	1
5	5	4	1
7	7	1	1
9	9	1	1
15	15	1	1
25	25	1	1
50	50	1	1

Determine the least squares regression line for:

x	1	2	3	4	5
y	4.1	4.9	5.8	7.1	8.2

1	x	y	7.1
4	4	4.1	1
5	5	4.9	1
7	7	5.8	1
9	9	7.1	1
15	15	8.2	1



THERE HAVE ALWAYS BEEN
DECIMAL APPROXIMATIONS
BUT NOW... EXACT VALUE
OUTPUT AS WELL

What is the length of the hypotenuse of a right-angled triangle with perpendicular sides of length 4 cm and 8 cm?

$\sqrt{4^2+8^2}$	shift key, then	$\sqrt{4^2+8^2}$
4.5		8.94427191

What is the area of an equilateral triangle with side length 1.25 cm?

$\frac{1}{2} \times 1.25^2 \times \sin(60)$
$\frac{25\sqrt{3}}{64}$

Solve $\cos(3x) = \frac{\sqrt{3}}{2}$ for $0 \leq x \leq \pi$.

$\cos^{-1}\left(\frac{\sqrt{3}}{2}\right)$	Ans $\div 3$	Ans $+\frac{2\pi}{3}$
$\frac{1}{6}\pi$	$\frac{1}{18}\pi$	$\frac{13}{18}\pi$
$-\frac{\pi}{18} + \frac{2\pi}{3}$		$\frac{11}{18}\pi$



PROBABILITY CALCULATIONS
WITH EASE

If $X \sim N(30, 5^2)$, then $P(X > 33.2) = ?$

Normal CD	P=
Lower: 33.2	0.2610862937
Upper: 1×10^{-99}	
μ : 30	

What is the height of the shortest person in the top 10% of the height (H) distribution $H \sim N(161.8, 5.6^2)$?

Inverse Normal	xInv=
Area: 0.9	168.9766892
μ : 161.8	
σ : 5.6	

Let X be the number of 6s that result when a fair die is rolled 100 times. What is the most likely value of X ?

Binomial PD	Binomial PD	Binomial PD
Binomial CD	N: 100	P: 0.1666
Normal PD	P: 0.1666	
Normal CD	Execute	16



INVESTIGATE FUNCTIONS
BY TABULATING VALUES
OF $f(x)$ & $g(x)$

How is the function $g(x) = (x-2)^2$ different from $f(x) = x^2$?

$f(x) = x^2$	$g(x) = (x-2)^2$	Table
		16

Solve $50 + 50 \times 0.05x = 50 \times \left(1 + \frac{0.04}{12}\right)^{12x}$

$f(x) = 50 + 50 \times 0.05x$	$g(x) = 50 \left(1 + \frac{0.04}{12}\right)^{12x}$
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Table	Table
11	10.9





THINK ABOUT DIFFERENT FORMS OF A NUMBER USING



How does $\frac{22}{7}$ compare to π ?

$\frac{22}{7}$	Decimal Recurring Decimal Improper Fraction Mixed Fraction	$\frac{22}{7}$	$3\frac{1}{7}$
$\frac{22}{7}$	shift key, then	$\frac{22}{7}$	3.142857143
$\frac{22}{7}$	Standard Decimal Recurring Decimal Improper Fraction	$\frac{22}{7}$	3.142857
π	Standard Decimal Prime Factor ENG Notation	π	3.141592654

What number has the decimal form $0.\overline{252}$?
What about $0.\overline{123}$?
What is going on here?

$0.\overline{252}$	$\frac{28}{111}$
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Which has more factors, 2700 or 66825?

2700	Standard Decimal Prime Factor ENG Notation	2700	$2^2 \times 3^3 \times 5^2$
66825			$3^5 \times 5^2 \times 11$

THE CASIO fx-8200 AU WILL TAKE ALL YOUR STUDENTS FROM YEAR 7 TO 12* AND BEYOND

Calculations required in examinations, displayed as you have come to expect.

$\frac{51n(\frac{3}{7})}{21n(1.5)}$	$\frac{12}{\pi} \cos^{-1}(\frac{1}{\sqrt{2} - \frac{\pi}{16}})$
5.224234117	3.952381179
$800 \times (\frac{1-1.005^{94}}{1-1.005})$	
95699.4464	

Think about how the GCD and LCM are related.

GCD(6, 8) × LCM(6, 8)	48
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Investigate interesting summations.

$\frac{1}{d} + \frac{1}{d^2} + \frac{1}{d^3} + \frac{1}{d^4} + \dots + \frac{1}{d^n} = \sum_{x=1}^n \frac{1}{d^x} = ?$	$\sum_{x=1}^{10} (\frac{1}{4^x})$	$\sum_{x=1}^{10} (\frac{1}{5^x})$
	0.3333330154	0.2499999744

*Except in instances where a graphing or CAS calculator is required.

Continued on next page.



Investigate interesting products.

$$\frac{7}{9} \times \frac{26}{28} \times \frac{63}{65} \times \frac{124}{126} \times \dots \times \frac{x^n - 1}{x^n + 1} = \prod_{x=2}^n \frac{x^3 - 1}{x^3 + 1} = ?$$

$\prod_{x=2}^5 (\frac{x^3-1}{x^3+1})$	$\prod_{x=2}^{10} (\frac{x^3-1}{x^3+1})$	$\prod_{x=2}^{50} (\frac{x^3-1}{x^3+1})$
0.6888888889	0.6727272727	0.6669281046

Vector calculations.

VctA × VctB	VctAns = $\begin{pmatrix} 8 \\ -3 \end{pmatrix}$	-7
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Complex number calculations.

Arg(1 + $\sqrt{3}i$)	$-4 + 4i$
$\frac{1}{3}\pi$	$4\sqrt{2} \angle \frac{3}{4}\pi$

fx-8200 AU AT A GLANCE

Six powerful applications

Press to show all the applications

Go back one screen

See the value of all variables on one screen

Define a function for tabulation

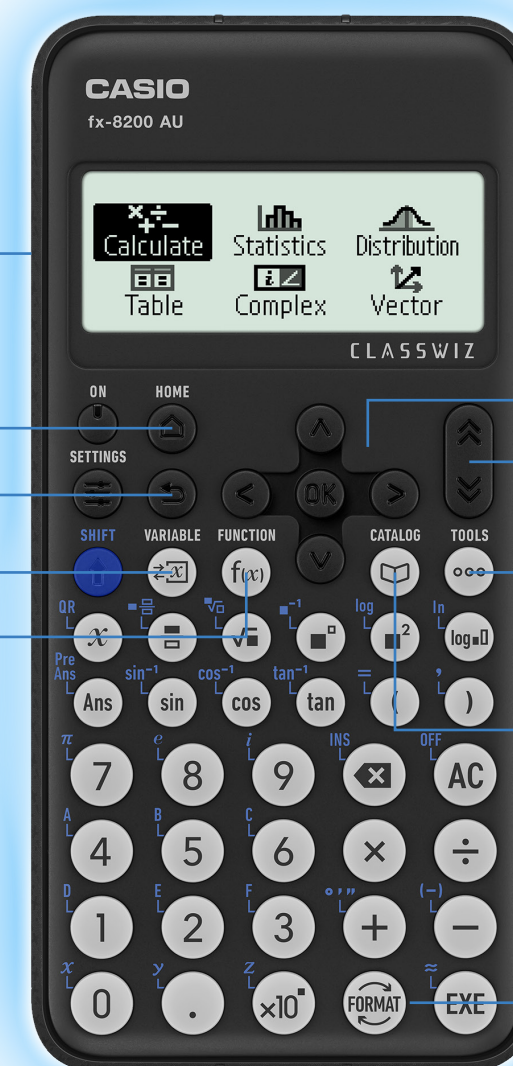
Cursor Keys

Page scroll keys

Application specific settings

Sensibly organised and easily accessible functions

Change the format in which a number is displayed



fx-100AU PLUS 2ND EDITION VS fx-8200 AU

The fx-100AU PLUS 2nd edition has been discontinued. If you currently use the fx-100AU, support is available to you and your colleagues and students as you transition to the fx-8200 AU scientific calculator. There are a few new features alongside familiar favourites from the fx-100AU PLUS available on the fx-8200 AU:

NEW: SIMPLE STATISTICS

Show summary statistics all together on one screen, without needing to calculate each one separately.

NEW: TABLE OF VALUES

Investigate functions by tabulating values of $f(x)$ and $g(x)$.

NEW: EXACT VALUES

Display answers in exact value format, as well as decimal approximation. Easily switch between forms of your answer with the press of the 'Format' button.

UPDATED: DISTRIBUTION

Compared to the fx-100AU which had limited probability calculations, you can now calculate normal and binomial probabilities, with ease

SAME AS THE fx-100AU PLUS: ADVANCED CALCULATIONS

- Complex numbers
- Prime Factorisation, GCD & LCM
- Vectors
- Summation of a series
- Product of a series



HOW TO VIDEOS FOR THE fx-8200 AU

Our range of video tutorials will help you and your students get up and running. Scan to watch.



HOW DOES THE CASIO fx-8200 AU COMPARE?

Feature	fx-8200 AU	fx-82AU PLUS II 2nd edition	fx-100AU PLUS 2nd edition
Available as of 2025	Yes	Yes	Discontinued
All the expected basic calculator functionality	✓	✓	✓
Natural (textbook) display	✓	✓	✓
Prime factorisation, GCD & LCM	✓	✓	✓
Verify	✓	✓	✓
Vector calculations	✓	✗	✓
Complex number calculations	✓	✗	✓
Exact value output	✓	✗	✗
Probability calculations	✓ (Normal, binomial and more user friendly)	✗	✓ (Limited)
Vastly improved statistics interface	✓	✗	✗
Tabulate	✓	✗	✗
Logarithms of any numerical base (as well as 10 and e)	✓	✗	✗
New and unambiguous way to convert between forms of numbers	✓	✗	✗
Recurring decimals, output and calculations	✓	✗	✗
Summation and product of series	✓	✗	✗
Modern user interface, paving the way for future improvements	✓	✗	✗
Easy-to-use web-based emulator	✓	✗	✗

Get more than just a calculator when you booklist or purchase fx-8200 AU.



NEW web-based emulator software, free to Casio schools coming soon



NEW complimentary calculators for your faculty



NEW resources and classroom activities coming soon



NEW how-to manual coming soon

Make sure your Prime Schools Plus account is up to date in 2023 to qualify for free fx-8200 AU calculators for your faculty. Not a member? Register here: www.casioeducation.com.au/join



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for Australian Students**

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