		Standard Models											
		fx-82ES PLUS	fx-85ES PLUS	fx-350ES PLUS	fx-95ES PLUS	fx-570ES PLUS	fx-991ES PLUS	fx-82ES	fx-85ES	fx-350ES	fx-500ES	fx-991ES	fx-570ES
Specifications	Number of functions	252	252	252	274	417	417	249	249	249	253	403	403
	Power supply (Main)	AAA × 1 (R03)	Two-way power (Solar + LR44 × 1)	AAA × 1 (LR03)	AAA × 1(R03)	AAA × 1 (R03)	Two-way power (Solar + LR44 × 1)	AAA × 1 (R03)	Two-way power (Solar + LR44 × 1)	AAA × 1 (LR03)	AAA × 1 (R03)	Two-way power (Solar + LR44 × 1)	AAA × 1 (R03)
	Power supply (Backup)	—		—	—	—		—		—	—		—
	Approximate battery life Main (hours)	17,000*3	3 years (LR44)*2	8,700*1	17,000*3	17,000*3	3 years (LR44)*2	17,000*3	3 years (LR44)*2	8,700*1	17,000*3	3 years (LR44)*2	17,000*3
	Approximate battery life Backup (years)	—		—	—	—		—		—	—		—
	Dimensions H×W×D(mm)	13.8 × 80 × 162	11.1 × 80 × 162	13.8 × 80 × 162	13.8 × 80 × 162	13.8 × 80 × 162	11.1 × 80 × 162	13.7 × 80 × 161	12.2 × 80 × 161	13.7 × 80 × 161	13.7 × 80 × 161	12.2 × 80 × 161	13.7 × 80 × 161
	Approximate weight (g)	100	95	100	100	100	95	110	105	110	110	105	110
	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
	Dot matrix display	31 × 96 dots	31 × 96 dots	31 × 96 dots	31 × 96 dots	31 × 96 dots	31 × 96 dots	31 × 96 dots	31 × 96 dots	31 × 96 dots	31 × 96 dots	31 × 96 dots	31 × 96 dots
	Display capacity (characters)	15	15	15	15	15	15	15	15	15	15	15	15
	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
	Icon menus	—	—	—	—	—	—	—	—	—	—	—	—
	Internal operation digits	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
Programming Functions	Program logic	—	—	—	—	—	—	—	—	—	—	—	—
	Memory (bytes)	—	—	—	—	—	—	—	—	—	—	—	—
	Program areas	—	—	—	—	—	—	—	—	—	—	—	—
	Storage memory area (Flash memory)	—	—	—	—	—	—	—	—	—	—	—	—
	Built-in formulas	—	—	—	—	—	—	—	—	—	—	—	—
Utilities	Natural textbook display / NATURAL-V.P.A.M.	●	●	●	●	●	●	●	●	●	●	●	●
	Key rollover function	●	●	●	●	●	●	●	●	●	●	●	●
	Replay function	●	●	●	●	●	●	●	●	●	●	●	●
	Multi-replay functions	●	●	●	●	●	●	●	●	●	●	●	●
	Replay copy	—	—	—	—	—	—	—	—	—	—	—	—
	Backspace	●	●	●	●	●	●	●	●	●	●	●	●
	CALC function	—	—	—	—	●	●	—	—	—	—	●	●
	SOLVE function	—	—	—	—	●	●	—	—	—	—	●	●
	Answer function	●	●	●	●	●	●	●	●	●	●	●	●
	Variables	●	●	●	●	●	●	●	●	●	●	●	●
	Onboard function manual	—	—	—	—	—	—	—	—	—	—	—	—
	Syntax help	—	—	—	—	—	—	—	—	—	—	—	—
	Auto power off	●	●	●	●	●	●	●	●	●	●	●	●
Special Features	Base-n calculations (Binary/Octal/Hexadecimal)	—	—	—	—			—	—	—	—	●	●
	Logical operations	—	—	—	—			—	—	—	—	●	●
	Engineering symbol calculations	—	—	—	—			—	—	—	—		
	Engineering notation (ENG/ENG)	●	●	●	●	●	●	●	●	●	●	●	●
	Scientific constants	—	—	—	—	40	40	—	—	—	—	40	40
	Metric conversions	—	—	—	—	40	40	—	—	—	—	40	40
CAS	Computer Algebra System	—	—	—	—	—	—	—	—	—	—	—	—
Basic Functions	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 ($x^y/x\sqrt{\ }$)	●	●	●	●	●	●	●	●	●	●	●	●
	Fraction	●	●	●	●	●	●	●	●	●	●	●	●
	Percentage calculation (%)	●	●	●	●	●	●	●	●	●	●	●	●
	Rounding	●	●	●	●	●	●	●	●	●	●	●	●
	Simplification	—	—	—	—	—	—	—	—	—	—	—	—
	Integer division	—	—	—	—	—	—	—	—	—	—	—	—
	GCD/LCM	—	—	—	—	—	—	—	—	—	—	—	—
	Sexagesimal ↔ decimal	●	●	●	●	●	●	●	●	●	●	●	●
	Display format (FIX, SCI)	●	●	●	●	●	●	●	●	●	●	●	●
	Angle unit (Deg, Rad, Grad)	●	●	●	●	●	●	●	●	●	●	●	●
	Angle unit conversion (Deg, Rad, Grad)	●	●	●	●	●	●	●	●	●	●	●	●
	Factorization into prime factors	●	●	●	●								
	Ratio calculation	—	—	—	●	—	—	—	—	—	—	—	—
Calculus	Differentiation calculation	—	—	—	—	●	●	—	—	—	—	●	●
	Integration calculation	—	—	—	—	●	●	—	—	—	—	●	●
Algebra	Simultaneous equation	—	—	—	● (3 unknowns)	● (3 unknowns)	● (3 unknowns)	—	—	—	● (3 unknowns)	● (3 unknowns)	● (3 unknowns)
	Polynomial equation	—	—	—	● (Degree 2, 3)	● (Degree 2, 3)	● (Degree 2, 3)	—	—	—	● (Degree 2, 3)	● (Degree 2, 3)	● (Degree 2, 3)
	Inequality calculation	—	—	—	●	—	—	—	—	—	—	—	—
	Table function	●	●	●	●	●	●	●	●	●	●	●	●
	Matrix calculations	—	—	—	—	●	●	—	—	—	—	●	●
	Complex number calculation	—	—	—	—	●	●	—	—	—	—	●	●
Geometry	Geometry Application	—	—	—	—	—	—	—	—	—	—	—	—
	Coordinate conversion (Pol, Rec)	●	●	●	●	●	●	●	●	●	●	●	●
	Vector calculations	—	—	—	—	●	●	—	—	—	—	●	●
Probability	Combination, permutation (nCr, nPr)	●	●	●	●	●	●	●	●	●	●	●	●
Statistics	Random numbers	●	●	●	●	●	●	●	●	●	●	●	●
	Random integers	●	●	●	●	●	●	—	—	●	●	●	●
	List-based STAT data editor	●	●	●	●	●	●	●	●	●	●	●	●
	Standard deviation	●	●	●	●	●	●	●	●	●	●	●	●
	Regression analysis	●	●	●	●	●	●	●	●	●	●	●	●
	Linear regression	●	●	●	●	●	●	●	●	●	●	●	●
	ab Exponential regression	●	●	●	●	●	●	●	●	●	●	●	●
	Advanced statistics	—	—	—	—	—	—	—	—	—	—	—	—
	Other regressions	Log, Exp, Pwr, Inv, Quad	Log, Exp, Pwr, Inv, Quad	Log, Exp, Pwr, Inv, Quad	Log, Exp, Pwr, Inv, Quad	Log, Exp, Pwr, Inv, Quad	Log, Exp, Pwr, Inv, Quad	Log, Exp, Pwr, Inv, Quad	Log, Exp, Pwr, Inv, Quad	Log, Exp, Pwr, Inv, Quad	Log, Exp, Pwr, Inv, Quad	Log, Exp, Pwr, Inv, Quad	Log, Exp, Pwr, Inv, Quad
Finance	Financial function	—	—	—	—	—	—	—	—	—	—	—	—
Spreadsheet	Spreadsheet	—	—	—	—	—	—	—	—	—	—	—	—
Others	eActivity	—	—	—	—	—	—	—	—	—	—	—	—
	Data communication	—	—	—	—	—	—	—	—	—	—	—	—
	Others	—	—*2	—	—	—*3	—*2	—*3	—*2	—	—	—*2	—*3

*1 Continuous operation (assuming 5 minutes calculation and 55 minutes display per hour)   *2 1 hour use per day   *3 Continuous display of flashing cursor