




Scientific Calculator / Wissenschaftlicher Rechner /  
Calculatrice scientifique / Calculadora científica /  
Calcolatrice scientifica / Wetenschappelijke calculator /  
Matematikregner / Funktiolaskin /  
Vetenskaplig räknare / Calculadora científica /  
Επιστημονική υπολογιστική μηχανή

- E** Calculation Examples
- D** Beispiele für Berechnungen
- F** Exemples de calcul
- ES** Ejemplos de cálculo
- I** Esempi di calcolo
- NL** Rekenvoorbeelden
- DA** Regneeksempler
- FI** Laskentaesimerkkejä
- SE** Beräkningsexempel
- PT** Exemplos de cálculos
- ΕΛ** παραδείγματα υπολογισμών






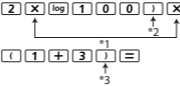
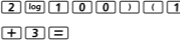
**EX.1** To select the number of digit display result in Fix, Sci, Norm / Auswählen der Anzahl Zeichen in der Ergebnisanzeige in den Modi Fix/Fixiert, Sci/Wissenschaftlich und Norm/Normal / Pour sélectionner le nombre de chiffres affichés dans le résultat en mode Fix, Sci, Norm / Para seleccionar el número de resultados de la pantalla de dígitos en Fix, Sci, Norm / Per selezionare il numero dei risultati visualizzati sul display in Fix, Sci, Norm / Als u het aantal weergavecijferresultaten voor Fix, Sci, Norm wilt selecteren / Auswählen der Anzahl Zeichen in der Ergebnisanzeige in den Modi Fix/Fixiert, Sci/Wissenschaftlich und Norm/Normal / Fix-, Sci- tai Norm-lukuna esitettävien tulosten numeroiden lukumäärän valitseminen / Så väljer du antalet siffror som visas i resultatet för Fix, Sci, Norm / Para seleccionar o número de dígitos dos resultados apresentado em Fix, Sci, Norm / Για να επιλέξετε τον αριθμό των ψηφίων που θα εμφανίζονται στο αποτέλεσμα για Fix, Sci, Norm

LINE MODE :

Example in Line mode 	Key in operation 	Display 
220 ÷ 7 = 31.42857143	220 <input type="text" value="÷"/> 7 <input type="text" value="="/>	220 ÷ 7 31.42857143
FIX 4	<input type="text" value="Shift"/> <input type="text" value="SET-UP"/> 6 4	220 ÷ 7 31.4286
FIX 2	<input type="text" value="Shift"/> <input type="text" value="SET-UP"/> 6 2	220 ÷ 7 31.43
SCI 5	<input type="text" value="Shift"/> <input type="text" value="SET-UP"/> 7 5	220 ÷ 7 3.1429x10 <sup>1</sup>
SCI 4	<input type="text" value="Shift"/> <input type="text" value="SET-UP"/> 7 4	220 ÷ 7 3.143x10 <sup>1</sup>
1÷1000=0.001 (Norm 1)	<input type="text" value="Shift"/> <input type="text" value="SET-UP"/> 8 1 1 <input type="text" value="÷"/> 1000 <input type="text" value="="/>	1 ÷ 1000 1x10 <sup>-3</sup>
Norm 2	<input type="text" value="Shift"/> <input type="text" value="SET-UP"/> 8 2	1 ÷ 1000 0.001
















**EX.2** Omitting the multiplication sign and final closed Parenthesis / Weglassen des Multiplikationszeichens und der schließenden Klammer / Omettez le signe de multiplication et la parenthèse fermante finale / Omita el signo de multiplicación y el paréntesis de cierre final / Omettere il segno di moltiplicazione e la parentesi chiusa / Laat het vermenigvuldigingsteken en haakje sluiten weg / Udeladelse af multiplikationstegn og sidste slutparentes / Jätä pois kertomerkki ja jälkimmäinen sulkumerkki / Utelämna multiplikationstecknet och sista avslutande parentes / Omitir o sinal de multiplicação e o parêntesis de fecho final / Παραλείψτε το σύμβολο πολλαπλασιασμού και την τελική παρένθεση κλεισίματος

**MATHS MODE :**  Shift  SET-UP  1







Example in Maths mode 	Key in operation 	Display 
$2 \times \log 100 \times (1+3)$ = 16 Including <input type="checkbox"/> *1, <input type="checkbox"/> *2, <input type="checkbox"/> *3	 <p>2 <input type="checkbox"/> x <input type="checkbox"/> log <input type="checkbox"/> 1 <input type="checkbox"/> 0 <input type="checkbox"/> 0 <input type="checkbox"/> ) <input type="checkbox"/> x</p> <p>( <input type="checkbox"/> 1 <input type="checkbox"/> + <input type="checkbox"/> 3 <input type="checkbox"/> ) <input type="checkbox"/> =</p>	$2 \times \log(100) \times (1+3)$  16
Omitting <input type="checkbox"/> *1, Omitting <input type="checkbox"/> *3	 <p>2 <input type="checkbox"/> log <input type="checkbox"/> 1 <input type="checkbox"/> 0 <input type="checkbox"/> 0 <input type="checkbox"/> ) ( <input type="checkbox"/> 1</p> <p>+ <input type="checkbox"/> 3 <input type="checkbox"/> =</p>	$2 \log(100)(1+3)$  16

**EX.3** 1234567 [+] 889900 in Replacing, Deleting and Insertion / 1234567 [+] 889900 Ersetzen, Löschen und Widerrufen / 1234567 [+] 889900 Remplacement, Suppression et Insertion / 1234567 [+] 889900 Remplazar, Eliminación y Inserción / 1234567 [+] 889900 Sostituzione, Eliminazione e Inserimento / 1234567 [+] 889900 Vervangen, Verwijderen en Invoegen / 1234567 [+] 889900 Indtastning, Sletning og Indsætning / 1234567 [+] 889900 Vaihtaminen, Poisto ja Väliin lisääminen / 1234567 [+] 889900 Inmatning, Radera och Infoga / 1234567 [+] 889900 Substituir, Eliminar e Inserir / 1234567 [+] 889900 Αντικατάσταση, Διαγραφή και Εισαγωγή



- E** (3.1) Replace an entry (1234567 → 1234560)  
**D** (3.1) Ersetzen eines Eintrags (1234567 → 1234560)  
**F** (3.1) Remplacement d'une entrée (1234567 → 1234560)  
**ES** (3.1) Remplazar una entrada (1234567 → 1234560)  
**I** (3.1) Sostituzione di un dato inserito (1234567 → 1234560)  
**NL** (3.1) Een invoer vervangen (1234567 → 1234560)  
**DA** (3.1) Ændring af indtastning (1234567 → 1234560)  
**FI** (3.1) Syöttöarvon vaihtaminen (1234567 → 1234560)  
**SE** (3.1) Ersätta en inmatning (1234567 → 1234560)  
**PT** (3.1) Substituir uma entrada (1234567 → 1234560)  
**ΕΛ** (3.1) Αντικατάσταση καταχώρησης (1234567 → 1234560)

Mode Setting 	Key In operation 	Display (input Line only) 
<b>Method 1:</b> Line/Maths mode - Insert mode	1234567  889900  7 times  	1234567 +889900  1234560 +889900
<b>Method 2:</b> Line mode - Overwrite mode	   1234567  889900  	1234567+889900_
	 8 times 	1234567+889900 1234560+889900

- E** (3.2) Deletion (1234567 → 134567)
- D** (3.2) Löschen (1234567 → 1234560)
- F** (3.2) Suppression (1234567 → 1234560)
- ES** (3.2) Eliminación (1234567 → 1234560)
- I** (3.2) Eliminazione (1234567 → 1234560)
- NL** (3.2) Verwijderen (1234567 → 1234560)
- DA** (3.2) Sletning (1234567 → 1234560)
- FI** (3.2) Poisto (1234567 → 1234560)
- SE** (3.2) Radera (1234567 → 1234560)
- PT** (3.2) Eliminar (1234567 → 1234560)
- ΕΛ** (3.2) Διαγραφή (1234567 → 1234560)








<b>Method 1:</b> Line/Maths	 12times	12 34567+889900
mode - Insert mode		134567+889900
<b>Method 2:</b> Line mode -	Shift  Insert 	1234567+889900_
Overwrite mode	 13times	1 <u>2</u> 34567+889900
		1 <u>3</u> 4567+889900

- E** (3.3) Insertion (1234567 → 134567)
- D** (3.3) Einfügen (1234567 → 1234560)
- F** (3.3) Insertion (1234567 → 1234560)
- ES** (3.3) Inserción (1234567 → 1234560)
- I** (3.3) Inserimento (1234567 → 1234560)
- NL** (3.3) Invoegen (1234567 → 1234560)
- DA** (3.3) Indsætning (1234567 → 1234560)
- FI** (3.3) lisääminen (1234567 → 1234560)
- SE** (3.3) Infoga (1234567 → 1234560)
- PT** (3.3) Inserir (1234567 → 1234560)
- ΕΛ** (3.3) Εισαγωγή (1234567 → 1234560)

Line/Maths mode -	 6times	1234567+ 889900
Insert mode		1234567+2 889900













**EX.4** Inputting and Display result in Maths Mode / Eingabe- und Ergebnisanzeige im mathematischen Modus / Entrée et affichage des résultats en mode Maths / Resultado de pantalla y entrada en el modo de matemáticas / Input di dati e visualizzazione dei risultati in modalità Matematica / Invoer- en weergaveresultaten in de modus Wiskundig / Indtastning og resultatvisning i matematikstatus / Syöttäminen ja tulosten esittäminen Maths-tilassa / Inmatning och visade resultat i matematikläge / Introdução e visualização de resultados no modo Matemática / Καταχώριση και εμφάνιση αποτελέσματος σε λειτουργία μαθηματικών

MATHS MODE :   **1**

Example in Maths mode 	Key in operation 	Display 
$\left  \sqrt{3} - \frac{2}{\sqrt{2}} \right $	<b>Abs</b>  <b>3</b>  <b>-</b> <b>2</b>   <b>2</b> <b>=</b>	$\left  \sqrt{3} - \frac{2}{\sqrt{2}} \right $ $\sqrt{3} - \sqrt{2}$




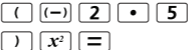

**EX.5** Order of Operation / Reihenfolge der Operationen / Ordre des opérations / Orden de las operaciones / Sequenza delle operazioni / Bewerkingsvolgorde / Rækkefølge af handlinger / Laskutoimitusten Järjestys / Operationernas ordningsföljd / Ordem das operações / Σειρά πράξεων

MATHS MODE :   **1**

Example in Maths mode 	Key in operation 	Display 
$1 \div 2 \pi$	<b>1</b>  <b>2</b>   <b>=</b>	$1 \div 2 \pi$ 0.1591549431
2 store into A $1 \div 2A = \frac{1}{4}$	<b>2</b>    <b>1</b>  <b>2</b>   <b>=</b>	$1 \div 2A$ $\frac{1}{4}$

**EX.6** Arithmetic Calculations / Arithmetische Berechnungen / Calculs arithmétiques / Cálculos aritméticos / Calcoli aritmetici / Rekenkundige bewerkingen / Aritmetsike beregninger / Aritmeettiset laskut / Aritmetiska beräkningar / Cálculos aritméticos / Αριθμητικοί υπολογισμοί




















MATHS MODE :   **1**

Example in Maths mode 	Key in operation 	Display 
(-2.5) <sup>2</sup>		(-2.5) <sup>2</sup> $\frac{25}{4}$
(4 x 10 <sup>75</sup> )(-2 x 10 <sup>-79</sup> )		4 <sub>E</sub> 75x-2 <sub>E</sub> -79 $-\frac{1}{1250}$

**EX.7 Memory Calculations / Speicherrechnungen /**  
**Calculs de mémoire / Cálculos de memoria / Calcoli con**  
**la memoria / Geheugenberekeningen /**  
**Speicherrechnungen / Laskeminen muistin avulla /**  
**Minnesberäkningar / Cálculos de memória /**  
**Υπολογισμοί μνήμης**

- E** 23 + 7 (Store A), calculate 2xsin (memory A), and clear memory A.
- D** 23 +7 A (A speichern), 2sinA berechnen und Speicher A leeren
- F** 23 +7 A (Store A), calcul de 2sinA et effacement de la mémoire A
- ES** 23 +7 A (almacenar A), calcular 2sinA y borrar memoria A
- I** 23 +7 A (Store A), calcola 2sinA e cancella la memoria A
- NL** 23 +7 A (sla A op), bereken 2sinA en wis geheugen A
- DA** 23 +7 A (A speichern), 2sinA berechnen und Speicher A leeren
- FI** 23 +7 A (tallenna A), laske 2 sin A ja tyhjennä muisti A
- SE** 23 +7 A (lagra A), beräkna 2sinA och rensa minne A
- PT** 23 +7 A (Store A), calcular 2sinA e limpar memória A
- EA** 23 + 7A (Store A), υπολογισμός 2sinA και διαγραφή της μνήμης A




**MATHS MODE :**   **1**

Example in Maths mode 	Key in operation 	Display 
23 + 7 → A	      	23+7 → A 30
2 x sin A = 1	    	2sin(A) 1
Clear memory	   	0 → A 0























**EX.8** Independent Memory, Answer Memory /  
 Unabhängiger Speicher, Antwortspeicher / Mémoire  
 Indépendante, Mémoire réponse / Memoria  
 independiente, Memoria de respuesta / Memoria  
 indipendente, Memoria di risposta / Onafhankelijk  
 geheugen, Antwoordgeheugen / Uafhængig  
 hukommelse, Svarhukommelse / Itsenäinen muisti,  
 Vastausmuisti / Oberoende minne, Svartsminne /  
 Memória Independente, Memória de respostas /  
 Ανεξάρτητη μνήμη, Μνήμη απάντησης

MATHS MODE :  Shift  SET-UP  1

Example in Maths mode 	Key in operation 	Display 
123 + 456 → M+, Ans <sup>2</sup> = 335,241	<input type="checkbox"/> 1 <input type="checkbox"/> 2 <input type="checkbox"/> 3 <input type="checkbox"/> + <input type="checkbox"/> 4 <input type="checkbox"/> 5 <input type="checkbox"/> 6 <input type="checkbox"/> M+ <input type="checkbox"/> x <sup>2</sup> <input type="checkbox"/> =	Ans <sup>2</sup>  335241
789900 – Ans = 454,659	<input type="checkbox"/> 7 <input type="checkbox"/> 8 <input type="checkbox"/> 9 <input type="checkbox"/> 9 <input type="checkbox"/> 0 <input type="checkbox"/> 0 <input type="checkbox"/> – <input type="checkbox"/> Ans <input type="checkbox"/> =	789900-Ans  454659





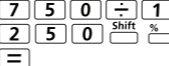
**EX.9** Fraction Calculation, Fraction ↔ Decimal point conversion / Bruchrechnungen, Bruch- ↔ Dezimalpunktumwandlung / Calculs de fractions, Conversion entre fraction et forme décimale / Cálculos de fracciones, Conversión de fracción ↔ punto decimal / Calcoli frazionari, Conversione da frazione a valore decimale / Berekeningen met breuken, Breuk ↔ Decimale punt conversie / Brøkregning, Bruch- ↔ Dezimalpunktumwandlung / Murtolukulaskut, Muuntaminen: murtoluku ↔ desimaalierotin / Båkberäkningar, Omvandling bråk ↔ decimalkomma / Cálculos fraccionais, Conversão fracção ↔ vírgula decimal / Κλασματικοί Υπολογισμοί, Μετατροπή κλάσματος ↔ υποδιαστολής

MATHS MODE :   

Example in Maths mode 	Key in operation 	Display 
$1\frac{1}{2} + \frac{5}{6} = \frac{7}{3}$ in Maths mode	  <i>a b/c</i>         	$1\frac{1}{2} + \frac{5}{6}$  $\frac{7}{3}$
$\frac{7}{3} \leftrightarrow 2.333333333$ (Fraction ↔ Decimal)		$1\frac{1}{2} + \frac{5}{6}$  2.333333333
$2.333333333 \leftrightarrow 2\frac{1}{3}$ (Decimal ↔ Mixed Fraction)	 <i>a b/c ← d/c</i> 	$1\frac{1}{2} + \frac{5}{6}$  $2\frac{1}{3}$





























**EX.10** Percentage Calculations / Klammerrechnungen  
 / Calculs avec parenthèses / Cálculos con paréntesis /  
 Calcoli con parentesi / Berekeningen tussen haakjes /  
 Regning med parenteser / Sulkeissa olevien lukujen  
 laskutoimitukset / Parentesberäkningar / Cálculos de  
 paréntesis / Υπολογισμοί Ποσοστών

**MATHS MODE :**  Shift  SET-UP  1

Example in Maths mode 	Key in operation 	Display 
To calculate 25% of 820 (Maths mode)		820x25%  205
The percentage of 750 against 1250 (Maths mode)		750÷1250%  60
















**EX.11 Degree-Minutes-Seconds Calculations /**  
**Grad-Minuten-Sekunden / Calculs**  
**Degrés-Minutes-Secondes / Cálculos con**  
**Grados-Minutos-Segundos / Calcoli con**  
**Gradi/minuti/secondi / Graden-minuten-seconden /**  
**Grader-minutter-sekunder / Asteet-minuutit-sekunnit /**  
**Grader-Minuter-Sekunder / Graus-Minutos-Segundos /**  
**Μοίρες-Λεπτά-Δευτερόλεπτα**

**MATHS MODE :**   **1**

<b>Example in Maths mode</b> 	<b>Key in operation</b> 	<b>Display</b> 
$86^{\circ}37'34.2'' \div 0.7 =$ $123^{\circ}45'6''$ (Maths mode)	               	$86^{\circ}37' 34.2'' \div 0.7$    $123^{\circ}45'6''$
$123^{\circ}45'6'' \rightarrow 123.7516667$ (Maths mode)		$86^{\circ}37' 34.2'' \div 0.7$ $123.7516667$
$2.3456 \rightarrow 2^{\circ}20'44.16''$ (Maths mode)	       	$2.3456$  $2^{\circ}20'44.16''$




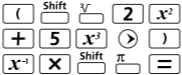

**EX.12 Multi-statements / Mehrachanweisungen / Instructions multiples / Instrucciones múltiples / Cmandi multipli / Meervoudige statements / Samling af flere udtryk / Moninkertaiset lauseet / Fler-påståenden / Instruções múltiplas / Πολλαπλές παραστάσεις**

**MATHS MODE :**   

<b>Example in Maths mode</b> 	<b>Key in operation</b> 	<b>Display</b> 
1x12=12 2+25=27 using a multi-statement in Maths mode	          	1x12:2+25   1x12      ▲ Disp <span style="float: right;">12</span>  2+25      ▲ <span style="float: right;">27</span>
Replay the previous calculation history 1 x 12 = 12		1x12      ▼ <span style="float: right;">12</span>











**EX.13** Square, Root, Cube, Cube Root, Power, Power Root, Reciprocal and Pi / Quadrat, Wurzel, Kubikwurzel, Potenz, Potenzwurzel, Kehrwert und Pi / Carré, racine carrée, racline cubique, puissance, racine, réciproque et Pi / Cuadrado, raiz, cubo, raiz cúbica, potencia, raiz de potencia, inversa y Pi / Quadrato, Radice, Cubo, Radice del cubo, Potenza, Radice Della potenza, Reciproco e Pi / Kwadraat, vierkantwortel, derdemacht, derdemachtswortel, machtsverheffen, worteltrekken, reciproque waarden en pi / Kvadrat, rod, kublk, kublkrod, potensopløftning, potensopløftning/rod, reciprokværði og Pi / Nellö, neliöjuuri, kuutio, kuutiojuuri, potenssi, käänteisluku ja pii / Kvadrat, rot, kub, kubikrot, exponent, exponentrot, inverterat värde och pi / Quadrado, raiz, cubo, raiz cúbica, potência, reciproco e Pi / Τετράγωνο, Ρίζα, Κυβική Ρίζα, Δύναμη, Ρίζα Δύναμης, Αντίστροφο Κλάσμα και π

MATHS MODE :   **1**



Example in Maths mode 	Key in operation 	Display 
$(\sqrt[3]{2^2 + 5^3})^{-1} \times \pi$ = 0.6217559776		$(\sqrt[3]{2^2 + 5^3})^{-1} \times \pi$ 0.6217559776
$(\sqrt[3]{2^6} + \sqrt[5]{243})$ = 7		$(\sqrt[3]{2^6} + \sqrt[5]{243})$ 7











**EX.14** Logarithm, Natural logarithm, Antilogarithm and Logab / Logarithmus, Natürlicher Logarithmus, Antilogarithmus und Logab / Logarithme, logarithme naturel, antilogarithme et logab / Logaritmo, logarithmo natural, antilogaritmo y Logab / Logaritmo, Logaritmo naturale, Antilogaritmo e Logab / Logaritme, natuurlijke logaritme, antilogaritme en logab / Logaritme, naturlig logaritme, antilogaritme og logab / Logaritmi, luonnollinen logaritmi, antilogaritmi ja logab / Logaritm, naturlig logaritm, antilogaritm och lagab / Logaritmos, logarithmo natural, antilogaritmo e logab / Λογάριθμος, Φυσικός Λογάριθμος, Αντιλογάριθμος και Logab

MATHS MODE :   **1**

<b>Example in Maths mode</b> 	<b>Key in operation</b> 	<b>Display</b> 
$e^{-3} + 10^{1.2} + \ln 3 =$ 16.99733128	Shift  (-) <b>3</b>  + Shift  <b>1</b> • <b>2</b>  + ln <b>3</b> =	$e^{-3} + 10^{1.2} + \ln(3)$   16.99733128
$\log_3 81 - \log 1 = 4$	 <b>3</b>  <b>8</b> <b>1</b>  - log <b>1</b> =	$\log_3(81) - \log(1)$   4






**EX.15** Angle Unit Conversion / Umrechnen der Winkeleinheit / Conversion des unités d'angle / Conversión de unidades angulares / Conversione di unità angolari / Conversie van hoekeenheid / Beispiel 15 Konverteringer af vinkelmál / Kulmayksikkömuunnos / Vinkelenhetsomvandling / Conversão da unidade de medição angular / Μετατροπή Μονάδας Μέτρησης Γωνίας

MATHS MODE :   **1**

Example in Maths mode 	Key in operation 	Display 
Convert 180 degree into radian and gradient ( $180^\circ = \overset{\text{rad}}{\text{r}} =$ $200^{\text{Grad}}$ )	  <b>4</b> <b>1</b> <b>8</b>    <b>1</b> <b>=</b>	180° <b>R</b>  $\pi$
	  <b>5</b> <b>=</b>	180°  200

**EX.16** Trigonometry Calculations / Trigonometrische Berechnungen / Calculs trigonométriques / Cálculos de trigonometria / Calcoli trigonometrici / Trigonometrische berekeningen / Trigonometriberegninger / Trigonometriset laskut / Trigonometriska beräkningar / Cálculos trigonométricos / Τριγωνομετρικοί Υπολογισμοί




MATHS MODE :   **1**

Example in Maths mode 	Key in operation 	Display 
Degree Mode	  <b>3</b>	<b>D</b>
$\text{Sin } 60 = \frac{\sqrt{3}}{2}$	<b>sin</b> <b>6</b> <b>0</b> <b>=</b>	sin(60) $\frac{\sqrt{3}}{2}$
$\frac{1}{\text{Sin}45^\circ} = \text{Cosec } 45^\circ = \sqrt{2}$	<b>sin</b> <b>4</b> <b>5</b> <b>)</b> <b>x<sup>-1</sup></b> <b>=</b>	sin(45) <sup>-1</sup>  $\sqrt{2}$






**EX.17** Hyperbolic Calculations / Hyperbelrechnungen / Calcul d'hyperboles / Cálculos hiperbólicos / Calcoli iperbolici / Hyperbolische berekeningen / Hyperbolske udregninger / Hyperboliset laskutoimitukset / Hyperboliska beräkningar / Cálculos hiperbólicos / Υπερβολικοί υπολογισμοί

MATHS MODE :  Shift  SET-UP  1

Example in Maths mode 	Key in operation 	Display 
$\sinh 2.5 - \cosh 2.5$ $= -0.08208499862$	hyp <input type="checkbox"/> 1 <input type="checkbox"/> 2 <input type="checkbox"/> • <input type="checkbox"/> 5 <input type="checkbox"/> ) <input type="checkbox"/> - <input type="checkbox"/> hyp <input type="checkbox"/> 2 <input type="checkbox"/> 2 <input type="checkbox"/> • <input type="checkbox"/> 5 <input type="checkbox"/> ) <input type="checkbox"/> =	$\sinh(2.5) - \cosh(\triangleright)$ $-0.08208499862$
$\cosh^{-1}45$ $= 4.499686191$	hyp <input type="checkbox"/> 5 <input type="checkbox"/> 4 <input type="checkbox"/> 5 <input type="checkbox"/> =	$\cosh^{-1}(45)$ $4.499686191$







**EX.18** Permutation, Combination, and Factorials / Permutation, Kombination, Fakultät / Permutation, combinaison, factorielle / Permutación, combinación, factoriales / Permutazione, Combinazione, Fattoriali / Permutatie, combinatie, faculteiten / Permutation, kombination, fakulteter / Permutaatio, kombinaatio, kertoma / Permutationer, kombinationer, uttryck i fakulteter / Permutação combinação, factoriais / Μετάθεση, Συνδυασμός και Παραγοντικά

MATHS MODE :  Shift  SET-UP  1

Example in Maths mode 	Key in operation 	Display 
${}_{10}P_3 = 720$	<input type="checkbox"/> 1 <input type="checkbox"/> 0 <input type="checkbox"/> Shift <input type="checkbox"/> nPr <input type="checkbox"/> 3 <input type="checkbox"/> =	${}_{10}P_3$ $720$
${}^5C_2 = 10$	<input type="checkbox"/> 5 <input type="checkbox"/> Shift <input type="checkbox"/> nCr <input type="checkbox"/> 2 <input type="checkbox"/> =	${}^5C_2$ $10$
$5! = 120$	<input type="checkbox"/> 5 <input type="checkbox"/> Shift <input type="checkbox"/> x! <input type="checkbox"/> =	$5!$ $120$

**EX.19** Random Number Generation / Generieren von Zufaliszahlen / Génération de nombres aléatoires / Generación de números aleatorios / Generazione di numeri casuali / Willekeurige getallen genereren / Generering af tiifældige tal / Satunnaislukujen generointi / Generering av slumpital / Geração de número aleatório / Δημιουργία Τυχαίου Αριθμού




MATHS MODE :   

<b>Example in Maths mode</b> 	<b>Key in operation</b> 	<b>Display</b> 
Generate a random number between 0.000 & 0.999	Shift  =	Rand  $\frac{139}{1000}$
Generate an integer from range of 1 to 100	Alpha  1 Shift  1 0 0 =	i~Rand(1,100  33



**EX.21** Quotient and Remainder Calculations / Quotient & Rest / Calcul quotient et reste / Cálculo de cociente y resto / Calcoli quoziente e resto / Quotiënt & restant / Quotient og Remainder / Osamäärä ja jäännös / Kvot & rest / Quociente e Resto / Υπολογισμός Πηλίκου & Υπόλοιπο

LINE MODE :  Shift  SET-UP  2

Example in Maths mode 	Key in operation 	Display 
$35 \div 10 = 3 \times 10 + 5$ Q=3 R=5 (Line mode)	Q...r <input type="text" value="3"/> <input type="text" value="5"/> <input type="text" value="Shift"/> ' <input type="text" value="1"/> <input type="text" value="0"/> <input type="text" value="="/>	Q...r(35, 10 Q= 3 R= 5
Quotient value (Q) + 3 = 6	<input type="text" value="+"/> <input type="text" value="3"/> <input type="text" value="="/>	Ans+3 6
Recall Quotient value (Q)	<input type="text" value="RCL"/> <input type="text" value="C"/>	C 3
Recall Remainder value (r)	<input type="text" value="RCL"/> <input type="text" value="D"/>	D 5

**EX.22** Coordinate Conversion /

Koordinatenumrechnungen / Conversions de

coordonnées / Conversión de coordenadas /




Conversione coordinata / Conversie van coördinaten /

Koordinatkonvertering / Koordinaattimuutokset /




Koordinatomvandling / Conversão de coordenadas /

Μετατροπή συντεταγμένων

MATHS MODE :  Shift  SET-UP  1




Example in Maths mode 	Key in operation 	Display 
With rectangular coordinate ( $x=1, y=\sqrt{3}$ ). Find Polar coordinate ( $r, \theta$ ) at degree mode	Shift <input type="text"/> Pol <input type="text"/> 1 Shift <input type="text"/> , <input type="text"/> <input type="text"/> 3 <input type="text"/> =	Pol(1, $\sqrt{3}$  $r=2, \theta=60$
	RCL <input type="text"/> X	X  2
	RCL <input type="text"/> Y	Y  60

LINE MODE :  Shift  SET-UP  2

Example in Line mode 	Key in operation 	Display 
With Polar coordinate ( $r=2, \theta=60^\circ$ ). Find Rectangular coordinate ( $x, y$ ) at degree mode	Shift <input type="text"/> Rec <input type="text"/> 2 Shift <input type="text"/> , <input type="text"/> 6 <input type="text"/> 0 <input type="text"/> =	Rec(2, 60 X= 1 Y= 1.732050808
	RCL <input type="text"/> X	X  1
	RCL <input type="text"/> Y	Y  1.732050808




**EX.23** Absolute Value Calculation / Berechnungen von absolutem Werten / Calcul du module / Cálculo del valor absoluto / Calcolo di valore assoluto / Berekening met absolute waarden / Beregning af absolutte værdier / Itseisarvolaskut / Beräkning av absolutvärde / Cálculo do Valor Absoluto / Υπολογισμός Απόλυτης Τιμής

MATHS MODE :   **1**

Example in Maths mode 	Key in operation 	Display 
$ \sin(60 - 5) \times (-\pi) $ =2.573442045	<b>Abs</b> <b>sin</b> <b>6</b> <b>0</b> <b>-</b> <b>5</b> <b>)</b> <b>x</b> <b>(</b> <b>(-)</b> <b>Shift</b> <b>π</b> <b>)</b> <b>=</b>	$ \sin(60 - 5) \times (-\pi) $  2.573442045




**EX.24** Engineering Notation / Technische Darstellung / Notation d'ingénierie / Notación de ingeniería / Notazione ingegneristica / ENG-notatie (ingenieur) / Metrisk notation / Tekninen esitysmuoto / Teknisk notation / Notação de engenharia / Δημιουργία παράστασης

LINE MODE :   **2**




Example in Line mode 	Key in operation 	Display 
$1 \div 200 = 5 \times 10^{-3}$ (In Line Mode)	<b>1</b> <b>÷</b> <b>2</b> <b>0</b> <b>0</b> <b>=</b>	$1 \div 200$  $5 \times 10^{-3}$
	<b>ENG</b> <b>ENG</b>	$1 \div 200$  $5000 \times 10^{-6}$
	<b>Shift</b> <b>←ENG</b>	$1 \div 200$  $5 \times 10^{-3}$




**EX.25** Display Values Exchange / Umschalten der angezeigten Werte / Échange de valeurs d'affichage / Cambio de valores de pantalla / Inversione dei valori di visualizzazione / Wisseling displaywaarden / Skift visningsformat / Esitysmuodon vaihtaminen / Växla visningsvärden / Alternar valores de visualização / Εναλλαγή εμφάνισης τιμών

LINE MODE :  Shift  SET-UP  2

Example in Line mode 	Key in operation 	Display 
$\frac{2}{3} + 2 = \frac{8}{3} = 2.666666667$ (In Line Mode)	<input type="checkbox"/> 2 <input type="checkbox"/> d/c <input type="checkbox"/> 3 <input type="checkbox"/> + <input type="checkbox"/> 2 <input type="checkbox"/> =	2_ 3+2  8_ 3
	<input type="checkbox"/> F↔D	2_ 3+2  2.666666667

MATHS MODE :  Shift  SET-UP  1

Example in Maths mode 	Key in operation 	Display 
$\frac{2}{3} + 2 = \frac{8}{3} = 2.666666667$ (In Maths Mode)	<input type="checkbox"/> 2 <input type="checkbox"/> d/c <input type="checkbox"/> 3 <input type="checkbox"/> > <input type="checkbox"/> + <input type="checkbox"/> 2 <input type="checkbox"/> =	$\frac{1}{2} + 2$  $\frac{8}{3}$
	<input type="checkbox"/> F↔D	$\frac{2}{3} + 2$  2.666666667

Example in Maths mode 	Key in operation 	Display 
$\tan 30 = \frac{\sqrt{3}}{3}$ $= 0.5773502692$	<input type="checkbox"/> tan <input type="checkbox"/> 3 <input type="checkbox"/> 0 <input type="checkbox"/> =	$\tan(30)$  $\frac{\sqrt{3}}{3}$
	<input type="checkbox"/> F↔D	$\tan(30)$  0.5773502692
$\pi \div 8 = \frac{1}{8}\pi$ $= 0.3926990817$	<input type="checkbox"/> Shift <input type="checkbox"/> π <input type="checkbox"/> ÷ <input type="checkbox"/> 8 <input type="checkbox"/> =	$\pi \div 8$  $\frac{1}{8}\pi$
	<input type="checkbox"/> F↔D	$\pi \div 8$  0.3926990817

- E** Statistical calculation result in [4] S-SUM, [5] S-VAR, [6] S-PTS, [7] Reg
- D** Résultat de calcul statistique dans [4] S-SUM, [5] S-VAR, [6] S-PTS, [7] Reg
- F** Résultat de calcul statistique dans [4] S-SUM, [5] S-VAR, [6] S-PTS, [7] Reg
- ES** Resultado del cálculo estadístico en [4] SSUM, [5] S-VAR, [6] S-PTS, [7] Reg
- I** Risultato di un calcolo statistico in [4] SSUM, [5] S-VAR, [6] S-PTS, [7] Reg
- NL** Statistische berekening leiden [4] S-SUM, [5] S-VAR, [6] S-PTS, [7] Reg
- DA** Statistiske beregninger resulterer i [4] SSUM, [5] S-VAR, [6] S-PTS, [7] Reg
- FI** Tilastollisen laskennan tuloksena [4] S-SUM, [5] S-VAR, [6] S-PTS, [7] Reg
- SE** Statistisk beräkning leder [4] S-SUM, [5] SVAR, [6] S-PTS, [7] Reg
- PT** Resultado do cálculo estatístico no [4] S-SUM, [5] SVAR, [6] S-PTS, [7] Reg
- EΛ** Στατιστικό αποτέλεσμα υπολογισμού του [4] S-SUM, [5] S-VAR, [6] S-PTS, [7] Reg

STAT sub-menu	STAT Type	Value	Symbol	Operation
S-SUM	1 & 2 variable	Summation of all $x^2$ value	$\sum x^2$	Shift STAT 4 1
		Summation of all x value	$\sum x$	Shift STAT 4 2
	2-variable	Summation of all $y^2$ value	$\sum y^2$	Shift STAT 4 3
		STAT only	Summation of all y value	$\sum y$
	Summation of xy pairs		$\sum xy$	Shift STAT 4 5
	Summation of all $x^3$ value		$\sum x^3$	Shift STAT 4 6
	Summation of all $x^2y$ pairs		$\sum x^2y$	Shift STAT 4 7
	Summation of all $x^4$ pairs		$\sum x^4$	Shift STAT 4 8







STAT sub-menu	STAT Type	Value	Symbol	Operation	
S-VAR	1 & 2 variable	Number of data sample	$n$	Shift STAT <input type="text"/> <input type="text"/> 5 <input type="text"/> 1	
		Mean of the x values	$\bar{x}$	Shift STAT <input type="text"/> <input type="text"/> 5 <input type="text"/> 2	
	STAT	Population standard deviation of x	$x\sigma_n$	Shift STAT <input type="text"/> <input type="text"/> 5 <input type="text"/> 3	
		Sample Standard Deviation of x	$x\sigma_{n-1}$	Shift STAT <input type="text"/> <input type="text"/> 5 <input type="text"/> 4	
	2-variable	Mean of the y values	$\bar{y}$	Shift STAT <input type="text"/> <input type="text"/> 5 <input type="text"/> 5	
		STAT only	Population standard deviation of y	$y\sigma_n$	Shift STAT <input type="text"/> <input type="text"/> 5 <input type="text"/> 6
			Sample standard Deviation of y	$y\sigma_{n-1}$	Shift STAT <input type="text"/> <input type="text"/> 5 <input type="text"/> 7
S-PTS	1 & 2 variable	Minimum value of X	$\min X$	Shift STAT <input type="text"/> <input type="text"/> 6 <input type="text"/> 1	
		Maximum value of X	$\max X$	Shift STAT <input type="text"/> <input type="text"/> 6 <input type="text"/> 2	
Reg	STAT	Minimum value of Y	$\min Y$	Shift STAT <input type="text"/> <input type="text"/> 6 <input type="text"/> 3	
	2-variable	Maximum value of Y	$\max Y$	Shift STAT <input type="text"/> <input type="text"/> 6 <input type="text"/> 4	
	STAT only	Regression coefficient A	$A$	Shift STAT <input type="text"/> <input type="text"/> 7 <input type="text"/> 1	
	For non-Quad	Reg	Regression coefficient B	$B$	Shift STAT <input type="text"/> <input type="text"/> 7 <input type="text"/> 2
			Correlation coefficient r	$r$	Shift STAT <input type="text"/> <input type="text"/> 7 <input type="text"/> 3
			Estimated value of x	$\hat{x}$	Shift STAT <input type="text"/> <input type="text"/> 7 <input type="text"/> 4
			Estimated value of y	$\hat{y}$	Shift STAT <input type="text"/> <input type="text"/> 7 <input type="text"/> 5
Reg	For Quad	Regression coefficient A	$A$	Shift STAT <input type="text"/> <input type="text"/> 7 <input type="text"/> 1	
		Regression coefficient B	$B$	Shift STAT <input type="text"/> <input type="text"/> 7 <input type="text"/> 2	
	Reg only	Regression coefficient C	$C$	Shift STAT <input type="text"/> <input type="text"/> 7 <input type="text"/> 3	
		Estimated value of x1	$\hat{x}_1$	Shift STAT <input type="text"/> <input type="text"/> 7 <input type="text"/> 4	
		Estimated value of x2	$\hat{x}_2$	Shift STAT <input type="text"/> <input type="text"/> 7 <input type="text"/> 5	
		Estimated value of y	$\hat{y}$	Shift STAT <input type="text"/> <input type="text"/> 7 <input type="text"/> 6	

**EX.26 SD type Statistical Calculation / Statistische Berechnung vom Typ SD / Calcul statistique de type SD / Cálculo estadístico de tipo SD / Calcolo statistico di tipo SD / SD-type Statistische Aberekening / Statistikregning med typen SD / SD-typin tilastolaskenta / SD-typ av statistiskt beräkning / Cálculo estatístico do tipo SD: / Στατιστικοί υπολογισμοί SD**

- E** To calculate  $\sum x^2$ ,  $\sum x$ ,  $n$ ,  $\bar{x}$ ,  $x\sigma_n$ ,  $x\sigma_{n-1}$ ,  $\min X$ ,  $\max X$  of data: 75, 85, 90, 77, 79 in SD mode (Freq: OFF)
- D** Berechnen von  $\sum x^2$ ,  $\sum x$ ,  $n$ ,  $\bar{x}$ ,  $x\sigma_n$ ,  $x\sigma_{n-1}$ ,  $\min X$ ,  $\max X$  von Daten: 75, 85, 90, 77, 79 im SD-Modus
- F** Pour calculer les valeurs  $\sum x^2$ ,  $\sum x$ ,  $n$ ,  $\bar{x}$ ,  $x\sigma_n$ ,  $x\sigma_{n-1}$ ,  $\min X$  et  $\max X$  des données : 75, 85, 90, 77, 79 en mode SD
- ES** Para calcular  $\sum x^2$ ,  $\sum x$ ,  $n$ ,  $\bar{x}$ ,  $x\sigma_n$ ,  $x\sigma_{n-1}$ ,  $\min X$ ,  $\max X$  de datos: 75, 85, 90, 77, 79 en el modo SD
- I** Per calcolare i valori  $\sum x^2$ ,  $\sum x$ ,  $n$ ,  $\bar{x}$ ,  $x\sigma_n$ ,  $x\sigma_{n-1}$ ,  $\min X$ ,  $\max X$  dei dati: 75, 85, 90, 77, 79 in modalità SD
- NL** Als u  $\sum x^2$ ,  $\sum x$ ,  $n$ ,  $\bar{x}$ ,  $x\sigma_n$ ,  $x\sigma_{n-1}$ ,  $\min X$ ,  $\max X$  van gegevens wilt berekenen: 75, 85, 90, 77, 79 in SD-modus
- DA** Udregn  $\sum x^2$ ,  $\sum x$ ,  $n$ ,  $\bar{x}$ ,  $x\sigma_n$ ,  $x\sigma_{n-1}$ ,  $\min X$ ,  $\max X$  for data: 75, 85, 90, 77, 79 i SD-status
- FI** Tietojen  $\sum x^2$ ,  $\sum x$ ,  $n$ ,  $\bar{x}$ ,  $x\sigma_n$ ,  $x\sigma_{n-1}$ ,  $\min X$ - ja  $\max X$ -arvojen laskenta: 75, 85, 90, 77 ja 79 SD-tilassa
- SE** Beräkna  $\sum x^2$ ,  $\sum x$ ,  $n$ ,  $\bar{x}$ ,  $x\sigma_n$ ,  $x\sigma_{n-1}$ ,  $\min X$ ,  $\max X$  för data: 75, 85, 90, 77, 79 i SD-läge
- PT** Para calcular  $\sum x^2$ ,  $\sum x$ ,  $n$ ,  $\bar{x}$ ,  $x\sigma_n$ ,  $x\sigma_{n-1}$ ,  $X$  mínimo e  $X$  máximo de dados: 75, 85, 90, 77, 79 em modo SD
- ΕΛ** Για υπολογισμό των τιμών  $\sum x^2$ ,  $\sum x$ ,  $n$ ,  $\bar{x}$ ,  $x\sigma_n$ ,  $x\sigma_{n-1}$ ,  $\min X$ ,  $\max X$  δεδομένων: 75, 85, 90, 77, 79 σε λειτουργία SD

(Freq : OFF)





Key in operation 	Display 
MODE 2	1:SD      2:Lin 3:Quad    4:Log 5:ab EXP   6:ab EXP 7:Pwr     8:Inv
1 (SD)	
7 5 = 8 5 = 9 0 = 7 7 = 7 9 =	
CA Shift STAT 4 1 =	$\Sigma x^2$  33120
CA Shift STAT 4 2 =	$\Sigma x$  406
CA Shift STAT 5 1 =	n  5
CA Shift STAT 5 2 =	$\bar{x}$  81.2
CA Shift STAT 5 3 =	$x\sigma_n$  5.528109984
CA Shift STAT 5 4 =	$x\sigma_{n-1}$  6.180614856

**EX.27 Quadratic Regression type Statistical Calculation / Statistische Berechnung vom Typ Quadratische Regression / Calcul statistique de type régression bicarrée / Cálculo estadístico de tipo regresión cuadrática / Calcolo statistico di tipo regressione quadratica / Kwadratische regressie type statistische berekening: / Statistikregning med typen kvadratisk regression / Kvadraattisen regressiotyyppin tilastolaskenta / Kvadratisk regressionstyp av statistiskt beräkning / Cálculo estadístico do tipo Regressão quadrática / Στατιστικός υπολογισμός δευτεροβάθμιας παλινδρόμησης**

- E** ABC Company investigate the effectiveness of the advertisement expense in coded units, the following data were obtained:
- D** Das Unternehmen ABC untersuchte die Effektivität der Ausgaben für Werbung in kodierten Einheiten und erhielt folgende Daten.
- F** La société ABC a fait une enquête sur l'efficacité de ses dépenses publicitaires en unité codées et a obtenu les données suivantes.
- ES** La empresa ABC investiga la eficacia de los gastos de publicidad en unidades codificadas y obtiene los datos siguientes.
- I** La società ABC ha studiato l'efficacia delle spese pubblicitarie in unità codificate, ottenendo i seguenti dati.
- NL** Het bedrijf ABC heeft de effectiviteit van de reclame-uitgaven onderzocht in gecodeerde eenheden. De volgende gegevens zijn verkregen.
- DA** ABC-firmaet har undersøgt effektiviteten af reklameudgifterne i kodede enheder, og følgende data blev indhentet.
- FI** ABC-yhtiö tutki mainoskustannusten tehokkuutta koodattuina yksikköinä, ja saatiin seuraavat tiedot.
- SE** ABC-företaget undersökte effektiviteten för annonseringsutgifterna i kodade enheter och erhöll följande data.
- PT** A empresa ABC investigou a eficácia das despesas de publicidade em unidades codificadas, tendo sido obtidos os seguintes dados.
- Ελ** Η εταιρεία ABC επένδυσε την αποτελεσματικότητα των δαπανών για τη διαφήμιση σε κωδικοποιημένες μονάδες, όπου αποκτήθηκαν τα παρακάτω δεδομένα:

Advertisement expenses: X	18	35	40	21	19
Effectiveness: y (%)	38	54	59	40	38





- E** Please use the regression to estimate the effectiveness (estimate the value of  $y$ ) if the advertisement expenses  $X=30$ , and estimate the advertisement expenses level (estimate the value of  $X_1, X_2$ ) for effectiveness  $y = 50$ .
- D** Verwenden Sie die Regression, um die Effektivität zu schätzen (Schätzung des Werts von  $y$ ), wenn die Werbekosten  $x=30$ , und die Werbekostenhöhe zu schätzen (Schätzung des Werts von  $X_1, X_2$ ) bei einer Effektivität von  $y = 50$ .
- F** Utilisez la régression pour évaluer l'efficacité (estimation de la valeur  $y$ ) si la publicité dépense  $x=30$  et estimez le niveau de dépense de la publicité (estimation des valeurs  $X_1, X_2$ ) pour une efficacité  $y = 50$
- ES** Utilice la regresión para estimar la efectividad (estimación del valor de  $y$ ) si los gastos de publicidad  $x=30$ , y estime el nivel de gastos de publicidad (estimación del valor de  $X_1, X_2$ ) para la efectividad de  $y = 50$
- I** Utilizzare la regressione per valutare l'efficacia (stima del valore di  $y$ ) se i costi dell'inserzione pubblicitaria  $x=30$  e valutare il livello di spesa per l'inserzione (stima del valore di  $X_1, X_2$ ) per l'efficacia  $y=50$
- NL** Gebruik de regressie om de effectiviteit te schatten (schat de waarde van  $y$ ) als de reclamekosten  $x=30$ , en schat het reclamekostenniveau (schat de waarde van  $X_1, X_2$ ) voor effectiviteit  $y=50$ .
- DA** Brug regressionen til at anslå effektiviteten (anslå værdien af  $y$ ), hvis reklameudgifter  $x=30$ , og anslå niveauet for reklameudgifter (anslå værdien af  $X_1, X_2$ ) for effektiviteten  $y = 50$
- FI** Arvioi tehokkuutta (arvioi  $y$ :n arvo) regression avulla, jos ilmoituskustannukset ovat  $x=30$ , ja arvioi ilmoituskustannusten tehokkuuden taso (arvio  $X_1$ :n ja  $X_2$ :n arvo),  $y = 50$
- SE** Använd regression för att uppskatta effektiviteten (uppskatta värdet av  $y$ ) om annonskostnaden är  $x=30$ , och uppskatta nivån för annonskostnaden (uppskatta värdet för  $X_1, X_2$ ) för effektiviteten  $y = 50$
- PT** Utilize a regressão para estimar a efectividade (estimar o valor de  $y$ ) se as despesas publicitárias forem  $x=30$  e estimar o nível de despesas publicitárias (estimar o valor de  $X_1, X_2$ ) para a efectividade  $y = 50$
- ΕΛ** Χρησιμοποιήστε την παλινδρόμηση για να υπολογίσετε την αποτελεσματικότητα (υπολογισμός της τιμής  $y$ ), εάν τα έξοδα της διαφήμισης είναι  $x=30$  και να υπολογίσετε το επίπεδο εξόδων διαφήμισης (υπολογισμός της τιμής  $X$  αποτελεσματικότητα  $y = 50$ )

Key in operation 	Display 
MODE 2	1:SD      2:Lin 3:Quad    4:Log 5:EXP    6:ab EXP 7:Pwr     8:Inv
3 (Quad)	
1 8 = 3 5 = 4 0 = 2 1 = 1 9 = (v) (r) 3 8 = 5 4 = 5 9 = 4 0 = 3 8 =	
CA 3 0 Shift STAT 7 6 =	30 $\hat{y}$  48.69615715
CA 5 0 Shift STAT 7 4 =	50 $\hat{x}_1$  31.30538226
CA 5 0 Shift STAT 7 5 =	50 $\hat{x}_2$  -167.1096731

**EX.28** Function Table Calculation /

**Funktionstabellenrechenoperationen / Calcul de table de fonctions / Cálculo de tabla de funciones / Calcolo tabella funzione / Functietabelberekening / Udregning af funktionstabel / Funktiotaulukkolaskenta / Funktionstabellberäkning / Cálculo de tabela de funções / Υπολογισμός πίνακα συναρτήσεων**

- E**  $f(x) = x^3 + 3x^2 - 2x$  to generate the function table for the range  $1 \leq x \leq 5$ , incremented in steps of 1.
- D**  $f(x) = x^3 + 3x^2 - 2x$  zum Generieren der Funktionstabelle für den Bereich  $1 \leq x \leq 5$  in Schritten von 1.
- F**  $f(x) = x^3 + 3x^2 - 2x$  afin de générer la table de fonctions pour la plage  $1 \leq x \leq 5$ , incrémentée par étapes de 1.
- ES**  $f(x) = x^3 + 3x^2 - 2x$  para generar la tabla de funciones para el intervalo  $1 \leq x \leq 5$ , incrementado en pasos de 1.
- I**  $f(x) = x^3 + 3x^2 - 2x$  per generare la tabella funzione per l'intervallo  $1 \leq x \leq 5$ , con incrementi di 1.
- NL**  $f(x) = x^3 + 3x^2 - 2x$  om de functietabel te genereren voor bereik  $1 \leq x \leq 5$ , met incrementele stappen van 1.
- DA**  $f(x) = x^3 + 3x^2 - 2x$  for at frembringe funktionstabellen for området  $1 \leq x \leq 5$  med en forøgelse på 1.
- FI**  $f(x) = x^3 + 3x^2 - 2x$  funktiotaulukon luomiseksi alueelle  $1 \leq x \leq 5$ , niin että lisäykset tehdään 1:n askelin.
- SE**  $f(x) = x^3 + 3x^2 - 2x$  för att generera funktionstabellen för området  $1 \leq x \leq 5$ , i steg om 1.
- PT**  $f(x) = x^3 + 3x^2 - 2x$  para gerar a tabela de funções para o intervalo  $1 \leq x \leq 5$ , incrementado em escalas de 1.
- ΕΛ**  $f(x) = x^3 + 3x^2 - 2x$  για δημιουργία του πίνακα συναρτήσεων για εύρος τιμών  $1 \leq x \leq 5$ , με βήματα προσαύξησης 1.

Key in operation 	Display 
<b>MODE</b> <b>3</b>	f(x)=
Alpha X <b>x<sup>3</sup></b> <b>+</b> <b>3</b> Alpha X <b>x<sup>2</sup></b> <b>-</b> <b>2</b> Alpha X	f(x)= X <sup>3</sup> +3X <sup>2</sup> -2X
<b>=</b> <b>1</b> <b>=</b> <b>5</b> <b>=</b> <b>1</b> <b>=</b>	 1
<b>▼</b> <b>▼</b> <b>▼</b> <b>▼</b>	 5

**Calculation Precision, Input Range / Berechnung Präzision, Eingangsbereich / Calcul de précision, plages des valeurs d'entrée / Cálculo de precisión, Rango de entrada / Calcolo di precisione, Rango de entrada / Rekenprecisie, Invoerbereik / Beregning Precision, Inputområde / Laskelma Precision, Syöttöalue / Beräkning Precision, Inmatningsområde / Cálculo de Precisão, Limite de entrada / Υπολογισμός ακριβείας, Περιοχή εισαγωγής**

- E** Number of Digits for Internal Calculation Precision\* 18 digits  
 ±1 at the 10th digit for a single calculation.  
 ±1 at the least significant for exponential display
- Calculation Range ±1 × 10<sup>-99</sup> to ±9.999999999 × 10<sup>99</sup> or 0
- D** Anzahl Ziffern für die interne Berechnung Präzision\* 18 Zeichen beinhalten  
 ±1 an der 10. Stelle bei einer einzelnen Berechnung.  
 ±1 an der letzten signifikanten Stelle bei der Exponentialdarstellung
- Rechenbereich ±1 × 10<sup>-99</sup> bis ±9.999999999 × 10<sup>99</sup> oder 0



<b>F</b>	Nombre de chiffres pour les calculs internes Précision*	18 chiffres  ±1 sur le dixième chiffre pour un calcul unique. ±1 sur le dernier chiffre significatif pour l'affichage exponentiel.
	Plage de calcul	$\pm 1 \times 10^{-99}$ à $\pm 9.999999999 \times 10^{99}$ ou 0
<b>ES</b>	Número de dígitos del cálculo interno Precisión*	18 dígitos  ±1 en el décimo dígito (en cálculos simples) ±1 en el último dígito significativo (en la visualización de exponentes).
	Intervalo de cálculo	$\pm 1 \times 10^{-99}$ to $\pm 9.999999999 \times 10^{99}$ o 0
<b>I</b>	Numero di cifre del calcolo interno Precisione*	18 cifre  ±1 alla 10a cifra per un unico calcolo. ±1 all'ultima cifra significativa in caso di visualizzazione esponenziale.
	Intervallo di calcolo	$\pm 1 \times 10^{-99}$ a $\pm 9.999999999 \times 10^{99}$ o 0
<b>NL</b>	Aantal cijfers van interne berekening Precisie*	18 cijfers bewaren  ±1 bij het tiende cijfer voor één berekening. ±1 bij het laatste significante cijfer voor de exponentiële weergave.
	Berekeningsbereik	$\pm 1 \times 10^{-99}$ tot $\pm 9.999999999 \times 10^{99}$ of 0
<b>DA</b>	Antal cifre i intern udregning Præcision*	18 cifre  ±1 ved det 10. Ciffer for en enkelt beregning. ±1 ved sidste signifikante ciffer ved eksponentiel visning.
	Udregningsområde	$\pm 1 \times 10^{-99}$ til $\pm 9.999999999 \times 10^{99}$ eller 0
<b>FI</b>	Sisäisen laskutoimituksen numeroiden lukumäärä Tarkkuus*	18 numeroa  ±1 yksittäisessä laskussa 10. Numerolla. ±1 viimeisessä merkitsevässä numerossa eksponentiaalinäytössä.
	Laskenta-alue	$\pm 1 \times 10^{-99}$ to $\pm 9.999999999 \times 10^{99}$ tai 0

<b>SE</b>	Antal siffror i intern beräkning Precision*  Beräkningsområde	18 siffror  $\pm 1$ vid den 10:e siffran för en enstaka beräkning. $\pm 1$ är den sista signifikanta siffran för exponentiell visning. $\pm 1 \times 10^{-99}$ to $\pm 9.999999999 \times 10^{99}$ eller 0
<b>PT</b>	Número de dígitos de cálculo interno Precisão*  Intervalo de cálculo	18 dígitos  $\pm 1$ no 10º dígito para um cálculo único. $\pm 1$ no último dígito significativo para o ecrã. $\pm 1 \times 10^{-99}$ a $\pm 9.999999999 \times 10^{99}$ ou 0
<b>ΕΛ</b>	Αριθμός ψηφίων για εσωτερικό υπολογισμό Ακρίβεια*  Εύρος τιμών υπολογισμού	18 ψηφίο  1 στο 10ο ψηφίο για έναν υπολογισμό. 1 στο τελευταίο σημαντικό ψηφίο, για τηνεκθετική προβολή. $1 \times 10^{-99}$ έως $9.999999999 \times 10^{99}$

**Input Ranges / Eingangsbereich / Plages des valeurs d'entrée / Rango de entrada / Rango de entrada / Invoerbereik / Inputområde / Syöttöalue / Inmatningsområde / Limite de entrada / Περιοχή εισαγωγής**

Functions	Input Range	
sinx	DEG	$0 \leq  x  < 9 \times 10^9$
	RAD	$0 \leq  x  < 157\,079\,632.7$
	GRA	$0 \leq  x  < 1 \times 10^{10}$
cosx	DEG	$0 \leq  x  < 9 \times 10^9$
	RAD	$0 \leq  x  < 157\,079\,632.7$
	GRA	$0 \leq  x  < 1 \times 10^{10}$
tanx	DEG	Same as sinx, except when $ x  = (2n-1) \times 90$
	RAD	Same as sinx, except when $ x  = (2n-1) \times \pi/2$
	GRA	Same as sinx, except when $ x  = (2n-1) \times 100$

Functions	Input Range
$\sin^{-1}x$	$0 \leq  x  \leq 1$
$\cos^{-1}x$	
$\tan^{-1}x$	$0 \leq  x  \leq 9.999\,999\,999 \times 10^{99}$
$\sinh x$ $\cosh x$	$0 \leq  x  \leq 30\,258\,509\,2$
$\sinh^{-1}x$	$0 \leq  x  \leq 4.999\,999\,999 \times 10^{99}$
$\cosh^{-1}x$	$1 \leq x \leq 4.999\,999\,999 \times 10^{99}$
$\tanh x$	$0 \leq  x  \leq 9.999\,999\,999 \times 10^{99}$
$\tanh^{-1}x$	$0 \leq  x  \leq 9.999\,999\,999 \times 10^{-1}$
$\log x / \ln x$	$0 < x \leq 9.999\,999\,999 \times 10^{99}$
$10^x$	$-9.999\,999\,999 \times 10^{99} \leq x \leq 99.999\,999\,99$
$e^x$	$-9.999\,999\,999 \times 10^{99} \leq x \leq 230.258\,509\,2$
$\sqrt{x}$	$0 \leq x < 1 \times 10^{100}$
$x^2$	$ x  < 1 \times 10^{50}$
$x^3$	$ x  < 2.154\,434\,69 \times 10^{33}$
$x^{-1}$	$ x  < 1 \times 100^{100}, x \neq 0$
$\sqrt[3]{x}$	$ x  < 1 \times 10^{100}$
$x!$	$0 \leq x \leq 69$ (x is an integer)
nPr	$0 \leq n < 1 \times 10^{10}, 0 \leq r \leq n$ (n,r are integers)
	$1 \leq \{n! / ((n-r)!) < 1 \times 10^{100}$
nCr	$0 \leq n < 1 \times 10^{10}, 0 \leq r \leq n$ (n,r are integers)
	$1 \leq n! / r! < 1 \times 10^{100}$ or $1 \leq n! / (n-r)! < 1 \times 10^{100}$
Pol(x,y)	$ x ,  y  \leq 9.999\,999\,999 \times 10^{99}$ $\sqrt{x^2 + y^2} \leq 9.999\,999\,999 \times 10^{99}$
Rec(r,θ)	$0 \leq r \leq 9.999\,999\,999 \times 10^{99}$ θ : Same as sinx
o r "	$ a , b, c < 1 \times 10^{100}$ $0 \leq b, c$ The display seconds value is subject to an error of +/-1 at the second decimal place

Functions	Input Range
◀ ° ″	$ x  < 1 \times 10^{100}$ Deciaml ↔ Sexagesimal Conversions $0^{\circ}0'0'' \leq  x  \leq 99999999^{\circ}59'59''$
$\wedge(x^y)$	$x > 0: -1 \times 10^{100} < y \log x < 100$ $x = 0: y > 0$ $x < 0: y = n, m / (2n + 1)$ (m, n are integers) However: $-1 \times 10^{100} < y \log  x  < 100$
${}_x\sqrt{y}$	$y > 0: x \neq 0, -1 \times 10^{100} < 1/x \log y < 100$ $y = 0: x > 0$ $y < 0: x = 2n + 1, (2n + 1) / m$ ( $m \neq 0; m, n$ are integers) However: $-1 \times 10^{100} < (1/x) \log  y  < 100$
a b/c	Total of integer, numerator, and denominator must be 10 digits or less (including division marks).
i~Rand(a,b)	$0 \leq a < 1 \times 10^{10}, 0 \leq b < 1 \times 10^{10}$ (a, b should be positive integers or 0)
Rand	Result generates a 3 digits pseudo random number(0.000~0.999)
LCM(x,y,z)	$0 < x, y, z \leq 9.999\ 999\ 999 \times 10^{12}$ (positive integers) Default result when $x, y, z = 0$
GCD(x,y,z)	$0 < x, y, z \leq 9.999\ 999\ 999 \times 10^{12}$ (positive integers) Default result when $x, y, z = 0$
Q...r(x,y)	$0 < x, y \leq 9.999\ 999\ 999 \times 10^{12}$ (positive integers) $0 \leq Q \leq 999\ 999\ 9999, 0 \leq r \leq 999\ 999\ 9999$ (Q, r are integers) Default result when $x = 0$
Abs	$ x  < 1 \times 10^{100}$
One-variable Statistical calculation	$ x  < 1 \times 10^{100}$ $ FREQ  < 1 \times 10^{100}$
Two-variable Statistical calculation	$ x  < 1 \times 10^{100}$ $ y  < 1 \times 10^{100}$ $ FREQ  < 1 \times 10^{100}$

- E** • Errors are cumulative in the case of consecutive calculations, this is also true as internal consecutive calculation are performed in the case of  $^n(x^y)$ ,  $^x\sqrt{y}$ ,  $^3\sqrt{}$ ,  $x!$ ,  $nPr$ ,  $nCr$ , etc. And may become large.

**■ Display of results using  $\sqrt{\quad}$**

Calculation results may be displayed using  $\sqrt{\quad}$  when all of the following cases:-

1. When intermediate and final calculation results are displayed in the following form:

$$\pm \frac{a\sqrt{b}}{c} \pm \frac{d\sqrt{e}}{f} \qquad \begin{array}{l} 0 \leq a < 100, \quad 1 \leq d < 100 \\ 0 \leq b < 1000, \quad 1 < e < 1000 \\ 1 \leq c < 100, \quad 1 \leq f < 100 \end{array}$$

2. When the number of terms in the intermediate and final calculation result is one or two.

- D** • Bei fortlaufenden Berechnungen Häufen sich Fehler, was zu größeren Fehlern führen kann. Dies gilt auch für die Durchführung interner fortlaufender Berechnungen bei  $^n(x^y)$ ,  $^x\sqrt{y}$ ,  $^3\sqrt{}$ ,  $x!$ ,  $nPr$ ,  $nCr$ .

**■ Anzeige der Ergebnisse unter Verwendung von  $\sqrt{\quad}$**

Rechenergebnisse können in den folgenden Fällen unter Verwendung von  $\sqrt{\quad}$  angezeigt werden:

1. Wenn Zwischen- und Endergebnisse in folgender Form dargestellt werden:

$$\pm \frac{a\sqrt{b}}{c} \pm \frac{d\sqrt{e}}{f} \qquad \begin{array}{l} 0 \leq a < 100, \quad 1 \leq d < 100 \\ 0 \leq b < 1000, \quad 1 < e < 1000 \\ 1 \leq c < 100, \quad 1 \leq f < 100 \end{array}$$

2. Wenn die Anzahl der Ausdrücke im Zwischen- oder Endergebnis der Berechnung 1 oder 2 beträgt.

- F** • Les erreurs cumulées peuvent devenir très importantes en cas de calculs consécutifs. Ceci est également vrai pour les calculs internes consécutifs dans le cas de  $^n(x^y)$ ,  $^x\sqrt{y}$ ,  $^3\sqrt{y}$ ,  $x!$ ,  $nPr$ ,  $nCr$  etc.

**■ Affichage des résultats à l'aide de  $\sqrt{\quad}$**

Les résultats des calculs peuvent s'afficher avec  $\sqrt{\quad}$  dans les cas suivants :

1. lorsque les résultats des calculs intermédiaires et finals s'affichent sous la forme suivante.

$$\pm \frac{a\sqrt{b}}{c} \pm \frac{d\sqrt{e}}{f} \quad \begin{array}{l} 0 \leq a < 100, \quad 1 \leq d < 100 \\ 0 \leq b < 1000, \quad 1 < e < 1000 \\ 1 \leq c < 100, \quad 1 \leq f < 100 \end{array}$$

2. lorsque le nombre de termes des calculs intermédiaires et finals s'élève à 1 ou 2.

- ES** • Cuando se realizan cálculos consecutivos, los errores son acumulativos y pueden aumentar. Lo mismo ocurre cuando se realizan cálculos consecutivos internos en el caso de  $^n(x^y)$ ,  $^x\sqrt{y}$ ,  $^3\sqrt{y}$ ,  $x!$ ,  $nPr$ ,  $nCr$  etc.

**■ Visualización de resultados utilizando  $\sqrt{\quad}$**

Los resultados del cálculo se pueden visualizar utilizando  $\sqrt{\quad}$  en todos los casos siguientes:

1. Cuando los resultados del cálculo intermedio y final se muestran de la siguiente forma:

$$\pm \frac{a\sqrt{b}}{c} \pm \frac{d\sqrt{e}}{f} \quad \begin{array}{l} 0 \leq a < 100, \quad 1 \leq d < 100 \\ 0 \leq b < 1000, \quad 1 < e < 1000 \\ 1 \leq c < 100, \quad 1 \leq f < 100 \end{array}$$

2. Cuando el número de términos en el resultado del cálculo intermedio y final es uno o dos.

- I** • Gli errori sono cumulativi e possono assumere dimensioni notevoli in caso di calcoli consecutivi; ciò è vero anche per i calcoli consecutivi interni eseguiti in caso di  $^n(x^y)$ ,  $^x\sqrt{y}$ ,  $^3\sqrt{y}$ ,  $x!$ ,  $nPr$ ,  $nCr$  e così via.

**■ Visualizzazione dei risultati tramite  $\sqrt{\quad}$**

I risultati dei calcoli potrebbero essere visualizzati utilizzando  $\sqrt{\quad}$  in tutti i casi seguenti:

1. Quando i risultati dei calcoli intermedi e finali vengono visualizzati nel formato seguente:

$$\pm \frac{a\sqrt{b}}{c} \pm \frac{d\sqrt{e}}{f} \quad \begin{array}{l} 0 \leq a < 100, \quad 1 \leq d < 100 \\ 0 \leq b < 1000, \quad 1 < e < 1000 \\ 1 \leq c < 100, \quad 1 \leq f < 100 \end{array}$$

2. Quando il numero dei termini nel risultato dei calcoli intermedi e finali è uno o due.

- NL** • Fouten zijn cumulatief als het opeenvolgende berekeningen betrft. Dit geldt ook voor interne opeenvolgende berekeningen die worden uitgevoerd in geval van  $^n(x^y)$ ,  $^x\sqrt{y}$ ,  $^3\sqrt{\phantom{x}}$ ,  $x!$ ,  $nPr$ ,  $nCr$  enzovoort.

■ **Weergave van resultaten met behulp van  $\sqrt{\phantom{x}}$**

Berekeningsresultaten kunnen worden weergegeven met behulp van  $\sqrt{\phantom{x}}$  in alle volgende gevallen:

1. Als tussentijdse en definitieve berekeningsresultaten in de volgende vorm worden weergegeven:

$$\pm \frac{a\sqrt{b}}{c} \pm \frac{d\sqrt{e}}{f} \quad \begin{array}{l} 0 \leq a < 100, \quad 1 \leq d < 100 \\ 0 \leq b < 1000, \quad 1 < e < 1000 \\ 1 \leq c < 100, \quad 1 \leq f < 100 \end{array}$$

2. Als het aantal voorwaarden in de tussentijdse en definitieve berekeningsresultaten een of twee is.

- DA** • Feji er kumulative og kan blive store i tilfælde af konsekutive beregninger. Dette gælder også, når interne konsekutive beregninger udføres i tilfælde af  $^n(x^y)$ ,  $^x\sqrt{y}$ ,  $^3\sqrt{\phantom{x}}$ ,  $x!$ ,  $nPr$ ,  $nCr$  osv.

■ **Resultatvisning med  $\sqrt{\phantom{x}}$**

Regneresultatet kan blive vist med  $\sqrt{\phantom{x}}$  i følgende tilfælde:

1. Når mellem- og slutresultatet vises i følgende format:

$$\pm \frac{a\sqrt{b}}{c} \pm \frac{d\sqrt{e}}{f} \quad \begin{array}{l} 0 \leq a < 100, \quad 1 \leq d < 100 \\ 0 \leq b < 1000, \quad 1 < e < 1000 \\ 1 \leq c < 100, \quad 1 \leq f < 100 \end{array}$$

2. Når antallet af termer i mellem- eller slutresultatet er en eller to.

- FI** • Virheet kumuloituvat ja voivat muodostua suuriksi perättäisissä laskuissa. Tämä koskee myös sellaisia laskuihin oleellisesti kuuluvia perättäisiä laskuja, joita esiintyy operaattoreissa  $^n(x^y)$ ,  $^x\sqrt{y}$ ,  $^3\sqrt{\phantom{x}}$ ,  $x!$ ,  $nPr$ ,  $nCr$  jne.

■ **Tulosten esittäminen  $\sqrt{\phantom{x}}$ -funktion avulla**

Laskutoimitusten tulokset voidaan esittää  $\sqrt{\phantom{x}}$ -funktion avulla seuraavissa tapauksissa:

1. Kun laskutoimituksen välitulokset ja lopulliset tulokset esitetään seuraavassa muodossa:

$$\pm \frac{a\sqrt{b}}{c} \pm \frac{d\sqrt{e}}{f} \quad \begin{array}{l} 0 \leq a < 100, \quad 1 \leq d < 100 \\ 0 \leq b < 1000, \quad 1 < e < 1000 \\ 1 \leq c < 100, \quad 1 \leq f < 100 \end{array}$$

2. Kun laskutoimituksen välitulosten ja lopullisten tulosten termien lukumäärä on yksi tai kaksi.

- SE** • Fel ackumuleras och kan bli stora vid flera berä kningar efter varandra. Detta gäller även när på varandra följande beäkningar utförs med  $^n(x^y)$ ,  $^x\sqrt{y}$ ,  $^3\sqrt{x}$ ,  $x!$ ,  $nPr$ ,  $nCr$  osv.

**Resultatet visas med  $\sqrt{\quad}$**

Beräkningsresultatet kan visas med  $\sqrt{\quad}$  i alla följande fall:

1. Om mellanresultat och slutgiltiga resultat visas i följande format:

$$\pm \frac{a\sqrt{b}}{c} \pm \frac{d\sqrt{e}}{f} \qquad \begin{array}{l} 0 \leq a < 100, \quad 1 \leq d < 100 \\ 0 \leq b < 1000, \quad 1 < e < 1000 \\ 1 \leq c < 100, \quad 1 \leq f < 100 \end{array}$$

2. Om antalet termer i mellanresultatet eller det slutgiltiga resultatet är en eller två.

- PT** • Os erros são cumulativos e podem multiplicar-se no caso de cálculos consecutivos. Esta situação também acontece porque os cálculos consecutivos internos são efectuados no caso de  $^n(x^y)$ ,  $^x\sqrt{y}$ ,  $^3\sqrt{x}$ ,  $x!$ ,  $nPr$ ,  $nCr$  etc.

**Visualização de resultados utilizando  $\sqrt{\quad}$**

Os resultados do cálculo podem ser visualizados utilizando  $\sqrt{\quad}$  em todos os casos seguintes:

1. Quando os resultados de cálculo intermédios e finais são visualizados na seguinte forma:

$$\pm \frac{a\sqrt{b}}{c} \pm \frac{d\sqrt{e}}{f} \qquad \begin{array}{l} 0 \leq a < 100, \quad 1 \leq d < 100 \\ 0 \leq b < 1000, \quad 1 < e < 1000 \\ 1 \leq c < 100, \quad 1 \leq f < 100 \end{array}$$

2. Quando o número de termos no resultado de cálculo intermédio e final é um ou dois.

- Ελ** • Τα σφάλματα είναι αθροιστικά και ενδέχεται να γίνουν πιο σοβαρά στην περίπτωση διαδοχικών υπολογισμών, αυτό ισχύει και όταν πραγματοποιούνται εσωτερικοί διαδοχικοί υπολογισμοί στην περίπτωση των  $^n(x^y)$ ,  $^x\sqrt{y}$ ,  $^3\sqrt{x}$ ,  $x!$ ,  $nPr$ ,  $nCr$ .

**Εμφάνιση αποτελεσμάτων με  $\sqrt{\quad}$**

Τα αποτελέσματα των υπολογισμών μπορεί να εμφανιστούν με  $\sqrt{\quad}$  στις παρακάτω περιπτώσεις:

1. Όταν τα ενδιάμεσα και τελικά αποτελέσματα υπολογισμών εμφανίζονται με την παρακάτω μορφή:

$$\pm \frac{a\sqrt{b}}{c} \pm \frac{d\sqrt{e}}{f} \qquad \begin{array}{l} 0 \leq a < 100, \quad 1 \leq d < 100 \\ 0 \leq b < 1000, \quad 1 < e < 1000 \\ 1 \leq c < 100, \quad 1 \leq f < 100 \end{array}$$

2. Όταν ο αριθμός των όρων στο ενδιάμεσο και στο τελικό αποτέλεσμα υπολογισμού είναι ένα ή δύο.