



SHARP® CALCULATORS    





**Pocket
calculators**



page 5



**Desktop
calculators**



page 11



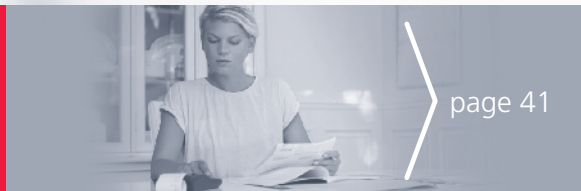
**Educational
calculators**



page 25



**Printing
calculators**



page 41





Pocket calculators



EL-233S

› Display Type	Flat
› Number of Display Digits	8
› Power Source	Battery
› Battery Type	LR54 × 1
› Automatic Power Down	✓
› Keys	Plastic
› Dimensions	103 × 60 × 8 mm
› Weight	35 g

› Memory	3 keys
› Percent (%)	✓
› Root ($\sqrt{\quad}$)	✓



EL-243E

› Display Type	Flat
› Number of Display Digits	8
› Power Source	Solar & Battery
› Battery Type	LR54 × 1
› Automatic Power Down	✓
› Keys	Rubber
› Protective Case	✓
› Dimensions	105 × 64 × 11 mm
› Weight	51 g

› Currency Conversion	✓
› Memory	3 keys
› 3-Digit Punctuation	✓
› Percent (%)	✓



EL-243S

› Display Type	Flat
› Number of Display Digits	8
› Power Source	Solar & Battery
› Battery Type	LR54 × 1
› Automatic Power Down	✓
› Keys	Rubber
› Protective Case	✓
› Dimensions	105 × 64 × 11 mm
› Weight	51 g

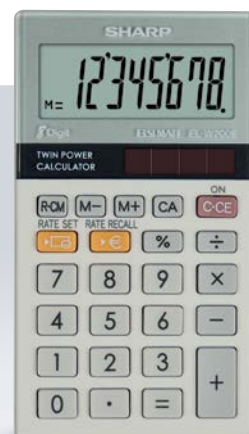
› Memory	3 keys
› Percent (%)	✓
› Root ($\sqrt{\quad}$)	✓
› Sign Change (+/-)	✓



EL-W200E

› Display Type	Flat
› Number of Display Digits	8
› Power Source	Solar & Battery
› Battery Type	CR2016 × 1
› Automatic Power Down	✓
› Keys	Plastic
› Dimensions	105 × 60 × 8 mm
› Weight	45 g

› Currency Conversion	✓
› Memory	3 keys
› 3-Digit Punctuation	✓
› Percent (%)	✓





EL-W200G

› Display Type	Flat
› Number of Display Digits	8
› Power Source	Solar & Battery
› Battery Type	CR2016 × 1
› Automatic Power Down	✓
› Keys	Plastic
› Dimensions	105 × 60 × 8 mm
› Weight	45 g

› Tax Calculation +/-	✓
› Memory	3 keys
› 3-Digit Punctuation	✓
› Percent (%)	✓



EL-250S

› Display Type	Angled
› Number of Display Digits	8
› Power Source	Solar & Battery
› Battery Type	LR54 × 1
› Automatic Power Down	✓
› Keys	Plastic
› Dimensions	116 × 71 × 17 mm
› Weight	58 g

› Tax Calculation +/-	✓
› Memory	4 keys
› 3-Digit Punctuation	✓
› Percent (%)	✓
› Decimal Setting	F, 2, 0



EL-R277

Eco model

› Display Type	Angled
› Number of Display Digits	8
› Power Source	Solar Cell
› Battery Type	×
› Automatic Power Down	✓
› Keys	Plastic
› Dimensions	117 × 70 × 21 mm
› Weight	65 g

› Memory	4 keys
› 3-Digit Punctuation	✓
› Percent (%)	✓
› Root (√)	✓
› Sign Change (+/-)	✓



EL-240SA

› Display Type	Angled
› Number of Display Digits	8
› Power Source	Solar & Battery
› Battery Type	LR54 × 1
› Automatic Power Down	✓
› Keys	Plastic
› Dimensions	116 × 71 × 17 mm
› Weight	58 g

› Memory	3 keys
› 3-Digit Punctuation	✓
› Percent (%)	✓
› Root (√)	✓
› Sign Change (+/-)	✓
› Decimal Setting	F, 2, 0
› Last Answer Function	✓

EL-W211GGY

› Display Type	Flat
› Number of Display Digits	10
› Power Source	Solar & Battery
› Battery Type	CR2016 × 1
› Automatic Power Down	✓
› Keys	Plastic
› Dimensions	117 × 70 × 8 mm
› Weight	56 g

› Tax Calculation +/-	✓
› Memory	3 keys
› 3-Digit Punctuation	✓
› Percent (%)	✓



Comparison table

	EL-233S	EL-243E	EL-243S	EL-W200E	EL-W200G	EL-250S	EL-R277	EL-240SA	EL-W211GGY
Basic Description									
Display Type	Flat	Flat	Flat	Flat	Flat	Angled	Angled	Angled	Flat
Number of Display Digits	8	8	8	8	8	8	8	8	10
Power Source	Battery	Solar & Battery	Solar & Battery	Solar & Battery	Solar & Battery	Solar & Battery	Solar	Solar & Battery	Solar & Battery
Battery Type	LR54 × 1	LR54 × 1	LR54 × 1	CR2016 × 1	CR2016 × 1	LR54 × 1	×	LR54 × 1	CR2016 × 1
Automatic Power Down	✓	✓	✓	✓	✓	✓	✓	✓	✓
Keys	Plastic	Rubber	Rubber	Plastic	Plastic	Plastic	Plastic	Plastic	Plastic
Protective Case	×	✓	✓	×	×	×	×	×	×
Dimensions (mm)	103 × 60 × 8	105 × 64 × 11	105 × 64 × 11	105 × 60 × 8	105 × 60 × 8	116 × 71 × 17	117 × 70 × 21	116 × 71 × 17	117 × 70 × 8
Weight (g)	35	51	51	45	45	58	65	58	56
Features									
Currency Conversion	×	✓	×	✓	×	×	×	×	×
Cost/Sell/Margin Calculation	×	×	×	×	×	×	×	×	×
Tax Calculation +/-	×	×	×	×	✓	✓	×	×	✓
Memory	3 keys	3 keys	3 keys	3 keys	3 keys	4 keys	4 keys	3 keys	3 keys
Double Zero Key (00)	×	×	×	×	×	×	×	×	×
3-Digit Punctuation	×	✓	×	✓	✓	✓	✓	✓	✓
Percent (%)	✓	✓	✓	✓	✓	✓	✓	✓	✓
Root (√)	✓	×	✓	×	×	×	✓	✓	×
Sign Change (+/-)	×	×	✓	×	×	×	✓	✓	×
Decimal Setting	×	×	×	×	×	F, 2, 0	×	F, 2, 0	×
Last Answer Function	×	×	×	×	×	×	×	✓	×





Desktop calculators



EL-M700GClassic
Design

› Display Type	Angled
› Number of Display Digits	8
› Power Source	Solar & Battery
› Battery Type	LR44 × 1
› Automatic Power Down	✓
› Keys	Plastic
› Dimensions	116 × 87 × 29 mm
› Weight	85 g

› Tax Calculation +/-	✓
› Memory	3 keys
› 3-Digit Punctuation	✓
› Percent (%)	✓

**EL-310AN**

› Display Type	Angled
› Number of Display Digits	8
› Power Source	Solar & Battery
› Battery Type	LR54 × 1
› Automatic Power Down	✓
› Keys	Plastic
› Dimensions	125 × 77 × 10 mm
› Weight	75 g

› Memory	4 keys
› 3-Digit Punctuation	✓
› Percent (%)	✓
› Root (√)	✓
› Sign Change (+/-)	✓

**EL-M700T**

› Display Type	Angled
› Number of Display Digits	8
› Power Source	Solar & Battery
› Battery Type	LR54 × 1
› Automatic Power Down	✓
› Keys	Plastic
› Dimensions	125 × 77 × 10 mm
› Weight	55 g

› Tax Calculation +/-	✓
› Memory	3 keys
› 3-Digit Punctuation	✓
› Percent (%)	✓
› Root (√)	✓
› Sign Change (+/-)	✓

**EL-330ER**

› Display Type	Angled
› Number of Display Digits	8
› Power Source	Solar & Battery
› Battery Type	LR44 × 1
› Automatic Power Down	✓
› Keys	Plastic
› Dimensions	148 × 102 × 15 mm
› Weight	125 g

› Currency Conversion	✓
› Tax Calculation +/-	✓
› Memory	4 keys
› 3-Digit Punctuation	✓
› Percent (%)	✓
› Sign Change (+/-)	✓





EL-330F

› Display Type	Angled
› Number of Display Digits	8
› Power Source	Solar & Battery
› Battery Type	LR44 × 1
› Automatic Power Down	✓
› Keys	Plastic
› Dimensions	147 × 102 × 31 mm
› Weight	96 g

› Cost/Sell/Margin Calculation	✓
› Tax Calculation +/-	✓
› Memory	3 keys
› 3-Digit Punctuation	✓
› Percent (%)	✓
› Sign Change (+/-)	✓



EL-M710G

› Display Type	Angled
› Number of Display Digits	8
› Power Source	Solar & Battery
› Battery Type	LR44 × 1
› Automatic Power Down	✓
› Keys	Plastic
› Dimensions	152 × 100 × 33 mm
› Weight	130 g

› Currency Conversion	✓
› Tax Calculation +/-	✓
› Memory	3 keys
› Double Zero Key (00)	✓
› 3-Digit Punctuation	✓
› Percent (%)	✓
› Sign Change (+/-)	✓



EL-310W

› Display Type	Angled
› Number of Display Digits	8
› Power Source	Solar & Battery
› Battery Type	LR44 × 1
› Automatic Power Down	✓
› Keys	Plastic
› Dimensions	122 × 85 × 26 mm
› Weight	90 g

› Tax Calculation +/-	✓
› Memory	4 keys
› Tlačítko dvojité nula (00)	✓
› 3-Digit Punctuation	✓
› Percent (%)	✓
› Root (√)	✓
› Sign Change (+/-)	✓
› Correction Key	✓



EL-331ER

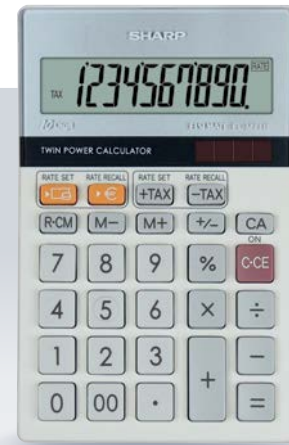
› Display Type	Angled
› Number of Display Digits	10
› Power Source	Solar & Battery
› Battery Type	LR44 × 1
› Automatic Power Down	✓
› Keys	Plastic
› Dimensions	148 × 102 × 15 mm
› Weight	125 g

› Currency Conversion	✓
› Tax Calculation +/-	✓
› Memory	4 keys
› 3-Digit Punctuation	✓
› Percent (%)	✓
› Sign Change (+/-)	✓

EL-M711E

› Display Type	Angled
› Number of Display Digits	10
› Power Source	Solar & Battery
› Battery Type	LR44 × 1
› Automatic Power Down	✓
› Keys	Plastic
› Dimensions	152 × 100 × 33 mm
› Weight	130 g

› Currency Conversion	✓
› Tax Calculation +/-	✓
› Memory	3 keys
› Double Zero Key (00)	✓
› 3-Digit Punctuation	✓
› Percent (%)	✓
› Sign Change (+/-)	✓

**EL-M711G**

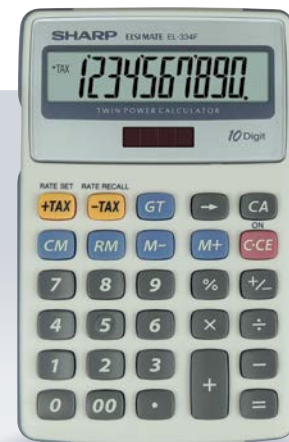
› Display Type	Angled
› Number of Display Digits	10
› Power Source	Solar & Battery
› Battery Type	LR44 × 1
› Automatic Power Down	✓
› Keys	Plastic
› Dimensions	152 × 100 × 33 mm
› Weight	130 g

› Currency Conversion	✓
› Tax Calculation +/-	✓
› Memory	3 keys
› Double Zero Key (00)	✓
› 3-Digit Punctuation	✓
› Percent (%)	✓
› Sign Change (+/-)	✓

**EL-334F**

› Display Type	Flat
› Number of Display Digits	10
› Power Source	Solar & Battery
› Battery Type	LR44 × 1
› Automatic Power Down	✓
› Keys	Plastic
› Kickstand	✓
› Dimensions	170 × 108 × 15 mm
› Weight	160 g

› Tax Calculation +/-	✓
› Memory	4 keys
› Double Zero Key (00)	✓
› 3-Digit Punctuation	✓
› Percent (%)	✓
› Sign Change (+/-)	✓
› Correction Key	✓
› Grand Total (GT)	✓

**EL-377W**

› Display Type	Flat
› Number of Display Digits	10
› Power Source	Solar & Battery
› Battery Type	LR54 × 1
› Automatic Power Down	✓
› Keys	Rubber
› Dimensions	120 × 71 × 10 mm
› Weight	62 g

› Tax Calculation +/-	✓
› Memory	4 keys
› Double Zero Key (00)	✓
› 3-Digit Punctuation	✓
› Percent (%)	✓
› Root (√)	✓
› Sign Change (+/-)	✓
› Correction Key	✓

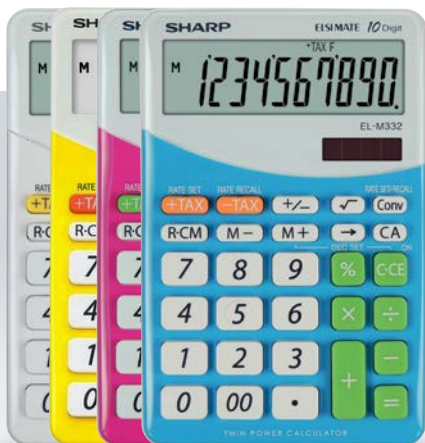




EL-330W

› Display Type	Angled
› Number of Display Digits	10
› Power Source	Solar & Battery
› Battery Type	LR44 × 1
› Automatic Power Down	✓
› Keys	Plastic
› Dimensions	152 × 94 × 28 mm
› Weight	121 g

› Currency Conversion	✓
› Cost/Sell/Margin Calculation	✓
› Tax Calculation +/-	✓
› Memory	4 keys
› Double Zero Key (00)	✓
› 3-Digit Punctuation	✓
› Percent (%)	✓
› Sign Change (+/-)	✓
› Correction Key	✓



EL-M332

› Display Type	Angled
› Number of Display Digits	10
› Power Source	Solar & Battery
› Battery Type	CR2032 × 1
› Automatic Power Down	✓
› Keys	Plastic
› Dimensions	149 × 100 × 27 mm
› Weight	122 g

› Currency Conversion	✓
› Tax Calculation +/-	✓
› Memory	3 keys
› Double Zero Key (00)	✓
› 3-Digit Punctuation	✓
› Percent (%)	✓
› Root (√)	✓
› Sign Change (+/-)	✓
› Correction Key	✓
› Decimal Setting	F, 2, 0



EL-128C

› Display Type	Angled
› Number of Display Digits	12
› Power Source	Solar & Battery
› Battery Type	LR54 × 1
› Automatic Power Down	✓
› Keys	Plastic
› Dimensions	155 × 97 × 12 mm
› Weight	95 g

› Tax Calculation +/-	✓
› Memory	3 keys
› Double Zero Key (00)	✓
› 3-Digit Punctuation	✓
› Percent (%)	✓
› Correction Key	✓
› Check & Correct Function	✓



EL-320W

› Display Type	Tilt Adjustable
› Number of Display Digits	12
› Power Source	Solar & Battery
› Battery Type	CR2032 × 1
› Automatic Power Down	✓
› Keys	Plastic
› Dimensions	97 × 153 × 18 mm
› Weight	115 g

› Tax Calculation +/-	✓
› Memory	3 keys
› Double Zero Key (00)	✓
› 3-Digit Punctuation	✓
› Percent (%)	✓
› Correction Key	✓
› Decimal Setting	F, 2, 0

EL-R287

Eco model

› Display Type	Flat
› Number of Display Digits	12
› Power Source	Solar & Battery
› Battery Type	CR2032 × 1
› Automatic Power Down	✓
› Keys	Plastic
› Kickstand	✓
› Dimensions	170 × 108 × 15 mm
› Weight	160 g

› Cost/Sell/Margin Calculation	✓
› Memory	3 keys
› Double Zero Key (00)	✓
› 3-Digit Punctuation	✓
› Percent (%)	✓
› Sign Change (+/-)	✓
› Correction Key	✓



EL-128S

› Display Type	Angled
› Number of Display Digits	12
› Power Source	Solar & Battery
› Battery Type	LR54 × 1
› Automatic Power Down	✓
› Keys	Plastic
› Dimensions	155 × 97 × 12 mm
› Weight	95 g

› Cost/Sell/Margin Calculation	✓
› Tax Calculation +/-	✓
› Memory	3 keys
› Double Zero Key (00)	✓
› 3-Digit Punctuation	✓
› Percent (%)	✓
› Root (√)	✓
› Correction Key	✓



EL-338GN

› Display Type	Angled
› Number of Display Digits	12
› Power Source	Solar & Battery
› Battery Type	CR2032 × 1
› Automatic Power Down	✓
› Keys	Plastic
› Dimensions	185 × 125 × 31 mm
› Weight	165 g

› Cost/Sell/Margin Calculation	✓
› Tax Calculation +/-	✓
› Memory	3 keys
› 3-Digit Punctuation	✓
› Percent (%)	✓
› Grand Total (GT)	✓
› Decimal Setting	F, 3, 2, 0, A
› Round Up/Down	✓



EL-124T

› Display Type	Angled
› Number of Display Digits	12
› Power Source	Solar & Battery
› Battery Type	LR44 × 1
› Automatic Power Down	✓
› Keys	Plastic
› Dimensions	152 × 96 × 12 mm
› Weight	105 g

› Tax Calculation +/-	✓
› Memory	4 keys
› Double Zero Key (00)	✓
› 3-Digit Punctuation	✓
› Percent (%)	✓
› Root (√)	✓
› Sign Change (+/-)	✓
› Correction Key	✓
› Grand Total (GT)	✓





EL-125T

› Display Type	Angled
› Number of Display Digits	12
› Power Source	Solar & Battery
› Battery Type	LR54 × 1
› Automatic Power Down	✓
› Keys	Plastic
› Dimensions	176 × 112 × 13 mm
› Weight	125 g

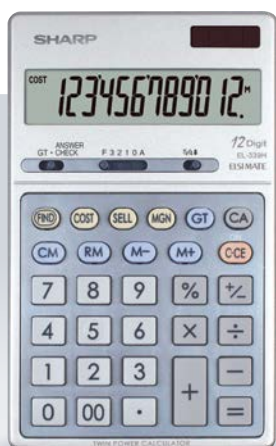
› Tax Calculation +/-	✓
› Memory	4 keys
› Double Zero Key (00)	✓
› 3-Digit Punctuation	✓
› Percent (%)	✓
› Root (√)	✓
› Sign Change (+/-)	✓
› Correction Key	✓
› Grand Total (GT)	✓



EL-126R

› Display Type	Angled
› Number of Display Digits	12
› Power Source	Solar & Battery
› Battery Type	LR54 × 1
› Automatic Power Down	✓
› Keys	Plastic
› Dimensions	155 × 97 × 12 mm
› Weight	95 g

› Currency Conversion	✓
› Tax Calculation +/-	✓
› Memory	3 keys
› Double Zero Key (00)	✓
› 3-Digit Punctuation	✓
› Percent (%)	✓
› Root (√)	✓
› Sign Change (+/-)	✓
› Correction Key	✓
› Grand Total (GT)	✓



EL-339H

› Display Type	Flat
› Number of Display Digits	12
› Power Source	Solar & Battery
› Battery Type	LR44 × 1
› Automatic Power Down	✓
› Keys	Plastic
› Kickstand	✓
› Dimensions	175 × 108 × 23 mm
› Weight	164 g

› Cost/Sell/Margin Calculation	✓
› Memory	4 keys
› Double Zero Key (00)	✓
› 3-Digit Punctuation	✓
› Percent (%)	✓
› Sign Change (+/-)	✓
› Grand Total (GT)	✓
› Decimal Setting	F, 3, 2, 1, 0, A
› Round Up/Down	✓
› Answer Check	✓



EL-R297

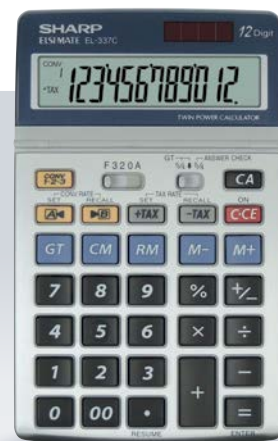
Eco model

› Display Type	Flat
› Number of Display Digits	12
› Power Source	Solar & Battery
› Battery Type	CR2032 × 1
› Automatic Power Down	✓
› Keys	Plastic
› Kickstand	✓
› Dimensions	200 × 133 × 18 mm
› Weight	228 g

› Cost/Sell/Margin Calculation	✓
› Memory	4 keys
› Double Zero Key (00)	✓
› 3-Digit Punctuation	✓
› Percent (%)	✓
› Root (√)	✓
› Sign Change (+/-)	✓
› Correction Key	✓
› Grand Total (GT)	✓
› Decimal Setting	F, 3, 2, 0, A

EL-337C

› Display Type	Tilt Adjustable	› Currency Conversion	✓
› Number of Display Digits	12	› Tax Calculation +/-	✓
› Power Source	Solar & Battery	› Memory	4 keys
› Battery Type	LR44 × 1	› Double Zero Key (00)	✓
› Automatic Power Down	✓	› 3-Digit Punctuation	✓
› Keys	Plastic	› Percent (%)	✓
› Dimensions	175 × 108 × 22 mm	› Sign Change (+/-)	✓
› Weight	165 g	› Grand Total (GT)	✓
		› Resume Function	✓
		› Decimal Setting	F, 3, 2, 0, A
		› Round Up/Down	✓
		› Answer Check	✓



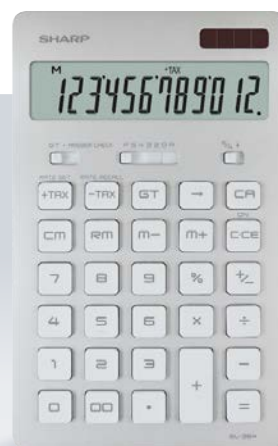
EL-340W

› Display Type	Tilt Adjustable	› Tax Calculation +/-	✓
› Number of Display Digits	12	› Memory	4 keys
› Power Source	Solar & Battery	› Double Zero Key (00)	✓
› Battery Type	CR2032 × 1	› 3-Digit Punctuation	✓
› Automatic Power Down	✓	› Percent (%)	✓
› Keys	Plastic	› Root (√)	✓
› Dimensions	189 × 127 × 18 mm	› Změna znaménka (+/-)	✓
› Weight	195 g	› Sign Change (+/-)	✓
		› Grand Total (GT)	✓
		› Mark-up/-down (MU)	✓
		› Decimal Setting	F, 3, 2, 0, A
		› Round Up/Down	✓



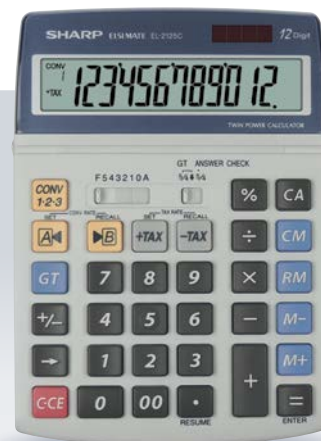
EL-364

› Display Type	Flat	› Tax Calculation +/-	✓
› Number of Display Digits	12	› Memory	4 keys
› Power Source	Solar & Battery	› Double Zero Key (00)	✓
› Battery Type	CR2025 × 1	› 3-Digit Punctuation	✓
› Automatic Power Down	✓	› Percent (%)	✓
› Keys	Plastic	› Sign Change (+/-)	✓
› Kickstand	✓	› Correction Key	✓
› Dimensions	176 × 110 × 13 mm	› Grand Total (GT)	✓
› Weight	180 g	› Resume Function	✓
		› Decimal Setting	F, 5, 4, 3, 2, 0, A
		› Round Up/Down	✓
		› Answer Check	✓



EL-2125C

› Display Type	Tilt Adjustable	› Currency Conversion	✓
› Number of Display Digits	12	› Tax Calculation +/-	✓
› Power Source	Solar & Battery	› Memory	4 keys
› Battery Type	LR44 × 1	› Double Zero Key (00)	✓
› Automatic Power Down	✓	› 3-Digit Punctuation	✓
› Keys	Plastic	› Percent (%)	✓
› Dimensions	195 × 140 × 23 mm	› Sign Change (+/-)	✓
› Weight	215 g	› Correction Key	✓
		› Grand Total (GT)	✓
		› Resume Function	✓
		› Decimal Setting	F, 5, 4, 3, 2, 1, 0, A
		› Round Up/Down	✓
		› Answer Check	✓





EL-144T

› Display Type	Angled	› Tax Calculation +/-	✓
› Number of Display Digits	14	› Memory	4 keys
› Power Source	Solar & Battery	› Double Zero Key (00)	✓
› Battery Type	LR54 × 1	› 3-Digit Punctuation	✓
› Automatic Power Down	✓	› Percent (%)	✓
› Keys	Plastic	› Root (√)	✓
› Dimensions	155 × 97 × 12 mm	› Sign Change (+/-)	✓
› Weight	95 g	› Correction Key	✓
		› Grand Total (GT)	✓



EL-145T

› Display Type	Angled	› Tax Calculation +/-	✓
› Number of Display Digits	14	› Memory	4 keys
› Power Source	Solar & Battery	› Double Zero Key (00)	✓
› Battery Type	LR54 × 1	› 3-Digit Punctuation	✓
› Automatic Power Down	✓	› Percent (%)	✓
› Keys	Plastic	› Root (√)	✓
› Dimensions	176 × 112 × 13 mm	› Sign Change (+/-)	✓
› Weight	125 g	› Correction Key	✓
		› Grand Total (GT)	✓

Smart Features

±TAX

Tax Calculation

Easily calculates prices with or without taxes. Models featuring convenient tax calculation keys save you time by simplifying complex calculations. Just press the relevant key to add or subtract predetermined tax rates at a touch.

Tax rate setting (19%)

(C-CE)	(C-CE)		0
SET			
(+TAX)	19		
SET			
(+TAX)	*		19%

Recall tax rate (19%)

(C-CE)	(C-CE)		
RECALL			
(-TAX)			19%

Calculation 1

How much is Price-plus-Tax of 800?

(C-CE)	(C-CE)		
	800		800
(+TAX)			952
(+TAX)			152

Calculation 2

How much is Price-less-Tax of (175+241,50)?

(C-CE)	(C-CE)		
	175,00	+	
	241,50	=	416,50
(-TAX)			350,00
(-TAX)			66,50

ANSWER
CHECK

Answer Check

An "OK" sign appears when the calculation being checked matches the result of the first.

Calculation A: $100 + 10\%$

1 0 0 + 1 0 % =
1 1 0

Answer A

Calculation B: $10 \times 10 + 10$

1 0 x + 1 0 + 1 0 =
1 1 0 OK

Answer B

Comparison table

	EL-M700G	EL-310AN	EL-M700T	EL-330ER	EL-330F	EL-M710G	EL-310W	EL-331ER	EL-M711E	EL-M711G
Basic Description										
Display Type	Angled	Angled	Angled	Angled	Angled	Angled	Angled	Angled	Angled	Angled
Number of Display Digits	8	8	8	8	8	8	8	10	10	10
Power Source	Solar & Battery	Solar & Battery	Solar & Battery	Solar & Battery	Solar & Battery	Solar & Battery	Solar & Battery	Solar & Battery	Solar & Battery	Solar & Battery
Battery Type	LR44 × 1	LR54 × 1	LR54 × 1	LR44 × 1	LR44 × 1	LR44 × 1	LR44 × 1	LR44 × 1	LR44 × 1	LR44 × 1
Automatic Power Down	√	√	√	√	√	√	√	√	√	√
Keys	Plastic	Plastic	Plastic	Plastic	Plastic	Plastic	Plastic	Plastic	Plastic	Plastic
Kickstand	×	×	×	×	×	×	×	×	×	×
Dimensions (mm)	116 × 87 × 29	125 × 77 × 10	125 × 77 × 10	148 × 102 × 15	147 × 102 × 31	152 × 100 × 33	122 × 85 × 26	148 × 102 × 15	152 × 100 × 33	152 × 100 × 33
Weight (g)	85	75	55	125	96	130	90	125	130	130
Features										
Currency Conversion	×	×	×	√	×	√	×	√	√	√
Cost/Sell/Margin	×	×	×	×	√	×	×	×	×	×
Tax Calculation +/-	√	×	√	√	√	√	√	√	√	√
Memory	3 keys	4 keys	3 keys	4 keys	3 keys	3 keys	4 keys	4 keys	3 keys	3 keys
Double Zero Key (00)	×	×	×	×	×	√	√	×	√	√
3-Digit Punctuation	√	√	√	√	√	√	√	√	√	√
Percent (%)	√	√	√	√	√	√	√	√	√	√
Root (√)	×	√	√	×	×	×	√	×	×	×
Sign Change (+/-)	×	√	√	√	√	√	√	√	√	√
Correction Key	×	×	×	×	×	×	√	×	×	×
Grand Total (GT)	×	×	×	×	×	×	×	×	×	×
Item Counter	×	×	×	×	×	×	×	×	×	×
Mark-up/-down (MU)	×	×	×	×	×	×	×	×	×	×
Day/Date Calculation	×	×	×	×	×	×	×	×	×	×
Resume Function	×	×	×	×	×	×	×	×	×	×
Decimal Setting	×	×	×	×	×	×	×	×	×	×
Round Up/Down	×	×	×	×	×	×	×	×	×	×
Answer Check	×	×	×	×	×	×	×	×	×	×
Check & Correct Function	×	×	×	×	×	×	×	×	×	×

Comparison table

	EL-334F	EL-377W	EL-330W	EL-M332	EL-128C	EL-320W	EL-R287	EL-128S	EL-338GN	EL-124T
Basic Description										
Display Type	Flat	Flat	Angled	Angled	Angled	Tilt Adjustable	Flat	Angled	Angled	Angled
Number of Display Digits	10	10	10	10	12	12	12	12	12	12
Power Source	Solar & Battery	Solar & Battery	Solar & Battery	Solar & Battery	Solar & Battery	Solar & Battery	Solar & Battery	Solar & Battery	Solar & Battery	Solar & Battery
Battery Type	LR44 × 1	LR54 × 1	LR44 × 1	CR2032 × 1	LR54 × 1	CR2032 × 1	CR2032 × 1	LR54 × 1	CR2032 × 1	LR44 × 1
Automatic Power Down	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Keys	Plastic	Rubber	Plastic	Plastic	Plastic	Plastic	Plastic	Plastic	Plastic	Plastic
Kickstand	✓	✓	×	×	×	×	✓	×	×	×
Dimensions (mm)	170 × 108 × 15	120 × 71 × 10	152 × 94 × 28	149 × 100 × 27	155 × 97 × 12	97 × 153 × 18	170 × 108 × 15	155 × 97 × 12	185 × 125 × 31	152 × 96 × 12
Weight (g)	160	62	121	122	95	115	160	95	165	105
Features										
Currency Conversion	×	×	✓	✓	×	×	×	×	×	×
Cost/Sell/Margin	×	×	✓	×	×	×	✓	✓	✓	×
Tax Calculation +/-	✓	✓	✓	✓	✓	✓	×	✓	✓	✓
Memory	4 keys	4 keys	4 keys	3 keys	3 keys	3 keys	3 keys	3 keys	3 keys	4 keys
Double Zero Key (00)	✓	✓	✓	✓	✓	✓	✓	✓	×	✓
3-Digit Punctuation	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Percent (%)	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Root (√)	×	✓	×	✓	×	×	×	✓	×	✓
Sign Change (+/-)	✓	✓	✓	✓	×	×	✓	×	×	✓
Correction Key	✓	✓	✓	✓	✓	✓	✓	✓	×	✓
Grand Total (GT)	✓	×	×	×	×	×	×	×	✓	✓
Item Counter	×	×	×	×	×	×	×	×	×	×
Mark-up/-down (MU)	×	×	×	×	×	×	×	×	×	×
Day/Date Calculation	×	×	×	×	×	×	×	×	×	×
Resume Function	×	×	×	×	×	×	×	×	×	×
Decimal Setting	×	×	×	F, 2, 0	×	F, 2, 0	×	×	F, 3, 2, 0, A	×
Round Up/Down	×	×	×	×	×	×	×	×	✓	×
Answer Check	×	×	×	×	×	×	×	×	×	×
Check & Correct Function	×	×	×	×	✓	×	×	×	×	×

Comparison table

	EL-125T	EL-126R	EL-339H	EL-R297	EL-337C	EL-340W	EL-364	EL-2125C	EL-144T	EL-145T
Basic Description										
Display Type	Angled	Angled	Flat	Flat	Tilt Adjustable	Tilt Adjustable	Flat	Tilt Adjustable	Angled	Angled
Number of Display Digits	12	12	12	12	12	12	12	12	14	14
Power Source	Solar & Battery	Solar & Battery	Solar & Battery	Solar & Battery	Solar & Battery	Solar & Battery	Solar & Battery	Solar & Battery	Solar & Battery	Solar & Battery
Battery Type	LR54 × 1	LR54 × 1	LR44 × 1	CR2032 × 1	LR44 × 1	CR2032 × 1	CR2025 × 1	LR44 × 1	LR54 × 1	LR54 × 1
Automatic Power Down	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Keys	Plastic	Plastic	Plastic	Plastic	Plastic	Plastic	Plastic	Plastic	Plastic	Plastic
Kickstand	×	×	✓	✓	×	×	✓	×	×	×
Dimensions (mm)	176 × 112 × 13	155 × 97 × 12	175 × 108 × 23	200 × 133 × 18	175 × 108 × 22	189 × 127 × 18	176 × 110 × 13	195 × 140 × 23	155 × 97 × 12	176 × 112 × 13
Weight (g)	125	95	164	228	165	195	180	215	95	125
Features										
Currency Conversion	×	✓	×	×	✓	×	×	✓	×	×
Cost/Sell/Margin	×	×	✓	✓	×	×	×	×	×	×
Tax Calculation +/-	✓	✓	×	×	✓	✓	✓	✓	✓	✓
Memory	4 keys	3 keys	4 keys	4 keys	4 keys	4 keys	4 keys	4 keys	4 keys	4 keys
Double Zero Key (00)	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
3-Digit Punctuation	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Percent (%)	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Root (√)	✓	✓	×	✓	×	✓	×	×	✓	✓
Sign Change (+/-)	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Correction Key	✓	✓	×	✓	×	✓	✓	✓	✓	✓
Grand Total (GT)	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Item Counter	×	×	×	×	×	×	×	×	×	×
Mark-up/-down (MU)	×	×	×	×	×	✓	×	×	×	×
Day/Date Calculation	×	×	×	×	×	×	×	×	×	×
Resume Function	×	×	×	×	✓	×	✓	✓	×	×
Decimal Setting	×	×	F, 3, 2, 1, 0, A	F, 3, 2, 0, A	F, 3, 2, 0, A	F, 3, 2, 0, A	F, 5, 4, 3, 2, 0, A	F, 5, 4, 3, 2, 1, 0, A	×	×
Round Up/Down	×	×	✓	×	✓	✓	✓	✓	×	×
Answer Check	×	×	✓	×	✓	×	✓	✓	×	×
Check & Correct Function	×	×	×	×	×	×	×	×	×	×

$$\text{SEI} \quad \mathcal{H} = \sum_{j=1}^{3n} \dot{q}_j \frac{\partial \mathcal{L}}{\partial \dot{q}_j} - \mathcal{L}$$

$$\mathcal{H} = \sum \dot{q}_j p_j - \mathcal{L}$$

$$\mathcal{H} = \mathcal{H}(q, p) \quad \mathcal{L} = \mathcal{L}(q, \dot{q}, t)$$

$$d\mathcal{H} = d(\dot{q} p - \mathcal{L})$$

$$= d(\dot{q} p) - d\mathcal{L}$$

$$= \dot{q} dp + d\dot{q} p - \frac{\partial \mathcal{L}}{\partial q} dq - \frac{\partial \mathcal{L}}{\partial \dot{q}} d\dot{q} - \frac{\partial \mathcal{L}}{\partial t} dt$$

$$\Delta \Phi + \frac{\partial}{\partial t} (\Delta)$$

$$\left[\frac{1}{\mu_0} \nabla \cdot (\vec{E} \times \vec{B}) + \frac{1}{2\mu_0} \frac{\partial B^2}{\partial t} + \dots \right]$$

$$\nabla \cdot (\vec{E} \times \vec{B}) + \frac{1}{2\mu_0} \frac{\partial B^2}{\partial t} + \dots$$



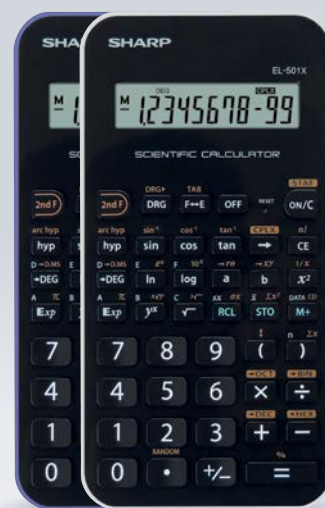


Educational calculators



EL-501X

› Display Type	1 line	› Pi Key	✓
› Number of Display Digits	10	› Complex Number Calculation	✓
› Power Source	Battery	› Memory Variables	1
› Battery Type	LR54 × 2	› 1-Variable Statistics	✓
› Automatic Power Down	✓	› Mean, Standard Deviation	✓
› Keys	Plastic	› Random Numbers	✓
› Protective Case	✓	› Deg, Rad, Grad Modes	✓
› Dimensions	144 × 75 × 10 mm	› Sin, Cos, Tan, and Inverses	✓
› Weight	73 g	› Hyperbolic Functions	✓
› Built-In Functions	131	› Sexagesimal and Decimal Conversions	✓
› Entry System	Algebraic (D.A.L.)	› Rectang. and Polar Coordinates Convers.	✓
› 1/x, x ² , square root, %	✓	› Bin, Oct, Hex, Dec	✓



EL-531X

› Display Type	2 lines	› Memory Variables	9
› Number of Display Digits	10	› FSE Display (SCI, FIX, ENG)	✓
› Power Source	Battery	› 3-Digit Punctuation	✓
› Battery Type	AAA × 1	› 1-Variable Statistics	✓
› Automatic Power Down	✓	› 2-Variable Statistics	✓
› Keys	Plastic	› Regression Calculations	6
› Protective Case	✓	› Mean, Standard Deviation	✓
› Dimensions	158 × 80 × 14 mm	› nCr, nPr, n!	✓
› Weight	101 g	› Random Numbers	✓
› Built-In Functions	272	› Deg, Rad, Grad Modes	✓
› Entry System	Algebraic (D.A.L.)	› Sin, Cos, Tan, and Inverses	✓
› 1/x, x ² , square root, %	✓	› Hyperbolic Functions	✓
› Pi Key	✓	› Sexagesimal and Decimal Conversions	✓
› Fractions	✓	› Rectang. and Polar Coordinates Convers.	✓
› Multi-Line Playback	✓	› Bin, Pen, Oct, Hex, Dec	✓
› Last Answer Recall (ANS)	✓	› Logical Operation (AND, OR, NOT, NEG, XOR) ✓	



EL-531XH

› Display Type	2 lines	› Memory Variables	9
› Number of Display Digits	10	› FSE Display (SCI, FIX, ENG)	✓
› Power Source	Battery	› 3-Digit Punctuation	✓
› Battery Type	AAA × 1	› 1-Variable Statistics	✓
› Automatic Power Down	✓	› 2-Variable Statistics	✓
› Keys	Plastic	› Regression Calculations	6
› Protective Case	✓	› Mean, Standard Deviation	✓
› Dimensions	158 × 80 × 14 mm	› nCr, nPr, n!	✓
› Weight	101 g	› Random Numbers	✓
› Built-In Functions	272	› Deg, Rad, Grad Modes	✓
› Entry System	Algebraic (D.A.L.)	› Sin, Cos, Tan, and Inverses	✓
› 1/x, x ² , square root, %	✓	› Hyperbolic Functions	✓
› Pi Key	✓	› Sexagesimal and Decimal Conversions	✓
› Fractions	✓	› Rectang. and Polar Coordinates Convers.	✓
› Multi-Line Playback	✓	› Bin, Pen, Oct, Hex, Dec	✓
› Last Answer Recall (ANS)	✓	› Logical Operation (AND, OR, NOT, NEG, XOR) ✓	



EL-531XG



› Display Type	2 lines	› Memory Variables	9
› Number of Display Digits	10	› FSE Display (SCI, FIX, ENG)	✓
› Power Source	Solar & Battery	› 3-Digit Punctuation	✓
› Battery Type	LR44 × 1	› 1-Variable Statistics	✓
› Automatic Power Down	✓	› 2-Variable Statistics	✓
› Keys	Plastic	› Regression Calculations	6
› Protective Case	✓	› Mean, Standard Deviation	✓
› Dimensions	158 × 80 × 14 mm	› nCr, nPr, n!	✓
› Weight	95 g	› Random Numbers	✓
› Built-In Functions	272	› Deg, Rad, Grad Modes	✓
› Entry System	Algebraic (D.A.L.)	› Sin, Cos, Tan, and Inverses	✓
› 1/x, x ² , square root, %	✓	› Hyperbolic Functions	✓
› Pi Key	✓	› Sexagesimal and Decimal Conversions	✓
› Fractions	✓	› Rectang. and Polar Coordinates Convers.	✓
› Multi-Line Playback	✓	› Bin, Pen, Oct, Hex, Dec	✓
› Last Answer Recall (ANS)	✓	› Logical Operation (AND, OR, NOT, NEG, XOR)	✓

EL-531TH



› Display Type	2 lines	› Memory Variables	9
› Number of Display Digits	10	› FSE Display (SCI, FIX, ENG)	✓
› Power Source	Battery	› 3-Digit Punctuation	✓
› Battery Type	AAA × 1	› 1-Variable Statistics	✓
› Automatic Power Down	✓	› 2-Variable Statistics	✓
› Keys	Plastic	› Regression Calculations	6
› Protective Case	✓	› Mean, Standard Deviation	✓
› Dimensions	161 × 80 × 15 mm	› nCr, nPr, n!	✓
› Weight		› Random Numbers	✓
› Built-In Functions	273	› Deg, Rad, Grad Modes	✓
› Entry System	Algebraic (D.A.L.)	› Sin, Cos, Tan, and Inverses	✓
› 1/x, x ² , square root, %	✓	› Hyperbolic Functions	✓
› Pi Key	✓	› Sexagesimal and Decimal Conversions	✓
› Fractions	✓	› Rectang. and Polar Coordinates Convers.	✓
› Multi-Line Playback	✓	› Bin, Pen, Oct, Hex, Dec	✓
› Last Answer Recall (ANS)	✓	› Logical Operation (AND, OR, NOT, NEG, XOR)	✓

EL-531TG



› Display Type	2 lines	› Memory Variables	9
› Number of Display Digits	10	› FSE Display (SCI, FIX, ENG)	✓
› Power Source	Solar & Battery	› 3-Digit Punctuation	✓
› Battery Type	LR44 × 1	› 1-Variable Statistics	✓
› Automatic Power Down	✓	› 2-Variable Statistics	✓
› Keys	Plastic	› Regression Calculations	6
› Protective Case	✓	› Mean, Standard Deviation	✓
› Dimensions	161 × 80 × 15 mm	› nCr, nPr, n!	✓
› Weight		› Random Numbers	✓
› Built-In Functions	273	› Deg, Rad, Grad Modes	✓
› Entry System	Algebraic (D.A.L.)	› Sin, Cos, Tan, and Inverses	✓
› 1/x, x ² , square root, %	✓	› Hyperbolic Functions	✓
› Pi Key	✓	› Sexagesimal and Decimal Conversions	✓
› Fractions	✓	› Rectang. and Polar Coordinates Convers.	✓
› Multi-Line Playback	✓	› Bin, Pen, Oct, Hex, Dec	✓
› Last Answer Recall (ANS)	✓	› Logical Operation (AND, OR, NOT, NEG, XOR)	✓

EL-520X

▶ Display Type	2 lines	▶ Last Answer Recall (ANS)	✓
▶ Number of Display Digits	10	▶ Memory Variables	9
▶ Power Source	Solar & Battery	▶ FSE Display (SCI, FIX, ENG)	✓
▶ Battery Type	LR44 × 1	▶ 3-Digit Punctuation	✓
▶ Automatic Power Down	✓	▶ 1-Variable Statistics	✓
▶ Keys	Plastic	▶ 2-Variable Statistics	✓
▶ Protective Case	✓	▶ Regression Calculations	6
▶ Dimensions	158 × 80 × 14 mm	▶ Mean, Standard Deviation	✓
▶ Weight	95 g	▶ nCr, nPr, n!	✓
▶ Built-In Functions	419	▶ Random Numbers	✓
▶ Entry System	Algebraic (D.A.L.)	▶ Deg, Rad, Grad Modes	✓
▶ 1/x, x ² , square root, %	✓	▶ Sin, Cos, Tan, and Inverses	✓
▶ Pi Key	✓	▶ Hyperbolic Functions	✓
▶ Fractions	✓	▶ Sexagesimal and Decimal Conversions	✓
▶ Equation Solver (Newton)	✓	▶ Rectang. and Polar Coordinates Convers.	✓
▶ System of Linear Equations	✓	▶ Bin, Pen, Oct, Hex, Dec	✓
▶ Numeric Derivative and Integral	✓	▶ Logical Operation (AND, OR, NOT, NEG, XOR)	✓
▶ Complex Number Calculation	✓	▶ Metric Conversions	✓
▶ Multi-Line Playback	✓	▶ Physical Constants	✓



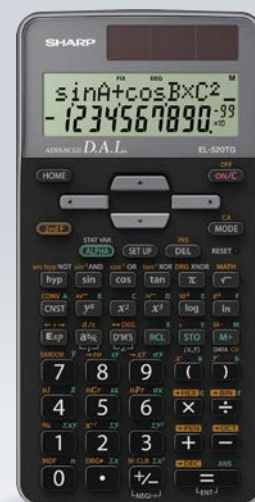
EL-520XG

▶ Display Type	2 lines	▶ FSE Display (SCI, FIX, ENG)	✓
▶ Number of Display Digits	10	▶ 3-Digit Punctuation	✓
▶ Power Source	Solar & Battery	▶ 1-Variable Statistics	✓
▶ Battery Type	LR44 × 1	▶ 2-Variable Statistics	✓
▶ Automatic Power Down	✓	▶ Regression Calculations	6
▶ Keys	Plastic	▶ Mean, Standard Deviation	✓
▶ Protective Case	✓	▶ nCr, nPr, n!	✓
▶ Dimensions	158 × 80 × 14 mm	▶ Random Numbers	✓
▶ Weight	95 g	▶ Deg, Rad, Grad Modes	✓
▶ Built-In Functions	400+	▶ Sin, Cos, Tan, and Inverses	✓
▶ Entry System	Algebraic (D.A.L.)	▶ Hyperbolic Functions	✓
▶ 1/x, x ² , square root, %	✓	▶ Sexagesimal and Decimal Conversions	✓
▶ Pi Key	✓	▶ Rectang. and Polar Coordinates Convers.	✓
▶ Fractions	✓	▶ Bin, Pen, Oct, Hex, Dec	✓
▶ Complex Number Calculation	✓	▶ Logical Operation (AND, OR, NOT, NEG, XOR)	✓
▶ Multi-Line Playback	✓	▶ Metric Conversions	✓
▶ Last Answer Recall (ANS)	✓	▶ Physical Constants	✓
▶ Memory Variables	9		



EL-520TG

▶ Display Type	2 lines	▶ Last Answer Recall (ANS)	✓
▶ Number of Display Digits	10	▶ Memory Variables	9
▶ Power Source	Solar & Battery	▶ FSE Display (SCI, FIX, ENG)	✓
▶ Battery Type	LR44 × 1	▶ 3-Digit Punctuation	✓
▶ Automatic Power Down	✓	▶ 1-Variable Statistics	✓
▶ Keys	Plastic	▶ 2-Variable Statistics	✓
▶ Protective Case	✓	▶ Regression Calculations	6
▶ Dimensions	158 × 80 × 14 mm	▶ Mean, Standard Deviation	✓
▶ Weight	91 g	▶ nCr, nPr, n!	✓
▶ Built-In Functions	419	▶ Random Numbers	✓
▶ Entry System	Algebraic (D.A.L.)	▶ Deg, Rad, Grad Modes	✓
▶ 1/x, x ² , square root, %	✓	▶ Sin, Cos, Tan, and Inverses	✓
▶ Pi Key	✓	▶ Hyperbolic Functions	✓
▶ Fractions	✓	▶ Sexagesimal and Decimal Conversions	✓
▶ Equation Solver (Newton)	✓	▶ Rectang. and Polar Coordinates Convers.	✓
▶ System of Linear Equations	✓	▶ Bin, Pen, Oct, Hex, Dec	✓
▶ Numeric Derivative and Integral	✓	▶ Logical Operation (AND, OR, NOT, NEG, XOR)	✓
▶ Complex Number Calculation	✓	▶ Metric Conversions	✓
▶ Multi-Line Playback	✓	▶ Physical Constants	✓



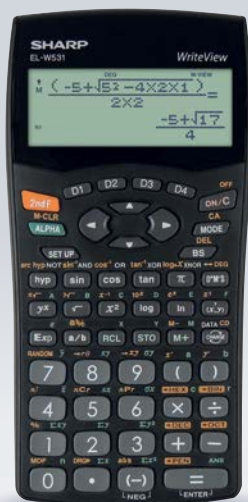
EL-506X



› Display Type	2 lines	› Last Answer Recall (ANS)	✓
› Number of Display Digits	10	› Memory Variables	9
› Power Source	Solar & Battery	› FSE Display (SCI, FIX, ENG)	✓
› Battery Type	LR44 × 1	› 3-Digit Punctuation	✓
› Automatic Power Down	✓	› 1-Variable Statistics	✓
› Keys	Plastic	› 2-Variable Statistics	✓
› Protective Case	✓	› Regression Calculations	6
› Dimensions	158 × 80 × 14 mm	› Mean, Standard Deviation	✓
› Weight	83 g	› nCr, nPr, n!	✓
› Built-In Functions	469	› Random Numbers	✓
› Entry System	Algebraic (D.A.L.)	› Deg, Rad, Grad Modes	✓
› 1/x, x ² , square root, %	✓	› Sin, Cos, Tan, and Inverses	✓
› Pi Key	✓	› Hyperbolic Functions	✓
› Fractions	✓	› Sexagesimal and Decimal Conversions	✓
› Equation Solver (Newton)	✓	› Rectang. and Polar Coordinates Convers.	✓
› System of Linear Equations	✓	› Bin, Pen, Oct, Hex, Dec	✓
› Matrix and Vector Calculations	✓	› Logical Operation (AND, OR, NOT, NEG, XOR)	✓
› Numeric Derivative and Integral	✓	› Metric Conversions	✓
› Complex Number Calculation	✓	› Physical Constants	✓
› Multi-Line Playback	✓		

EL-W531

Classic
Design



› Display Type	Dot Matrix	› Memory Variables	9
› Number of Display Digits	16	› FSE Display (SCI, FIX, ENG)	✓
› Power Source	Battery	› 3-Digit Punctuation	✓
› Battery Type	LR44 × 1	› 1-Variable Statistics	✓
› Automatic Power Down	✓	› 2-Variable Statistics	✓
› Keys	Plastic	› Regression Calculations	7
› Protective Case	✓	› Mean, Standard Deviation	✓
› Dimensions	161 × 80 × 15 mm	› nCr, nPr, n!	✓
› Weight	100 g	› Random Numbers	✓
› Built-In Functions	335	› Deg, Rad, Grad Modes	✓
› Entry System	Algebraic (D.A.L.)	› Sin, Cos, Tan, and Inverses	✓
› 1/x, x ² , square root, %	✓	› Hyperbolic Functions	✓
› Pi Key	✓	› Sexagesimal and Decimal Conversions	✓
› Fractions	✓	› Rectang. and Polar Coordinates Convers.	✓
› Training (DRILL) Function	✓	› Bin, Pen, Oct, Hex, Dec	✓
› Multi-Line Playback	✓	› Logical Operation (AND, OR, NOT, NEG, XOR)	✓
› Last Answer Recall (ANS)	✓		

EL-W531XH



› Display Type	Dot Matrix	› Memory Variables	9
› Number of Display Digits	16	› FSE Display (SCI, FIX, ENG)	✓
› Power Source	Battery	› 3-Digit Punctuation	✓
› Battery Type	AAA × 1	› 1-Variable Statistics	✓
› Automatic Power Down	✓	› 2-Variable Statistics	✓
› Keys	Plastic	› Regression Calculations	7
› Protective Case	✓	› Mean, Standard Deviation	✓
› Dimensions	168 × 80 × 14 mm	› nCr, nPr, n!	✓
› Weight	103 g	› Random Numbers	✓
› Built-In Functions	335	› Deg, Rad, Grad Modes	✓
› Entry System	Algebraic (D.A.L.)	› Sin, Cos, Tan, and Inverses	✓
› 1/x, x ² , square root, %	✓	› Hyperbolic Functions	✓
› Pi Key	✓	› Sexagesimal and Decimal Conversions	✓
› Fractions	✓	› Rectang. and Polar Coordinates Convers.	✓
› Training (DRILL) Function	✓	› Bin, Pen, Oct, Hex, Dec	✓
› Multi-Line Playback	✓	› Logical Operation (AND, OR, NOT, NEG, XOR)	✓
› Last Answer Recall (ANS)	✓		

EL-W531XG

› Display Type	Dot Matrix
› Number of Display Digits	16
› Power Source	Solar & Battery
› Battery Type	LR44 × 1
› Automatic Power Down	✓
› Keys	Plastic
› Protective Case	✓
› Dimensions	168 × 80 × 14 mm
› Weight	99 g
› Built-In Functions	335
› Entry System	Algebraic (D.A.L.)
› 1/x, x ² , square root, %	✓
› Pi Key	✓
› Fractions	✓
› Training (DRILL) Function	✓
› Multi-Line Playback	✓
› Last Answer Recall (ANS)	✓

› Memory Variables	9
› FSE Display (SCI, FIX, ENG)	✓
› 3-Digit Punctuation	✓
› 1-Variable Statistics	✓
› 2-Variable Statistics	✓
› Regression Calculations	7
› Mean, Standard Deviation	✓
› nCr, nPr, n!	✓
› Random Numbers	✓
› Deg, Rad, Grad Modes	✓
› Sin, Cos, Tan, and Inverses	✓
› Hyperbolic Functions	✓
› Sexagesimal and Decimal Conversions	✓
› Rectang. and Polar Coordinates Convers.	✓
› Bin, Pen, Oct, Hex, Dec	✓
› Logical Operation (AND, OR, NOT, NEG, XOR)	✓



EL-W531TG

› Display Type	Dot Matrix
› Number of Display Digits	16
› Power Source	Solar & Battery
› Battery Type	LR44 × 1
› Automatic Power Down	✓
› Keys	Plastic
› Protective Case	✓
› Dimensions	168 × 80 × 14 mm
› Weight	99 g
› Built-In Functions	335
› Entry System	Algebraic (D.A.L.)
› 1/x, x ² , square root, %	✓
› Pi Key	✓
› Fractions	✓
› Training (DRILL) Function	✓
› Multi-Line Playback	✓
› Last Answer Recall (ANS)	✓

› Memory Variables	9
› FSE Display (SCI, FIX, ENG)	✓
› 3-Digit Punctuation	✓
› 1-Variable Statistics	✓
› 2-Variable Statistics	✓
› Regression Calculations	7
› Mean, Standard Deviation	✓
› nCr, nPr, n!	✓
› Random Numbers	✓
› Deg, Rad, Grad Modes	✓
› Sin, Cos, Tan, and Inverses	✓
› Hyperbolic Functions	✓
› Sexagesimal and Decimal Conversions	✓
› Rectang. and Polar Coordinates Convers.	✓
› Bin, Pen, Oct, Hex, Dec	✓
› Logical Operation (AND, OR, NOT, NEG, XOR)	✓



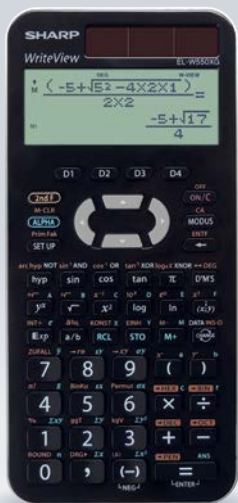
EL-W531TH

› Display Type	Dot Matrix
› Number of Display Digits	16
› Power Source	Battery
› Battery Type	AAA × 1
› Automatic Power Down	✓
› Keys	Plastic
› Protective Case	✓
› Dimensions	168 × 80 × 14 mm
› Weight	99 g
› Built-In Functions	335
› Entry System	Algebraic (D.A.L.)
› 1/x, x ² , square root, %	✓
› Pi Key	✓
› Fractions	✓
› Training (DRILL) Function	✓
› Multi-Line Playback	✓
› Last Answer Recall (ANS)	✓

› Memory Variables	9
› FSE Display (SCI, FIX, ENG)	✓
› 3-Digit Punctuation	✓
› 1-Variable Statistics	✓
› 2-Variable Statistics	✓
› Regression Calculations	7
› Mean, Standard Deviation	✓
› nCr, nPr, n!	✓
› Random Numbers	✓
› Deg, Rad, Grad Modes	✓
› Sin, Cos, Tan, and Inverses	✓
› Hyperbolic Functions	✓
› Sexagesimal and Decimal Conversions	✓
› Rectang. and Polar Coordinates Convers.	✓
› Bin, Pen, Oct, Hex, Dec	✓
› Logical Operation (AND, OR, NOT, NEG, XOR)	✓



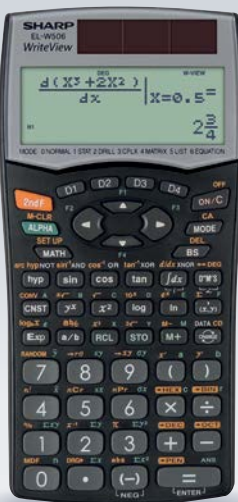
EL-W550XG



› Display Type	Dot Matrix	› Last Answer Recall (ANS)	✓
› Number of Display Digits	16	› Memory Variables	9
› Power Source	Solar & Battery	› FSE Display (SCI, FIX, ENG)	✓
› Battery Type	LR44 × 1	› 3-Digit Punctuation	✓
› Automatic Power Down	✓	› 1-Variable Statistics	✓
› Keys	Plastic	› 2-Variable Statistics	✓
› Protective Case	✓	› Regression Calculations	7
› Dimensions	168 × 80 × 14 mm	› Mean, Standard Deviation	✓
› Weight	99 g	› nCr, nPr, n!	✓
› Built-In Functions	335+	› Random Numbers	✓
› Entry System	Algebraic (D.A.L.)	› Deg, Rad, Grad Modes	✓
› 1/x, x ² , square root, %	✓	› Sin, Cos, Tan, and Inverses	✓
› Pi Key	✓	› Hyperbolic Functions	✓
› GCD, LCM	✓	› Sexagesimal and Decimal Conversions	✓
› Quotient and Remainder Calculation	✓	› Rectang. and Polar Coordinates Convers.	✓
› Fractions	✓	› Bin, Pen, Oct, Hex, Dec	✓
› Function Table	✓	› Logical Operation (AND, OR, NOT, NEG, XOR)	✓
› Training (DRILL) Function	✓	› Metric Conversions	✓
› Multi-Line Playback	✓	› Physical Constants	✓

EL-W506

Classic Design



› Display Type	Dot Matrix	› Multi-Line Playback	✓
› Number of Display Digits	16	› Last Answer Recall (ANS)	✓
› Power Source	Solar & Battery	› Memory Variables	9
› Battery Type	LR44 × 1	› FSE Display (SCI, FIX, ENG)	✓
› Automatic Power Down	✓	› 3-Digit Punctuation	✓
› Keys	Plastic	› 1-Variable Statistics	✓
› Protective Case	✓	› 2-Variable Statistics	✓
› Dimensions	161 × 80 × 15 mm	› Regression Calculations	7
› Weight	102 g	› Mean, Standard Deviation	✓
› Built-In Functions	556	› nCr, nPr, n!	✓
› Entry System	Algebraic (D.A.L.)	› Random Numbers	✓
› 1/x, x ² , square root, %	✓	› Deg, Rad, Grad Modes	✓
› Pi Key	✓	› Sin, Cos, Tan, and Inverses	✓
› Fractions	✓	› Hyperbolic Functions	✓
› Equation Solver (Newton)	✓	› Sexagesimal and Decimal Conversions	✓
› System of Linear Equations	✓	› Rectang. and Polar Coordinates Convers.	✓
› Matrix and Vector Calculations	✓	› Bin, Pen, Oct, Hex, Dec	✓
› Numeric Derivative and Integral	✓	› Logical Operation (AND, OR, NOT, NEG, XOR)	✓
› Complex Number Calculation	✓	› Metric Conversions	✓
› Training (DRILL) Function	✓	› Physical Constants	✓

EL-W506X



› Display Type	Dot Matrix	› Multi-Line Playback	✓
› Number of Display Digits	16	› Last Answer Recall (ANS)	✓
› Power Source	Solar & Battery	› Memory Variables	9
› Battery Type	LR44 × 1	› FSE Display (SCI, FIX, ENG)	✓
› Automatic Power Down	✓	› 3-Digit Punctuation	✓
› Keys	Plastic	› 1-Variable Statistics	✓
› Protective Case	✓	› 2-Variable Statistics	✓
› Dimensions	168 × 80 × 14 mm	› Regression Calculations	7
› Weight	99 g	› Mean, Standard Deviation	✓
› Built-In Functions	556	› nCr, nPr, n!	✓
› Entry System	Algebraic (D.A.L.)	› Random Numbers	✓
› 1/x, x ² , square root, %	✓	› Deg, Rad, Grad Modes	✓
› Pi Key	✓	› Sin, Cos, Tan, and Inverses	✓
› Fractions	✓	› Hyperbolic Functions	✓
› Equation Solver (Newton)	✓	› Sexagesimal and Decimal Conversions	✓
› System of Linear Equations	✓	› Rectang. and Polar Coordinates Convers.	✓
› Matrix and Vector Calculations	✓	› Bin, Pen, Oct, Hex, Dec	✓
› Numeric Derivative and Integral	✓	› Logical Operation (AND, OR, NOT, NEG, XOR)	✓
› Complex Number Calculation	✓	› Metric Conversions	✓
› Training (DRILL) Function	✓	› Physical Constants	✓



EL-9950

GRAPHING CALCULATOR

With its large 132 × 64 dot matrix Write-View display, its graphing capability and slide show feature, the EL-9950 is a very flexible student companion, offering not less than 827 functions. This graphing calculator covers all the needs of highschool and university demands!

- ▶ Graphing capability ✓
- ▶ Solver function ✓
- ▶ Matrix function ✓
- ▶ Statistical and regression graphs (9 resp. 14 types) ✓
- ▶ 27 Variable memories ✓
- ▶ Shift/Change Graph feature ✓
- ▶ Rapid Graph/Window/Zoom feature ✓
- ▶ Slide show feature ✓
- ▶ Power source: AAA × 4, CR2032 × 1 (Backup) ✓

Slide show

[CURR] create new
 [PLAY] slide show
 [NEW] Press[ENTER]
 [SELECT]
 [EDIT]

Y1 = X³ - 3X² - 3X + 3
 Y2 = _
 Y3 = _
 Y4 = _
 Y5 = _
 Y6 = _

X	Y1
0.3125	1.80005
0.625	0.19727
0.9375	-1.6252
1.25	-3.4844
1.5625	-5.197

Equation Editor

By one-line editing

$$\int_0^1 \frac{x}{\sqrt{1+x^2}} dx = 0.414213562$$

By equation editor

$$\int_0^1 \frac{x}{\sqrt{1+x^2}} dx = 0.414213562$$

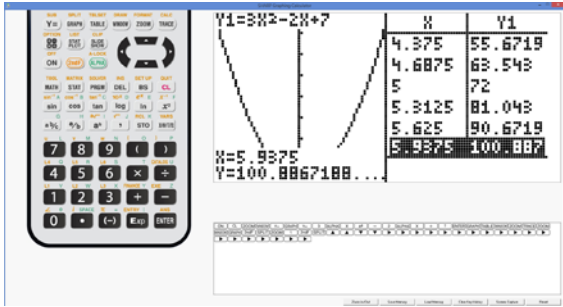
Scientific graphing

Y1 = X³ - 3X² - 3X + 3
 Y2 = _
 Y3 = _
 Y4 = _
 Y5 = _
 Y6 = _

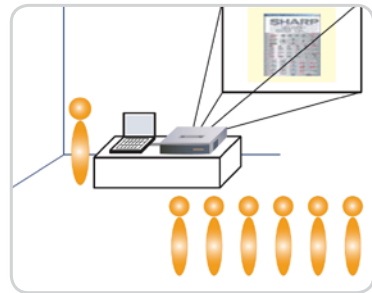
X	Y1
0.3125	1.80005
0.625	0.19727
0.9375	-1.6252
1.25	-3.4844
1.5625	-5.197

PC Simulator

The PC simulator enables operation of the EL-9950 on a PC.



Screen shots can be captured for use by teachers in classroom presentations.



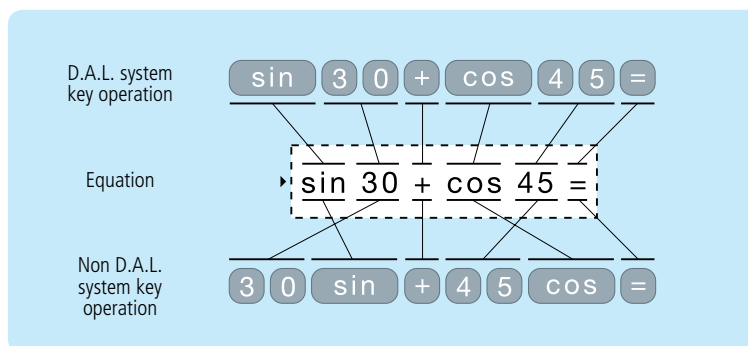
Greater Efficiency and Ease of Use

Our scientific calculators for schools incorporate Direct Algebraic Logic (D.A.L), which Sharp was the first manufacturer in the world to introduce back in 1992, but also the innovative WriteView™ Technology. Using DAL, the input formula is displayed from left to right in the same way as used in textbooks. The WriteView™ function enables the EL-W531 and EL-W506 models to display formulae, roots or fractions exactly as they are shown in textbooks or on the board at school.

D.A.L.

Direct Algebraic Logic (D.A.L.)

Until the introduction of SHARP's D.A.L., keying in equations had been a complicated process making scientific calculators difficult to use. Introduced in 1992 and an industry-first, SHARP's D.A.L. allows symbols and numbers of an equation to be entered as they are written. Instead of wasting energy on difficult calculator operations, users are free to concentrate on mathematical concepts.



$$\frac{-5 + \sqrt{17}}{4}$$

WriteView™

A standard scientific calculator cannot display fractions and symbols such as " $\sqrt{\quad}$ " the way they appear in a proper mathematical formula. A WriteView calculator, however, can display fractions and symbols just as they appear in a mathematical formula.

Calculate $\frac{\sqrt{2}}{3} + \frac{\sqrt{5}}{5} =$

Standard Scientific Calculator

Standard Scientific Calculator display: $(\sqrt{2}) \cdot 3 + (\sqrt{5}) \cdot 5 \rightarrow 0.918618116$

WriteView Calculator

WriteView Calculator display: $\frac{\sqrt{2}}{3} + \frac{\sqrt{5}}{5} = \frac{3\sqrt{5} + 5\sqrt{2}}{15}$

2-Line

2-Line Display

A 2-line display allows the users to check the equation and answer at the same time. Because the equation remains on display, it is easy to edit or make substitutions if necessary.

Equation

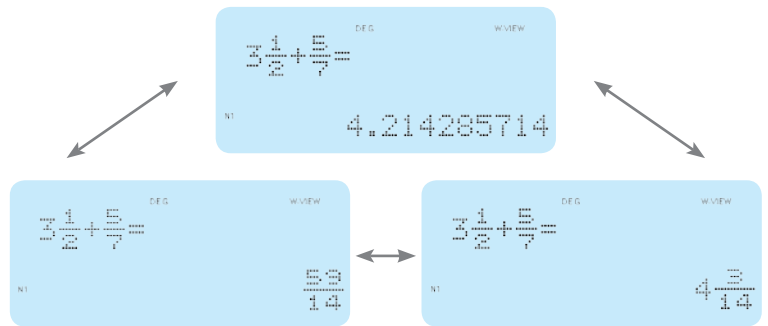
Answer

2-Line Display: Equation: $\sin 30 + \cos 40 =$, Answer: 1.266044443



Fraction / Decimal Conversion

When possible, calculation results will be displayed using fractions, \sqrt{x} and π . When you press **CHANGE**, the display will cycle through the following display styles:
 mixed fractions \rightarrow improper fractions \rightarrow decimal numbers \rightarrow mixed fractions.



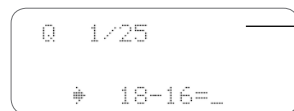
Math Drill Function

Math training questions with positive integers are displayed randomly. It is possible to select the number of questions and operator type.

Math Drill Sample

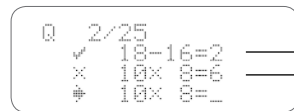


Select the operator type for questions (+, -, x, /, or mixed)



Current question / Total questions

Questions are randomly selected and will not repeat except by chance

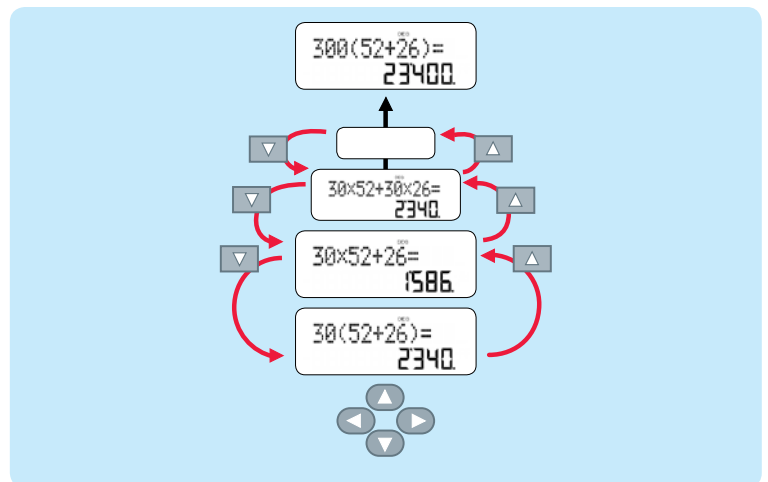


Correct answer / Wrong answer



Multi-Line Playback

SHARP's Multi-Line Playback function lets you recall any of the last 142 steps you have made. This feature is very useful for comparing formulas and recalculating equations.



$$\begin{matrix} a+K=X \\ b+K=Y \\ c+K=Z \end{matrix}$$

Constant Calculation

A portion of the equation is automatically memorised as a constant, thus omitting redundant input.

$$\begin{matrix} A+B=C \\ \sqrt{C}=D \end{matrix}$$

Chain Calculation

The answer can be used as is in the next calculation.

5 0 0 0 ÷ 1 2 5 =

2 5 0 0 ÷ 1 2 5 =

5 0 0 0 ÷ 1 2 5 =

Skip the steps

5 2 ÷ 3 7 =

No "ANS" key

2ndF ANS =

500÷K= 4

2500÷K= 20

5000÷125= 40

52÷37= 1.405

√ANS= 943398.1132

$$d/dx$$

Numerical Derivative

$$\int dx$$

Numerical Integral

Simply enter numerical values following the interactive on-screen instructions, and you can find the answer easily of derivative and integral calculations. You don't have to re-enter the formula, and the calculation can be repeated as many times as needed.

Numerical Derivative

$y=2x^3+x^2+2$

$2x^3+x^2+2$

Numerical Integral

$y=2x^3+x^2+2$

$2x^3+x^2+2$

$x?$

$dx?$

$d/dx=$

$4.$

$a?$

$b?$

$n?$

$\int dx=$

1.5

$-2.$

$-1.$

$100.$



Formula Memory

Frequently used formulas or complex equations can be stored as functions in Formula Memory**. By recalling the formula, you can substitute new variables into the equation and recalculate it without having to enter the entire sequence again.

Since you can do repeat equations, it's also convenient for simulations.

The diagram illustrates the Formula Memory process through a series of calculator screens and key presses:

- Initial screen: $(4+3)\pi X^3$ with a cursor.
- Key press: **F1**.
- Screen: $(4+3)\pi X^3$ with a cursor.
- Key press: **RCL** **F1**.
- Screen: $(4+3)\pi X^3$ with a cursor.
- Key press: **ALGB**.
- Screen: $(4+3)\pi X^3$ with a cursor.
- Key press: **1** **0** **=**.
- Final screen: $4'188.790205$.



Definable Memory

Definable Memory enables you to store functions and operations in memory. With a single keystroke, you can enter functions or operations that previously required multiple keystrokes, such as [2ndF] [sinh⁻¹].

The diagram illustrates the Definable Memory process through two steps:

- Storing a function in the calculator: **STO** **D1** **2ndF** **hyp** **sin**.
- Calculating $\sinh^{-1} 0.5$ using the D1 key: **D1** **0** **.** **5** **=**.

Comparison table

	EL-501X	EL-531X	EL-531XH	EL-531XG	EL-531TH	EL-531TG	EL-520X	EL-520XG	EL-520TG
Basic Description									
Display Type	1 line	2 lines	2 lines	2 lines	2 lines	2 lines	2 lines	2 lines	2 lines
Number of Display Digits	10	10	10	10	10	10	10	10	10
Power Source	Battery	Battery	Battery	Solar & Battery	Battery	Solar & Battery	Solar & Battery	Solar & Battery	Solar & Battery
Battery Type	LR54 × 2	LR44 × 1	AAA × 1	LR44 × 1	AAA × 1	LR44 × 1	LR44 × 1	LR44 × 1	LR44 × 1
Automatic Power Down	✓	✓	✓	✓	✓	✓	✓	✓	✓
Keys	Plastic	Plastic	Plastic	Plastic	Plastic	Plastic	Plastic	Plastic	Plastic
Protective Case	✓	✓	✓	✓	✓	✓	✓	✓	✓
Dimensions	144 × 75 × 10 mm	158 × 80 × 14 mm	158 × 80 × 14 mm	158 × 80 × 14 mm	161 × 80 × 15 mm	161 × 80 × 15 mm	158 × 80 × 14 mm	158 × 80 × 14 mm	158 × 80 × 14 mm
Weight	73 g	95 g	101 g	95 g			95 g	95 g	91 g
Mathematical Functions									
Built-In Functions	131	272	272	272	273	273	419	400+	419
Entry System	Algebraic (D.A.L.)	Algebraic (D.A.L.)	Algebraic (D.A.L.)	Algebraic (D.A.L.)	Algebraic (D.A.L.)	Algebraic (D.A.L.)	Algebraic (D.A.L.)	Algebraic (D.A.L.)	D.A.L.
1/x, x ² , square root, %	✓	✓	✓	✓	✓	✓	✓	✓	✓
Pi Key	✓	✓	✓	✓	✓	✓	✓	✓	✓
GCD, LCM	×	×	×	×	×	×	×	×	×
Quotient and Remainder Calculation	×	×	×	×	×	×	×	×	✓
Fractions	×	✓	✓	✓	✓	✓	✓	✓	✓
Function Table	×	×	×	×	×	×	×	×	×
Equation Solver (Newton)	×	×	×	×	×	×	✓	×	✓
System of Linear Equations	×	×	×	×	×	×	✓	×	✓
Matrix and Vector Calculations	×	×	×	×	×	×	×	×	×
Numeric Derivative and Integral	×	×	×	×	×	×	✓	×	✓
Complex Number Calculation	✓	×	×	×	×	×	✓	✓	✓
Training (DRILL) Function	×	×	×	×	×	×	×	×	×
Memory									
Multi-Line Playback	×	✓	✓	✓	✓	✓	✓	✓	✓
Last Answer Recall (ANS)	×	✓	✓	✓	✓	✓	✓	✓	✓
Memory Variables	1	9	9	9	9	9	9	9	9
Notation and Decimal Places									
FSE Display (SCI, FIX, ENG)	×	✓	✓	✓	✓	✓	✓	✓	✓
3-Digit Punctuation	×	✓	✓	✓	✓	✓	✓	✓	✓
Statistics									
1-Variable Statistics	✓	✓	✓	✓	✓	✓	✓	✓	✓
2-Variable Statistics	×	✓	✓	✓	✓	✓	✓	✓	✓
Regression Calculations	×	6	6	6	6	6	6	6	6
Mean, Standard Deviation	✓	✓	✓	✓	✓	✓	✓	✓	✓
nCr, nPr, n!	×	✓	✓	✓	✓	✓	✓	✓	✓
Random Numbers	✓	✓	✓	✓	✓	✓	✓	✓	✓
Trigonometric Functions									
Deg, Rad, Grad Modes	✓	✓	✓	✓	✓	✓	✓	✓	✓
Sin, Cos, Tan, and Inverses	✓	✓	✓	✓	✓	✓	✓	✓	✓
Hyperbolic Functions	✓	✓	✓	✓	✓	✓	✓	✓	✓
Sexagesimal and Decimal Conversions	✓	✓	✓	✓	✓	✓	✓	✓	✓
Rectangular and Polar Coordinates Conversions	✓	✓	✓	✓	✓	✓	✓	✓	✓
Number Systems									
Bin, Pen, Oct, Hex, Dec	✓	✓	✓	✓	✓	✓	✓	✓	✓
Logical Operation (AND, OR, NOT, NEG, XOR)	×	✓	✓	✓	✓	✓	✓	✓	✓
Scientific Functions									
Metric Conversions	×	×	×	×	✓	✓	✓	✓	✓
Physical Constants	×	×	×	×	✓	✓	✓	✓	✓

Comparison table

	EL-506X	EL-W531	EL-W531XH	EL-W531XG	EL-W531TG	EL-W531TH	EL-W550XG	EL-W506	EL-W506X
Basic Description									
Display Type	2 lines	Dot Matrix	Dot Matrix	Dot Matrix	Dot Matrix	Dot Matrix	Dot Matrix	Dot Matrix	Dot Matrix
Number of Display Digits	10	16	16	16	16	16	16	16	16
Power Source	Solar & Battery	Battery	Battery	Solar & Battery	Solar & Battery	Battery	Solar & Battery	Solar & Battery	Solar & Battery
Battery Type	LR44 × 1	LR44 × 1	AAA × 1	LR44 × 1	LR44 × 1	AAA × 1	LR44 × 1	LR44 × 1	LR44 × 1
Automatic Power Down	✓	✓	✓	✓	✓	✓	✓	✓	✓
Keys	Plastic	Plastic	Plastic	Plastic	Plastic	Plastic	Plastic	Plastic	Plastic
Protective Case	✓	✓	✓	✓	✓	✓	✓	✓	✓
Dimensions	158 × 80 × 14 mm	161 × 80 × 15 mm	168 × 80 × 14 mm	168 × 80 × 14 mm	168 × 80 × 14 mm	168 × 80 × 14 mm	168 × 80 × 14 mm	161 × 80 × 15 mm	168 × 80 × 14 mm
Weight	83 g	100 g	103 g	99 g	98 g	98 g	99 g	102 g	99 g
Mathematical Functions									
Built-In Functions	469	335	335	335	414	414	335+	556	556
Entry System	Algebraic (D.A.L.)	Algebraic (D.A.L.)	Algebraic (D.A.L.)	Algebraic (D.A.L.)	D.A.L.	D.A.L.	Algebraic (D.A.L.)	Algebraic (D.A.L.)	Algebraic (D.A.L.)
1/x, x², square root, %	✓	✓	✓	✓	✓	✓	✓	✓	✓
Pi Key	✓	✓	✓	✓	✓	✓	✓	✓	✓
GCD, LCM	×	×	×	×	×	×	✓	×	×
Quotient and Remainder Calculation	×	×	×	×	×	×	✓	×	×
Fractions	✓	✓	✓	✓	✓	✓	✓	✓	✓
Function Table	×	×	×	×	✓	✓	✓	×	×
Equation Solver (Newton)	✓	×	×	×	×	×	×	✓	✓
System of Linear Equations	✓	×	×	×	×	×	×	✓	✓
Matrix and Vector Calculations	✓	×	×	×	×	×	×	✓	✓
Numeric Derivative and Integral	✓	×	×	×	×	×	×	✓	✓
Complex Number Calculation	✓	×	×	×	×	×	×	✓	✓
Training (DRILL) Function	×	✓	✓	✓	✓	✓	✓	✓	✓
Memory									
Multi-Line Playback	✓	✓	✓	✓	✓	✓	✓	✓	✓
Last Answer Recall (ANS)	✓	✓	✓	✓	✓	✓	✓	✓	✓
Memory Variables	9	9	9	9	9	9	9	9	9
Notation and Decimal Places									
FSE Display (SCI, FIX, ENG)	✓	✓	✓	✓	✓	✓	✓	✓	✓
3-Digit Punctuation	✓	✓	✓	✓	✓	✓	✓	✓	✓
Statistics									
1-Variable Statistics	✓	✓	✓	✓	✓	✓	✓	✓	✓
2-Variable Statistics	✓	✓	✓	✓	✓	✓	✓	✓	✓
Regression Calculations	6	7	7	7	7	7	7	7	7
Mean, Standard Deviation	✓	✓	✓	✓	✓	✓	✓	✓	✓
nCr, nPr, n!	✓	✓	✓	✓	✓	✓	✓	✓	✓
Random Numbers	✓	✓	✓	✓	✓	✓	✓	✓	✓
Trigonometric Functions									
Deg, Rad, Grad Modes	✓	✓	✓	✓	✓	✓	✓	✓	✓
Sin, Cos, Tan, and Inverses	✓	✓	✓	✓	✓	✓	✓	✓	✓
Hyperbolic Functions	✓	✓	✓	✓	✓	✓	✓	✓	✓
Sexagesimal and Decimal Conversions	✓	✓	✓	✓	✓	✓	✓	✓	✓
Rectangular and Polar Coordinates Conversions	✓	✓	✓	✓	✓	✓	✓	✓	✓
Number Systems									
Bin, Pen, Oct, Hex, Dec	✓	✓	✓	✓	✓	✓	✓	✓	✓
Logical Operation (AND, OR, NOT, NEG, XOR)	✓	✓	✓	✓	✓	✓	✓	✓	✓
Scientific Functions									
Metric Conversions	✓	×	×	×	×	×	✓	✓	✓
Physical Constants	✓	×	×	×	×	×	✓	✓	✓





Printing calculators



EL-1607P

EL-1607PE version with EU plug | EL-1607PUK version with UK plug

› Display Type	Digitron	› Currency Conversion	✓
› Number of Display Digits	12	› Tax Calculation +/-	✓
› Battery Type	CR2032 × 1	› Memory	4 keys
› Automatic Power Down	✓	› Double Zero Key (00)	✓
› AC Power Supply	✓	› 3-Digit Punctuation	✓
› Keys	Plastic	› Percent (%)	✓
› Dimensions	303 × 202 × 72 mm	› Sign Change (+/-)	✓
› Weight	1300 g	› Correction Key	✓
› Printing Colours	Black, Red	› Grand Total (GT)	✓
› Printing Speed	3 Lines/sec.	› Mark-up/-down (MU)	✓
› Paperroll (Size)	Standard (58 × 80 mm)	› Item Counter	✓
› Ink Roller	EA-772R	› Decimal Setting	F, 6, 3, 2, 1, 0
		› Round Up/Down	✓

**EL-1750V**

› Display Type	LCD	› Cost/Sell/Margin Calculation	✓
› Number of Display Digits	12	› Tax Calculation +/-	✓
› Battery Type	AA × 4	› Memory	4 keys
› Automatic Power Down	✓	› Double Zero Key (00)	✓
› AC Power Supply	Optional (EA-28A)	› 3-Digit Punctuation	✓
› Keys	Plastic	› Percent (%)	✓
› Dimensions	230 × 150 × 52 mm	› Sign Change (+/-)	✓
› Weight	455 g	› Correction Key	✓
› Printing Colours	Black, Red	› Grand Total (GT)	✓
› Printing Speed	2 Lines/sec.	› Average Calculation	✓
› Paperroll (Size)	Standard (58 × 80 mm)	› Item Counter	✓
› Ink Roller	EA-772R	› Decimal Setting	F, 3, 2, 0, A
		› Round Up/Down	✓
		› Change calculation mode	✓

**EL-2607PG**

EL-2607PGYUK version with UK plug | EL-2607PGGYSE version with Resume Function

› Display Type	Digitron	› Tax Calculation +/-	✓
› Number of Display Digits	12	› Memory	4 keys
› Battery Type	CR2032 × 1	› Double Zero Key (00)	✓
› Automatic Power Down	✓	› 3-Digit Punctuation	✓
› AC Power Supply	✓	› Percent (%)	✓
› Keys	Plastic	› Sign Change (+/-)	✓
› Dimensions	327 × 221 × 78 mm	› Correction Key	✓
› Weight	2000 g	› Grand Total (GT)	✓
› Printing Colours	Black, Red	› Mark-up/-down (MU)	✓
› Printing Speed	4.3 Lines/sec.	› Average Calculation	✓
› Paperroll (Size)	Standard (58 × 80 mm)	› Item Counter	✓
› Ink Ribbon	✓	› Resume Function	✓
		› Decimal Setting	F, 6, 3, 2, 1, 0, A
		› Round Up/Down	✓



CS-2635RH



› Display Type	Digitron	› Currency Conversion	✓
› Number of Display Digits	12	› Tax Calculation +/-	✓
› Battery Type	CR2032 × 1	› Memory	4 keys
› Automatic Power Down	✓	› Double Zero Key (00)	✓
› AC Power Supply	✓	› 3-Digit Punctuation	✓
› Keys	Plastic	› Percent (%)	✓
› Dimensions	345 × 250 × 87 mm	› Sign Change (+/-)	✓
› Weight	2000 g	› Correction Key	✓
› Printing Colours	Black, Red	› Mark-up/-down (MU)	✓
› Printing Speed	4.3 Lines/sec.	› Item Counter	✓
› Paperroll (Size)	Standard (58 × 80 mm)	› Resume Function	✓
› Ink Ribbon	✓	› Decimal Setting	F, 5, 4, 3, 2, 1, 0, A
		› Round Up/Down	✓

Smart Features



Cost-Sell-Margin Calculation

Quick and convenient calculation of cost, selling price and margins; ideal for business transactions.

Calculation 1		Answer	
Cost	98,50	98,50	(COST)
Sell	129,50	129,50	(SELL)
Margin %	?		(FIND) (MARGIN) = 23,938%

Calculation 2		Answer	
Cost	65,50	65,50	(COST)
Margin %	38%	38	(MARGIN)
Sell	?		(FIND) (SELL) = 105,65

Calculation 3		Answer	
Sell	175,50	175,50	(SELL)
Margin %	35%	35	(MARGIN)
Cost	?		(FIND) (COST) = 114,08



Average

AVG Function calculates average of inputted data.

Day	Sales	OPERATION	PRINT
Monday	€ 100	100[+]	100
Tuesday	€ 30	30[+]	30
Wednesday	€ 40	40[+]	40
Thursday	€ 0	0[+]	0
Friday	€ 75	75[+]	75
Saturday	€ 100	100[+]	100
Sunday	€ 0	0[AVG]	49

CALCULATION
 $(100 + 30 + 40 + 0 + 75 + 100 + 0) / 7 = € 49$



Grand Total (GT) Function

Automatically calculates the total sum of amounts generated.

U.S. revenues (A, B and C)		OPERATION	PRINT
Customer A	€ 2,500k	2500[+]	2500
Customer B	€ 2,200k	2200[+]	2200
Customer C	€ 3,000k	3000[+]	3000
		[*]	7700
Europe revenues (D, E and F)		OPERATION	PRINT
Customer D	€ 5,000k	5000[+]	5000
Customer E	€ 1,500k	1500[+]	1500
Customer F	€ 2,800k	2800[+]	2800
		[*]	9300

CALCULATION
 $(2.500+2.200+3.000) + (5.000+1.500+2.800) = 17.000$ [GT] **17.000**

x
y



Day/Date Calculation

- Day Calculation: determines number of days between two dates.
- Date Calculation: determines the date after a number of days and a starting date have been entered.

How many days are between
October 24th to December 27th?



64 days

Add 50 days to March 27.



May 15

Accessories

Ink rollers & Ink ribbon

Ink roller EA732R (Color: ● black)

Models: SHARP EL1610, EL1611, EL1611S, EL1611H, EL1611L, EL1611P, EL1801A, EL1801L

Ink roller EA770R (Color: ● black)

Models: SHARP EL1192S, EL1601H, EL1615, EL1625, EL1625H, EL1628, EL1631

Ink roller EA772R / EA772R compatible (Color: ● black, ● red)

Models: SHARP EL1750PIIGY, EL1750V, EL1611PGY, EL1607P (from 06/2012)

Ink roller EA781RBK / EA781RBK compatible (Color: ● black)

Models: SHARP EL1195L, EL1607P (till 05/2012), EL1801C, EL1801E, EL2192, EL2192G, EL2195L, EL2901C, EL2901P, EL2910R

Ink roller EA781RRD / EA781RRD compatible (Color: ● red)

Models: SHARP EL1195L, EL1607P (till 05/2012), EL1801C, EL1801E, EL2192, EL2192G, EL2195L, EL2901C, EL2901P, EL2910R

Ink ribbon GR51 (Color: ● black, ● red)

Models: SHARP EL2607PGY, CS2635RHGY



Paper rolls

EA1195P (Thermo Paper)

Models: SHARP EL8180, EL8181

EA1250P (Thermo Paper)

Models: SHARP CE-120P, CE-123P, CE-125S, CE-126P, CE-50P

EA7100P (Paper)

Models: SHARP EL1611E, EL1611PGY, EL1750PIIGY, EL1750V, EL1607P, EL2607PGY, CS2635RHGY

Roll 57 (Paper)

Models: SHARP EL1611E, EL1611PGY, EL1750PIIGY, EL1750V, EL1607P, EL2607PGY, CS2635RHGY



Adaptors

EA28A (for EU)

Models: SHARP EL1611P, EL1750PIIGY, EL1750V

L80EA28L (for UK)

Models: SHARP EL1611P, EL1750PIIGY, EL1750V



Comparison table

	EL-1607P	EL-1750V	EL-2607PG	CS-2635RH
Basic Description				
Display Type	Digitron	LCD	Digitron	Digitron
Number of Digits	12	12	12	12
Battery Type	CR2032 × 1	AA × 4	CR2032 × 1	CR2032 × 1
Automatic Power Down	✓	✓	×	✓
AC Power Supply	✓	Optional (EA-28A)	✓	✓
Keys	Plastic	Plastic	Plastic	Plastic
Dimensions	303 × 202 × 72 mm	230 × 150 × 52 mm	327 × 221 × 78 mm	345 × 250 × 87 mm
Weight	1300 g	455 g	2000 g	2000 g
Features				
Currency Conversion	✓	×	×	✓
Tax Calculation +/-	✓	✓	✓	✓
Memory	4 keys	4 keys	4 keys	4 keys
Double Zero Key (00)	✓	✓	✓	✓
3-Digit Punctuation	✓	✓	✓	✓
Time/Day Function	×	×	×	×
Percent (%)	✓	✓	✓	✓
Sign Change (+/-)	✓	✓	✓	✓
Correction Key	✓	✓	✓	✓
Grand Total (GT)	✓	✓	✓	×
Mark-up/-down (MU)	✓	×	✓	✓
Average Calculation	×	✓	✓	×
Item Counter	✓	✓	✓	✓
Resume Function	×	×	×	✓
Decimal Setting	F, 6, 3, 2, 1, 0	F, 3, 2, 0, A	F, 6, 3, 2, 1, 0, A	F, 5, 4, 3, 2, 1, 0, A
Round Up/Down	✓	✓	✓	✓
Print				
Printing Colours	Black, Red	Black, Red	Black, Red	Black, Red
Printing Speed	3 Lines/sec.	2 Lines/sec.	4.3 Lines/sec.	4.3 Lines/sec.
Paperroll (Size)	Standard (58 × 80 mm)	Standard (58 × 80 mm)	Standard (58 × 80 mm)	Standard (58 × 80 mm)
Ink Ribbon	×	×	✓	✓
Ink Roller	EA-772R	EA-772R	×	×



Sharp Calculators are represented in Europe by the MORAVIA Group.
For further information please contact us through the contact or support section
or visit www.sharp-calculators.com