

TI-40 Collège II

Scientific Calculator

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General Information

Examples: See the last page of these instructions for keystroke examples that demonstrate many of the TI-40 Collège II functions. Examples assume all default settings.

[ON] turns on the TI-40 Collège II. [2nd] [OFF] turns it off and clears the display. APD™ (Automatic Power Down™) turns off the TI-40 Collège II automatically if no key is pressed for about 5 minutes. Press [ON] after APD. The display, pending operations, settings, and memory are retained.

2-Line Display: The first line (**Entry Line**) displays an entry of up to 88 digits (or 47 digits for Stat or Constant Entry Line). Entries begin on the left; those with more than 11 digits scroll to the right. Press [←] and [→] to scroll the line. Press [2nd] [←] or [2nd] [→] to move the cursor immediately to the beginning or end of the entry.

The second line (**Result Line**) displays a result of up to 10 digits, plus a decimal point, a negative sign, a "x10" indicator, and a 2-digit positive or negative exponent. Results that exceed the digit limit are displayed in Scientific Notation.

Indicator	Definition
2nd	2nd function.
FIX	Fixed-decimal setting.
STAT	Statistical mode.
RAD	Angle mode set to radians.
—Q—	Displays quotient (q) and remainder (R) for integer divide result.
—R—	
N/D→n/d	The fraction result can be further simplified.
↑ ↓	An entry is stored in memory before and/or after the active screen. Press [↵] and [↵] to scroll.
→ ←	An entry or menu displays beyond 11 digits. Press [←] or [→] to scroll.

2nd Functions: [2nd] displays the 2nd indicator, and then selects the 2nd function (printed above keys) of the next key pressed. For example, [2nd] [√] 25 [ENTER] calculates the square root of 25 and returns the result, 5.

Menus: Certain TI-40 Collège II keys display menus:

[MEMVAR], [2nd] [RCL], [STO], [MATH], [2nd] [FracMode], [2nd] [LOG], [2nd] [TRIG], [2nd] [STAT], [STAT VAR], [2nd] [EXIT STAT], [PRB], [2nd] [DR], [°'"], [2nd] [R↔P], [2nd] [FIX], and [2nd] [RESET].

Press [←] or [→] to move the cursor and underline a menu item. To return to the previous screen without selecting the item, press [CLEAR]. To select a menu item:

- Press [ENTER] while the item is underlined, or

- For menu items followed by an argument value, enter the argument value while the item is underlined. The item and the argument value are displayed on the previous screen.

Previous Entries

After an expression is evaluated, use [↵] and [↵] to scroll through previous entries, which are stored in the TI-40 Collège II memory. You cannot retrieve previous entries while in **STAT** mode.

Last Answer

[2nd] [ANS]

The most recently calculated result is stored to the variable **Ans**. **Ans** is retained in memory, even after the TI-40 Collège II is turned off. To recall the value of **Ans**:

- Press [2nd] [ANS] (**Ans** displays on the screen), or
- Press any operations key ([+], [=], [x²], etc.) as the first part of an entry. **Ans** and the operator are both displayed.

Order of Operations

The TI-40 Collège II uses EOS™ (Equation Operating System) to evaluate expressions.

1st	Expressions inside parentheses.
2nd	Functions which need a) and precede the argument, such as the sin , log , and all R↔P menu items.
3rd	Fractions.
4th	Functions that are entered after the argument, such as x ² and angle unit modifiers (° ' " r g).
5th	Exponentiation (^) and roots (x√).
6th	Negation (-).
7th	Permutations (nPr) and combinations (nCr).
8th	Multiplication, implied multiplication, division.
9th	Addition and subtraction.
10th	Conversions (Ab/c↔d/e , ↔F , ↔D , ↔% , ↔DMS).
11th	[ENTER] completes all operations and closes all open parentheses.

Clearing and Correcting

[CLEAR]	Clears an error message. Clears characters on the entry line. Moves the cursor to last entry in history once display is clear.
[DEL]	Deletes the character at the cursor. Deletes all characters to the right when you hold down [DEL]; then, deletes 1 character to the left of the cursor each time you press [DEL].
[2nd] [INS]	Inserts a character at the cursor.
[2nd] [CLRVAR]	Clears all memory variables.
[2nd] [STAT] CLRDATA	Clears all data points without exiting STAT mode.
[2nd] [EXIT STAT] Y	Clears all data points and exits STAT mode.
[2nd] [RESET] Y or [ON] & [CLEAR]	Resets the TI-40 Collège II. Returns unit to default settings; clears memory variables, pending operations, all entries in history, and statistical data; clears constant mode and Ans .

Math Operations

[MATH]

[MATH] displays a menu with various math functions. Some functions require you to enter 2 values, real numbers or expressions which equal return a real number. [2nd] [,] separates 2 values.

abs(#)	Displays absolute value of #.
round(#,digits)	Rounds # to specified number of digits.
iPart(#)	Returns only the integer part (iPart) or

fPart(#)	fractional part (fPart) of #.
min(#1,#2) max(#1,#2)	Returns the minimum (min) or maximum (max) of 2 values, #1 and #2.
lcm(#1,#2) gcd(#1,#2)	Finds the least common multiple (lcm) or greatest common divisor (gcd) of 2 integers, #1 and #2.
#3	Calculates the cube of #.
$\sqrt[3]{\#}$	Calculates the cube root of #.
remainder (#1,#2)	Returns the remainder resulting from the division of 2 integers, #1 by #2.

Integer Divide [2nd] [÷]

[2nd] [÷] divides 2 positive integers and displays the quotient, Q, and the remainder, R. Only the quotient is stored to Ans.

Fractions [2nd] [FracMode] [DIV] [F] [A^b/_c ↔ d/e] [] [Simp] [%] [D]

[2nd] [FracMode] displays a menu of 2 settings, which determine how fraction results are displayed. Note: Results which cannot be displayed as a fraction are displayed as decimals.

- Manual (default) displays unsimplified fraction results, as applicable. $N/D \rightarrow n/d$ displays if the fraction can be simplified further.
- Auto displays fraction results that are automatically simplified to lowest terms. Note: You cannot press [Simp] while in Auto mode.

[] separates the numerator from the denominator. The denominator must be a positive integer. To negate a fraction, press [−] before entering the numerator.

[Simp] [ENTER] simplifies a fraction using the lowest common prime factor. If you want to choose the factor (instead of letting calculator choose it), press [Simp], enter the factor (an integer), and then press [ENTER].

[2nd] [DIV] displays DIV on the entry line and the divisor used to simplify the last fraction result. You must be in Manual mode to display DIV. Press [2nd] [DIV] again to toggle back to the simplified fraction.

[D] converts a fraction to a decimal, if possible.

[2nd] [F] converts a decimal to a fraction, if possible.

[%] converts a decimal or fraction to a percent.

[2nd] [A^b/_c ↔ d/e] converts between a mixed number and a simple fraction.

Pi [π]

$\pi=3.141592653590$ for calculations. $\pi=3.141592654$ for display. In RAD mode, π is represented as Pi in results of multiplication or fraction calculations. The TI-40 Collège II only accepts π in the numerator of a fraction.

Angle Modes [2nd] [DR] [°/'']

[2nd] [DR] displays a menu to change the Angle mode to degrees or radians.

[°/''] displays a menu to specify the Angle unit modifier—degrees (°), radians (r), or DMS (° ' "). It also lets you convert an angle to DMS Notation (►DMS).

To set the Angle mode for any part of an entry:

- Select the Angle mode. Entries are interpreted and results displayed according to the Angle mode, or
- Select a unit modifier (° ' " r) for any part of an entry. Entries with unit modifiers are interpreted accordingly, overriding the Angle mode.

To convert an entry:

- Set the Angle mode to the unit you want to convert to. Then use a unit modifier to designate the unit to convert from. (Angles of trig functions convert values inside parentheses first.), or

- Select ►DMS, which converts an entry to DMS (° ' ") Notation.

Trig [2nd] [TRIG]

[2nd] [TRIG] displays a menu of all trig functions (sin, sin-1, cos, cos-1, tan, tan-1). Select the trig function from the menu and then enter the value. Set the desired Angle mode before starting trig calculations.

Logarithms [2nd] [LOG]

[2nd] [LOG] displays a menu of all log functions (log, 10[^], ln, e[^]). Select the trig function from the menu, then enter the value, and complete it with [=]. Set the desired Angle mode before starting trig calculations.

Rectangular↔Polar [2nd] [R↔P]

[2nd] [R↔P] displays a menu to convert rectangular coordinates (x,y) to polar coordinates (r,θ) or vice versa. Set Angle mode, as necessary, before starting calculations.

Stored Operations [OP1] [OP2] [2nd] [OP1] [OP2]

The TI-40 Collège II stores 2 operations, OP1 and OP2. To store an operation to OP1 or OP2 and recall it:

- Press [2nd] [OP1] or [2nd] [OP2].
- Enter the operation (any combination of numbers, operators, or menu items and their arguments).
- Press [ENTER] to save the operation to memory.
- [OP1] or [OP2] recalls and displays the operation on the entry line. The TI-40 Collège II automatically calculates the result (without pressing [ENTER]) and displays the counter (as space permits) on the left side of the result line. When you press [OP1] or [OP2] more than once in succession, the counter increments by 1.

You can set the TI-40 Collège II to display the counter and the result only (excluding the entry). While defining the operation, press [◀] until the = is highlighted (■). Repeat to toggle this setting off.

Memory [MEMVAR] [STO►] [2nd] [RCL] [CLRVAR]

The TI-40 Collège II has 5 memory variables—A, B, C, D, and E. You can store a real number or an expression that results in a real number to a memory variable.

- [MEMVAR] accesses the menu of variables.
- [STO►] lets you store values to variables.
- [2nd] [RCL] recalls the values of variables.
- [2nd] [CLRVAR] clears all variable values.

Notation [2nd] [FIX] [EE]

[2nd] [FIX] displays the **Decimal Notation** mode menu. These settings *only* affect the display of results. F (default) restores floating-decimal format. Set decimal places to *n* (0–9) with 0123456789.

[EE] enters a value in **Scientific Notation**. Press [−] before entering a negative exponent.

Stats [2nd] [STAT] [EXIT STAT] [DATA] [STAT VAR]

1-VAR stats analyzes data from 1 data set with 1 measured variable, *x*. 2-VAR stats analyzes paired data from 2 data sets with 2 measured variables—*x*, the independent variable, and *y*, the dependent variable. You can enter up to 42 data sets.

Steps for defining statistical data points:

- Press [2nd] [STAT]. Select 1-VAR or 2-VAR. The STAT indicator displays.
- Press [DATA].
- Enter a value for *x*. [ENTER] evaluates it and displays the value.
- Press [◀].

- In 1-VAR stat mode, enter the frequency of occurrence (FRQ) of the data point. FRQ default=1. If FRQ=0, the data point is ignored.
 - In 2-VAR stat mode, enter the value for Y, and press **ENTER**.
5. Repeat steps 3 and 4 until all data points are entered. You must press **ENTER** or **⏏** to save the last data point or FRQ value entered. If you add or delete data points, the TI-40 Collège II automatically reorders the list.
6. When all points and frequencies are entered:
- Press **[STAT VAR]** to display the menu of variables (see table for definitions) and their current values, or
 - Press **[CLEAR]** to return to the blank STAT screen. You can do calculations with data variables (\bar{X} , \bar{Y} , etc.). Select a variable from the **[STAT VAR]** menu and then press **ENTER** to evaluate the calculation.
7. When finished:
- Press **[2nd] [STAT]** and select CLRDATA to clear all data points *without* exiting STAT mode, or
 - Press **[2nd] [EXIT STAT] [ENTER]** to clear all data points, variable and FRQ values, and to exit STAT mode (STAT indicator turns off).

Variables	Definition
n	Number of X or X,Y data points.
\bar{X} or \bar{Y}	Mean of all X or Y values.
Sx or Sy	Sample standard deviation of X or Y.
σ_X or σ_Y	Population standard deviation of X or Y.
ΣX or ΣY	Sum of all X or Y values.
ΣX^2 or ΣY^2	Sum of all X^2 or Y^2 values.
ΣXY	Sum of $X \cdot Y$ for all XY pairs.
a	Linear regression slope.
b	Linear regression Y-intercept.
r	Correlation coefficient.
X' (2-VAR)	Uses a and b to calculate predicted X value when you input a Y value.
Y' (2-VAR)	Uses a and b to calculate predicted Y value when you input an X value.

Probability [PRB]

nPr	Calculates the number of possible permutations of n items taken r at a time, given n and r. The order of objects is important, as in a race.
nCr	Calculates the number of possible combinations of n items taken r at a time, given n and r. The order of objects is not important, as in a hand of cards.
!	A factorial is the product of the positive integers from 1 to n. n must be a positive whole number ≤ 69 .
RAND	Generates a random real number between 0 and 1. To control a sequence of random numbers, store an integer (<i>seed value</i>) ≥ 0 to rand . The <i>seed value</i> changes randomly every time a random number is generated.
RANDI	Generates a random integer between 2 integers, A and B, where $A \leq \text{RANDI} \leq B$. Separate the 2 integers with a comma.

Errors

ARGUMENT — A function does not have the correct number of arguments.

DIVIDE BY 0 —

- You attempted to divide by 0.
- In statistics, $n=1$.

DOMAIN — You specified an argument to a function outside the valid range. For example:

- For \sqrt{x} : $x = 0$ or $y < 0$ and x not an odd integer.

- For y^x : y and $x = 0$; $y < 0$ and x not an integer.
- For \sqrt{x} : $x < 0$.
- For **LOG** or **LN**: $x \leq 0$.
- For **TAN**: $x = 90^\circ, -90^\circ, 270^\circ, -270^\circ, 450^\circ$, etc.
- For **SIN⁻¹** or **COS⁻¹**: $|x| > 1$.
- For **nCr** or **nPr**: **n** or **r** are not integers ≥ 0 .
- For **x!**: x is not an integer between 0 and 69.

EQU LENGTH ERROR — An entry exceeds the digit limits (88 for Entry Line and 47 for Stat or Constant Entry lines); for example, combining an entry with a constant that exceeds the limit.

FRACMODE — Pressing **[Simp]** when **Fracmode=Auto**.

FRQ DOMAIN — **FRQ** value (in 1-VAR stats) < 0 or > 99 , or not an integer.

OP — Pressing **[OP1]** or **[OP2]** when constants are not defined or while in **STAT** mode.

OVERFLOW — $|\theta| \geq 1E10$, where θ is an angle in a trig, hyperbolic, or **RPr**(function).

STAT —

- Pressing **[STAT VAR]** with no defined data points.
- When not in **STAT** mode, pressing **[DATA]**, **[STAT VAR]**, or **[2nd] [EXIT STAT]**.

SYNTAX — The command contains a syntax error: entering more than 23 pending operations, 8 pending values, or having misplaced functions, arguments, parentheses, or commas.

Battery Replacement

1. Using a small Phillips screwdriver, remove screws from back case.
2. Remove protective cover. Starting from the bottom, carefully separate front from back. **Caution:** Be careful not to damage any internal parts.
3. Using a small Phillips screwdriver (if necessary), remove old battery; replace with new one.
Caution: Avoid contact with other TI-40 Collège II components while changing the battery.
4. If necessary, press **[ON]** and **[CLEAR]** at the same time to reset the TI-40 Collège II (clears memory and all settings).

Caution: Dispose of old batteries properly. Do not incinerate batteries or leave where a child can find them.

In Case of Difficulty

Review instructions to be certain calculations were performed properly.

Press **[ON]** and **[CLEAR]** at the same time. This clears all memory and settings.

Check the battery to ensure that it is fresh and properly installed.

Change the battery when:

- **[ON]** does not turn the unit on, or
- The screen goes blank, or
- You get unexpected results.

To continue using the TI-40 Collège II until you can change the battery:

1. Expose the solar panel to brighter light.
2. Press **[ON]** and **[CLEAR]** at the same time to reset the calculator. This clears all settings and memory.

Note: Operates in well-lit areas using solar cell. Operates in other light settings using battery.

TI Product Service and Warranty Information

TI Product and Services Information

For more information about TI products and services, contact TI by e-mail or visit the TI calculator home page on the world-wide web.

e-mail address: **ti-cares@ti.com**

internet address: **<http://www.ti.com/calc>**

Service and Warranty Information

For information about the length and terms of the warranty or about product service, refer to the warranty statement enclosed with this product or contact your local Texas Instruments retailer/distributor.

$1 + 1$	1 + 1 ENTER	1+1	2.
$2 + 2$	2 + 2 ENTER	2+2	4.
$3 + 3$	3 + 3 ENTER	3+3	6.
$4 + 4$	4 + 4 ENTER	4+4	8.
$2 + 2$	← → ← →	2+2	↓
$2 + 2 + 2$	2nd → + 2 ENTER	2+2+2	↑
			6.

2nd [ANS]			
ANS	3×3	3x3	↑
	3 x 3 ENTER		9.
	$\times 3$	Ans x3	↑
	× 3 ENTER		27.
	$3 \sqrt{\text{Ans}}$	$3 \times \sqrt{\text{Ans}}$	↑
	3 2nd [√] 2nd [ANS] ENTER		3.

+ × ÷ - (-) () ENTER			
$5 \times -12 + 45$	5 × (-) 12 + 45 ENTER	$5 \times -12 + 45$	↑
			-15.
$10 \div 2$	10 2nd [÷] 2 ENTER	$10 \div 2$	↑
			5
			0
			-0
			-R
$4 \times (2 + 3)$	4 × (2 + 3) ENTER	$4 \times (2+3)$	↑
			20.
$4(2+3)$	4 (2 + 3) ENTER	$4(2+3)$	↑
			20.

[MATH]			
abs, iPart, fPart, $3\sqrt{\quad}$, $\sqrt[3]{\quad}$	[MATH] → →	iPart fPart →	
2.4	2 . 4) ENTER	iPart(2.4)	↑
			2.
round	[MATH] →	abs round →	
$\text{round}(\pi, 3)$	π 2nd [.] 3) ENTER	round(π,3)	↑
			3.142
min, max, lcm, gcd, remainder	[MATH] → → → →	← min max →	
$\text{min}(.5, .25)$	← .5 2nd [,] . 25) ENTER	min(.5,.25)	↑
			0.25

2nd [%] →%			
$5\% \times 250$	5 2nd [%] × 250 ENTER	$5\% \times 250$	↑
			12.5
$1/2 \rightarrow \%$	1 ÷ 2 2nd [→%] ENTER	$1/2 \rightarrow \%$	↑
			50%

2nd [FracMode] 2nd [DIV]			
2nd [FracMode] =Manual			
$4/16 + 4/8$	4 ÷ 16 + 4 ÷ 8 ENTER	$4/16 + 4/8$	↑
			12/16
			N/D → n/d
Simp	→Simp ENTER	Ans →Simp	↑
			6/8
			N/D → n/d
	→Simp 2 ENTER	Ans →Simp 2	↑
			3/4
DIV	2nd [DIV]	Div	↑
			2.
	2nd [DIV]	Ans →Simp 2	↑
			3/4

2nd [Ab/c↔d/e] 2nd [F]			
2nd [FracMode] =Manual			
$9/2 \text{ Ab/c↔d/e}$	9 ÷ 2 2nd [Ab/c↔d/e] ENTER	$9/2 \text{ Ab/c↔d/e}$	↑
			4 1/2
D	→D ENTER	Ans →D	↑
			4.5
F	2nd [F] ENTER	Ans →F	↑
			45/10
			N/D → n/d

x² 2nd [x⁻¹] √ √[] √[]			
2nd [FracMode] =Manual			
$2 \times (1/2)^{-1}$	2 × (1 ÷ 2) 2nd [x⁻¹] ENTER	$2 \times (1/2)^{-1}$	↑
			4/1
$2^2 + 2$	2 x² + 2 ENTER	$2^2 + 2$	↑
			6.
$\sqrt{25}$	2nd [√] 25) ENTER	$\sqrt{(25)}$	↑
			5.
5^3	5 ^ 3 ENTER	5^3	↑
			125.
$3 \times \sqrt{8}$	3 2nd [√] 8 ENTER	$3 \times \sqrt{8}$	↑
			2.

2nd [LOG]			
LOG	2nd [LOG]	log 10[^] →	
	1) ENTER	log(1)	↑
			0.
	2nd [LOG] ↻	← ln e[^]	
	.5) ENTER	e[^](.5)	↑

1.648721271

e=2.71828182846

2nd [DR] π $\circ^{\circ\prime\prime}$

DR [CLEAR] \uparrow

2nd [DR] \downarrow DEG RAD

[ENTER] \uparrow
RAD

π π 3 \times^2 [ENTER] $\pi 3^2$ \uparrow

3 0 $\circ^{\circ\prime\prime}$ [ENTER] [ENTER] 30° \uparrow
9Pi.
RAD
Pi/6
RAD

TRIG **2nd** [TRIG] sin \sin^{-1} \rightarrow

$\circ^{\circ\prime\prime}$ [ENTER] 3 0 $\circ^{\circ\prime\prime}$ $\circ^{\circ\prime\prime}$ \rightarrow \rightarrow

[ENTER] \downarrow [ENTER] $\sin(30^\circ)$ \uparrow
0.5
RAD

DR [CLEAR] **2nd** [DR] \downarrow DEG RAD

$\circ^{\circ\prime\prime}$ [ENTER] 2 π $\circ^{\circ\prime\prime}$ \downarrow \downarrow \downarrow \rightarrow

[ENTER] [ENTER] $2\pi^r$ \uparrow
360.

$\circ^{\circ\prime\prime}$ 1.5 $\circ^{\circ\prime\prime}$ \downarrow \leftarrow \rightarrow DMS

[ENTER] [ENTER] 1.5 \rightarrow DMS \uparrow
 $1^\circ 30' 0''$

2nd [TRIG]

DR **2nd** [DR] \downarrow DEG RAD

TRIG [ENTER] **2nd** [TRIG] \downarrow \downarrow \leftarrow tan \tan^{-1}

4 5 \downarrow [ENTER] $\tan(45)$ \uparrow
1.619775191
RAD

2nd [DR] \downarrow DEG RAD

[ENTER] [ENTER] $\tan(45)$ \uparrow
1.

2nd [R \leftrightarrow P]

R \leftrightarrow P **2nd** [R \leftrightarrow P] R \rightarrow Pr R \rightarrow P θ \rightarrow

5 **2nd** [,] 3 0 \downarrow [ENTER] R \rightarrow Pr (5,30) \uparrow
30.41381265

\leftarrow **2nd** [R \leftrightarrow P] \downarrow

R \rightarrow Pr R \rightarrow P θ \rightarrow

[ENTER] [ENTER]

R \rightarrow P θ (5,30) \uparrow
80.53767779

2nd [\rightarrow OP1] **2nd** [\rightarrow OP2] [OP1] [OP2]

\rightarrow OP1 **2nd** [\rightarrow OP1] \times 2 $+$ 3 [ENTER] OP1= \rightarrow 2+3

OP1 4 [OP1] $4 \times 2 + 3$ \uparrow
1 11.

6 [OP1] $6 \times 2 + 3$ \uparrow
1 15.

\rightarrow OP2 **2nd** [\rightarrow OP2] \times 2 \downarrow \downarrow [ENTER] OP2= \times 2

OP2 4 [OP2] 1 8.

[OP2] 2 16.

2nd [\rightarrow OP2] \downarrow [ENTER] OP2= \times 2

[OP2] 16×2
1 32.

2nd[CLRVAR] [STO \rightarrow] **2nd**[RCL] [MEMVAR]

CLRVAR **2nd** [CLRVAR] CLR VAR: Y N

STO \rightarrow [ENTER] 1 5 [STO \rightarrow] \rightarrow A B C D E \rightarrow

[ENTER] 15 \rightarrow A \uparrow
15.

π π \uparrow

RCL **2nd** [RCL] A B C D E
15.

[ENTER] \times^2 [ENTER] $\pi 15^2$ \uparrow
706.8583471

[STO \rightarrow] \downarrow \rightarrow A B C D E \rightarrow

[ENTER] Ans \rightarrow B \uparrow
706.8583471

MEM VAR [MEMVAR] \downarrow A B C D E
706.8583471

[ENTER] \div 4 [ENTER] B \div 4 \uparrow
176.7145868

2nd[FIX] [EE]

FIX π [ENTER] π \uparrow
3.141592654

2nd [FIX] E0123456789

	2	π 3.14 FIX
	2^{nd} [FIX] \square	π 3.141592654
EE	1.234 [EE] (\rightarrow) 65 [ENTER]	1.234 E-65 1.234×10^{-65}

2^{nd} [STAT] 2^{nd} [EXIT STAT] [DATA] [STAT VAR]

1-VAR: {45, 55, 55, 55}

STAT	2^{nd} [STAT]	1-VAR 2-VAR \rightarrow
DATA	[ENTER] [DATA] 45 [ENTER]	$x_1=45$ 45. STAT
	\downarrow [ENTER]	frq=1 1. STAT
	\downarrow 55 [ENTER]	$x_2=55$ 55. STAT
	\downarrow 3 [ENTER]	frq=3 3. STAT
STAT VAR	[STAT VAR] \downarrow \downarrow \downarrow	n \bar{x} S_x $\sigma_x \rightarrow$ 4.330127019 STAT
	[ENTER] \times 2 [ENTER]	$\sigma_x \times 2$ 8.660254038 STAT
STAT	2^{nd} [STAT] \downarrow	\leftarrow CLRDATA STAT
	[ENTER]	STAT

2-VAR: (45,30); (55,25); $x'(45)$

STAT	2^{nd} [STAT] \downarrow	1-VAR 2-VAR \rightarrow
DATA	[ENTER] [DATA] 45 [ENTER]	$x_1=45$ 45. STAT
	\downarrow 30 [ENTER]	$Y_1=30$ 30. STAT
	\downarrow 55 [ENTER]	$x_2=55$ 55. STAT
	\downarrow 25 [ENTER]	$Y_2=25$ 25. STAT
STAT VAR	[STAT VAR] \downarrow \downarrow	\leftarrow x' y' STAT
	[ENTER] 45 \downarrow [ENTER]	$x'(45)$ 15. STAT
EXIT STAT	2^{nd} [EXIT STAT]	EXIT ST: \underline{Y} N STAT
	[ENTER]	STAT

[PRB]		
nPr	8	8 \uparrow
	[PRB]	nPr nCr ! \rightarrow
	3 [ENTER]	8 nPr 3 336. \uparrow
nCr	5 2	52 \uparrow
	[PRB] \downarrow	nPr nCr ! \rightarrow
	5 [ENTER]	52 nCr 5 2598960. \uparrow
!	4	4 \uparrow
	[PRB] \downarrow \downarrow	nPr nCr ! \rightarrow
	[ENTER] [ENTER]	4! 24. \uparrow
STO \rightarrow rand	5 [STO \rightarrow] \downarrow	\leftarrow rand 660000. \uparrow
	[ENTER]	5 \rightarrow rand 5. \uparrow
RAND	[PRB] \downarrow \downarrow	\leftarrow RAND RANDI(STAT
	[ENTER] [ENTER]	RAND 0.000093165 \uparrow
RANDI	[PRB] \downarrow	\leftarrow RAND RANDI(STAT
	3 2^{nd} [,] 5 \downarrow [ENTER]	RANDI(3,5) 4. \uparrow