Basic Operations

TI-30Xa (battery)

- [ON/C] turns on the TI-30Xa.
- [OFF] turns off the TI-30Xa and clears display, settings, and pending operations, but not memory.
- APD™ (Automatic Power Down™) turns off the TI-30Xa automatically if no key is pressed for about 5 minutes, but does not clear display, settings, pending operations, or memory.

  Note: [ON/C] after APD retrieves display, pending operations, settings, and memory.

2nd Functions

2nd functions are printed above the keys. [2nd] selects the 2nd function of the next key pressed. For example, 2 [2nd] [x^3] calculates the cube of 2.

Basic Arithmetic

[+] [−] [×] [÷]	60 [+] 5 [×] 12 [=]	**120.**
[=]	Completes all pending operations. With constant (**K**), repeats the operation and value.	
[+/−]	Changes sign of value just entered.	
	1 [+] 8 [+/−] [+] 12 [=]	**5.**
[(] [)]	Parenthetical expression (up to 15 open). [=] closes all open parentheses.	
[π]	Pi is calculated with 12 digits (3.14159265359), displayed with 10 digits (3.141592654).	
	2 [×] [π] [=]	**6.283185307**

Powers and Roots

[1/x]	8 [1/x] [+] 4 [1/x] [=]	**0.375**
[x^2]	6 [x^2] [+] 2 [=]	**38.**
[$\sqrt{x}$]	256 [$\sqrt{x}$] [+] 4 [$\sqrt{x}$] [=]	**18.**
[2nd] [x^3]	2 [2nd] [x^3] [+] 2 [=]	**10.**
[2nd] [$\sqrt[3]{x}$]	8 [2nd] [$\sqrt[3]{x}$] [+] 4 [=]	**6.**
[y^x]	5 [y^x] 3 [=]	**125.**
[2nd] [$\sqrt[x]{y}$]	8 [2nd] [$\sqrt[x]{y}$] 3 [=]	**2.**

Fractions

b [a b/c] c	Enters a proper or improper fraction, **b/c** (**b** ≤ 6 digits, **c** ≤ 3 digits). When possible, improper fractions are displayed as mixed numbers.
	3 [a b/c] 4 → **3 ⌟4**
	[×] 3 [=] → **2 _ 1 ⌟4**
	Single-variable functions display decimal results.
	1 [a b/c] 2 [x²] → **0.25**
a [a b/c] b [a b/c] c	Enters the mixed fraction **a b/c**. (**a, b, c** ≤ 3 digits each, with the total digits ≤ 8).
	6 [a b/c] 4 [a b/c] 6 → **6 _ 4 ⌟6**
	[=] → **6 _ 2 ⌟3**
[2nd] [d/c]	Toggles display between a mixed number and an improper fraction.
	30 [a b/c] 4 → **30 ⌟4**
	[2nd] [d/c] → **7 _ 1 ⌟2**
	[2nd] [d/c] → **15 ⌟2**
	[2nd] [d/c] → **7 _ 1 ⌟2**
[2nd] [F◂▸D]	Toggles display between fraction and decimal.
	55 [a b/c] 24 → **55 ⌟24**
	[2nd] [F◂▸D] → **2.291666667**
	[2nd] [F◂▸D] → **2 _ 7 ⌟24**

Memory

The calculator has 3 memories. When a memory contains a number other than 0, **M1**, **M2**, or **M3** displays. To clear a single memory, press 0 [STO] 1, 0 [STO] 2, or 0 [STO] 3. To clear all 3 memories (solar only), press [ON/AC].

[STO] n	Stores displayed value in memory n, replacing current value.		
	23 [STO] 1	**M1**	**23.**
	[+] 2 [=]	**M1**	**25.**
[RCL] n	Recalls value in memory n.		
	(continued)		
	[RCL] 1	**M1**	**23.**
	[+] 3 [=]	**M1**	**26.**
[2nd] [SUM] n	Adds displayed value to memory n.		
	(continued)		
	4 [2nd] [SUM] 1	**M1**	**4.**
	[RCL] 1	**M1**	**27.**
[2nd] [EXC] n	Exchanges displayed and memory values.		
	(continued)		
	3 [×] 5 [=]	**M1**	**15.**
	[2nd] [EXC] 1	**M1**	**27.**
	[2nd] [EXC] 1	**M1**	**15.**

Notation

2nd [SCI]	Selects scientific notation.		
	12345 =		**12345.**
	2nd [SCI]	**SCI**	**1.2345 04**
2nd [ENG]	Selects engineering notation (exponent is a multiple of 3). (continued)		
	2nd [ENG]	**ENG**	**12.345 03**
EE	Enters exponent.		

To enter a number in scientific notation:

1. Enter up to 10 digits for base (mantissa). If negative, press +/− after entering the mantissa.
2. Press EE.
3. Enter 1 or 2 digit exponent. If negative, press +/− either before or after entering exponent.

1.2345 +/− EE +/− 65	**−1.2345 −65**

DMS

Enter DMS (Degrees/Minutes/Seconds) values as **D.MMSSs**, using 0s as necessary:

D	degrees (0–7 digits)
.	decimal-point separator
MM	minutes (must be 2 digits)
SS	seconds (must be 2 digits)
s	fractional part of a second

For example, enter 48°5'3.5" as **48.05035**.

Note: Before using a DMS value in a calculation, you must convert it to decimal with 2nd [DMS▸DD].

2nd [DMS▸DD]	Interprets display as DMS and converts it to decimal.	
	30.09090 2nd [DMS▸DD]	**30.1525**
2nd [DD▸DMS]	Temporarily displays current value as DMS.	
	30.1525 2nd [DD▸DMS]	**30°09'09"0**