

TEXAS INSTRUMENTS CALCULATOR

QUICK REFERENCE GUIDE

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Datamath Calculator Museum



TI-10

The TI-10 Profit Guide™

The TI-10 combines pricing features most often needed in the business environment with standard mathematical functions. This manual is designed to help you use these capabilities effectively.

Features

- Solar power cells provide power for the calculator whenever adequate light is available.
- The Cost-Sell-Margin feature provides a convenient way to determine frequently needed pricing information.

Turning the Calculator On and Off

To turn the calculator on, expose the solar power cells to an adequate light source and press **[AC]**.

Be sure the entire solar panel is exposed. Protect your calculator from prolonged periods of direct sunlight and high temperatures.

The calculator turns off when the solar cell panel is no longer exposed to the light source.

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Introduction

Calculator Display



- Memory Indicator
- Minus Sign
- Error Indicator

LCD Numeric Display—Allows the entry and display of 10-digit numbers (with a maximum of 9 digits to the right of the decimal).

Apostrophes separate large numbers into hundreds, thousands, etc. (such as 44'444'444).

Memory Indicator—Indicates that a value other than 0 is stored in memory.

Minus Sign—Indicates that the number in the display is negative.

Error Indicator—Indicates an error condition.

Accuracy and Rounding Information

Calculations are accurate to the tenth digit. When a calculation result exceeds 9999999999, the first 10 digits are displayed with a decimal point 10 places to the left of its true position, and an error condition is indicated. Position the decimal point correctly by mentally moving it 10 places to the right and inserting zeros as required.

Calculations that result in more than 10 digits to the right of the decimal point are rounded to 10 digits.

Basic Operations

Clearing the Calculator

There are two ways to clear the calculator.

All Clear—Pressing [AC] clears the calculator and the memory. It is a good practice to use [AC] only when the calculator is first turned on and before beginning any calculation that requires a clear memory.

Clear Entry/Clear—Pressing [CE/C] twice clears the calculator. The memory is **not** affected by this key.

Entering Data

Digit Keys—[0] through [9] enter digits 0 through 9.

Decimal Point—[.] enters a decimal point. The floating decimal point appears at the right of the integers as they are entered until [.] is pressed. Digits entered after the decimal become the fractional part of the number.

Change Sign—Pressing [+/-] after a number entry or a calculation changes the sign of the displayed number.

Basic Operations (Continued)

The calculator completes arithmetic operations as they are entered.

To display the result of a calculation, press [=].

In the following examples, the → symbol indicates the result of the calculation performed by pressing the keys that precede it.

Addition and Subtraction

Example: $7.921 + 1.6 - 12.321 = ?$

7.921[+]1.6[-]12.321[=] → 2.8 -

Multiplication and Division

Example: $\frac{12 \times 13}{6} = ?$

12[×]13[÷]6[=] → 26.

Correcting Entry Errors

Clear Entry—Pressing [CE/C] once corrects entry errors.

If you press [CE/C] before an operation key ([+], [-], [×], [÷]), the incorrect number is cleared from the display without affecting the calculations.

If you press [CE/C] immediately after an operation key, calculations are also cleared.

Calculations with a Constant

As you perform a calculation, the final operation and one of its accompanying numbers are retained in a constant register. When the equal [=] key is pressed, the calculation is completed. The information retained in the constant register allows you to repeat the calculation by entering only one new number and pressing [=] again.

For addition, subtraction, and division, the constant register retains the operation and the number that follows it.

Example: $2 + 3 = ?$; $4 + 3 = ?$

2[+]3[=]	→	5.
4[=]	→	7.

Example: $8 - 6 = ?$; $3 - 6 = ?$

8[-]6[=]	→	2.
3[=]	→	3.-

Example: $27 \div 3 = ?$; $15 \div 3 = ?$

27[÷]3[=]	→	9.
15[=]	→	5.

For multiplication, the constant register retains the operation and the number that precedes it.

Example: $3 \times 8 = ?$; $3 \times 15 = ?$

3[×]8[=]	→	24.
15[=]	→	45.

Cost, Sell, and Margin

A special feature of the TI-10 assists you in making informed decisions concerning cost, selling price, and profit margin.



Using the keys in the SEL, MAR, and CST columns, any one of these figures can be calculated when the other two are known.

The following points should be noted while working cost-sell-margin problems:

- The column of keys you use is determined by the type of calculation you want to make.
- Within each column, two keys identify the data required for that calculation.
- Data for the top key must be entered prior to data for the lower key.
- The results are displayed after the last entry has been made.
- An error message is displayed if the data is entered out of sequence or entered using keys from different columns.

Determining Cost

The CST column keys help you determine the cost of an item when you know the margin and selling price.

Example: If the selling price of an item is \$1.25 and the margin is 20%, find the cost of the item. (Use the CST column keys.)

1.25 [SEL] 20 [MAR] → 1.

Determining Selling Price

The SEL column keys help you determine the selling price of an item when you know the cost and margin.

Example: If the cost of an item is \$1.00 and the margin is 20%, find the selling price. (Use the SEL column keys.)

1 [CST] 20 [MAR] → 1.25

Determining the Margin

The MAR column keys help you determine the percentage of margin when you know the cost and selling price.

Example: If the cost of an item is \$1.00 and the selling price is \$1.25, find the margin percentage. (Use the MAR column keys.)

1 [CST] 1.25 [SEL] → 20.

Memory Operations

Memory Indicator

The letter M appears in the upper right corner of the display when the memory contains a number other than zero.

Clearing Memory

To clear the memory, press the **[MRC]** key twice or press **[AC]**.

Before you begin a new problem that does not use the number currently in memory, use either the **[MRC]** or **[AC]** key to be sure the memory is clear.

Adding a Number to Memory

The **[M +]** key adds the displayed number to memory. This key completes any operation (like the **[=]** key) and adds the result to memory.

The memory has the same 10-digit capacity as the display. The calculator indicates an error condition and blocks entry of any number that exceeds this limit. In such cases, the number stored prior to the overflow is retained.

Subtracting a Number from Memory

The [M -] key subtracts the displayed number from memory. This key completes any operation and subtracts the result from memory.

Recalling a Number from Memory

To display the number in memory, press the [MRC] key once.

Example Memory Operations

Example: $(4 \times 11.99) - (12 \times 0.98) = ?$

[MRC][MRC] 4 [x] 11.99 [M +]	→	47.96
12 [x] .98 [M -]	→	11.76
[MRC]	→	36.2

Example: $\frac{7.9 + 8.1}{-(5.2 + 2.8)} = ?$

[MRC][MRC] 5.2 [+] 2.8 [M -]	→	8.
7.9 [+] 8.1 [÷]	→	16.
[MRC][=]	→	2. -

Example: $4 \times 11.99 = x; 43.15 - x = ?$

[MRC][MRC] 4 [x] 11.99 [M +]	→	47.96
43.15 [-] [MRC][=]	→	4.81 -

Percentage Calculations

Percentages are calculated immediately when you press the [%] key.

If you press [=] following the [%] key, additional calculations are performed and incorrect results may be obtained.

Notice that two key sequences are shown in the add-on and discount examples. The first key sequence calculates the result directly, and the second displays the intermediate percentage.

Percentages: 5% of \$250 = ?

$$250 [\times] 5 [\%] \rightarrow 12.5$$

Add-ons: \$250 plus 5% markup = ?

$$250 [+] 5 [\%] \rightarrow 262.5$$

or

$$250 [\times] 5 [\%] \rightarrow 12.5 [+] [=] \rightarrow 262.5$$

Discounts: \$250 less 5% discount = ?

$$250 [-] 5 [\%] \rightarrow 237.5$$

or

$$250 [\times] 5 [\%] \rightarrow 12.5 [-] [=] \rightarrow 237.5$$

Ratios: \$600 is what percent of \$1,500?

$$600 [\div] 1500 [\%] \rightarrow 40.$$

Combinations:

\$129 less 25% discount plus 4% tax = ?

$$129 [-] 25 [\%] [+] 4 [\%] \rightarrow 100.62$$

Error Conditions

Error Indicator

An error/overflow condition is indicated by the letter E in the lower right corner of the display. Press [CE/C] once to clear the condition; press [CE/C] twice or [AC] once to clear the calculator.

Note: You should clear the calculator (press [CE/C] twice or [AC] once) when you receive an overflow. Do not attempt to continue calculations after you have simply cleared the overflow condition (by pressing [CE/C] once).

Conditions that Produce Errors

- You attempt to enter data into a cost, sell, or margin calculation using an incorrect key sequence. Refer to data entry information on page 6.
- You attempt to enter an integer with more than 10 digits. Refer to information on correcting entry errors on page 4.
- You attempt to perform a calculation that results in more than 10 digits to the left of the decimal point. Refer to accuracy information on page 2.
- You attempt to add a number to memory that would exceed its 10-digit capacity. Refer to memory information on page 8.
- You attempt to divide a number by zero.

In Case of Difficulty

If the numbers in the display are dim, erratic, or change very slowly, be sure the solar panel is completely exposed and the light source is adequate.

If you question the results of a calculation:

1. Press **[AC]** to clear the memory and the calculator. Then repeat your calculation.
2. Review the operating instructions to be certain the calculations were performed properly.

If the difficulty continues, refer to "Service Information."

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Service Information

If the suggestions in "In Case of Difficulty" do not correct the problem, call Consumer Relations **toll-free** within the United States at:

1-800-TI CARES (842-2737).

From outside the United States, call 1-806-741-4800. (We cannot accept collect calls at this number.) Or you may write to:

Texas Instruments Incorporated
Consumer Relations
P.O. Box 53
Lubbock, Texas 79408

Please contact Consumer Relations:

- Before returning the calculator for service
- For general information about using the calculator

Technical Questions

If you have technical questions about the operation of the calculator or its applications, call 1-806-741-2663. We regret that we cannot accept collect calls at this number. As an alternative, you can write to Consumer Relations at the address given above,

Express Service

Texas Instruments offers an express service option for fast delivery. Please call Consumer Relations at 1-800-TI CARES (842-2737) for additional information.

Calculator Accessories

If you are unable to find accessories at your local dealer, you may order them from Texas Instruments. Please call Consumer Relations at 1-800-TI CARES (842-2737) for information.

Returning Your Calculator for Service

A defective calculator will be either repaired or replaced with the same or comparable reconditioned model (at TI's option) when it is returned, postage prepaid, to a Texas Instruments Service Facility.

Texas Instruments cannot assume responsibility for loss or damage during incoming shipment. For your protection, carefully package the calculator for shipment and insure it with the carrier. Enclose your full return address, any accessories related to the problem, and a note describing the problem you experienced with the calculator. Also, please enclose a copy of your sales receipt or other proof of purchase to determine warranty status.

Please ship the calculator postage prepaid; COD shipments cannot be accepted.

In-Warranty Service

For a calculator covered under the warranty period, no charge is made for service.

Out-of-Warranty Service

For an out-of-warranty calculator, a flat-rate fee by model is charged for service.

Estimates are not provided prior to repair; to obtain the service charge for your product, please call Consumer Relations before returning the calculator to the Service Facility.

Texas Instruments Service Facilities

U.S. Residents (U.S. Postal Service)

Texas Instruments

P.O. Box 2500

Lubbock, Texas 79408

U.S. Residents (other carriers)

Texas Instruments

2305 N. University

Lubbock, Texas 79415

Canadian Residents Only

Texas Instruments

41 Shelley Road

Richmond Hill, Ontario, Canada L4C 5G4

One-Year Limited Warranty

This Texas Instruments electronic calculator warranty extends to the original consumer purchaser of the product.

Warranty Duration: This calculator is warranted to the original consumer purchaser for a period of one (1) year from the original purchase date.

Warranty Coverage: This calculator is warranted against defective materials or workmanship. **This warranty is void if the product has been damaged by accident, unreasonable use, neglect, improper service, or other causes not arising out of defects in material or workmanship.**

Warranty Disclaimers: Any implied warranties arising out of this sale, including but not limited to the implied warranties of merchantability and fitness for a particular purpose, are limited in duration to the above one-year period. Texas Instruments shall not be liable for loss of use of the calculator or other incidental or consequential costs, expenses, or damages incurred by the consumer or any other user.

Some states do not allow the exclusion or limitations of implied warranties or consequential damages, so the above limitations or exclusions may not apply to you.

Legal Remedies: This warranty gives you specific legal rights, and you may also have other rights that vary from state to state.

Warranty Performance: During the above one-year warranty period, your TI calculator will be either repaired or replaced with a reconditioned comparable model (at TI's option) when the product is returned, postage prepaid, to a Texas Instruments Service Facility. The repaired or replacement calculator will be in warranty for the remainder of the original warranty period or for six months, whichever is longer. Other than the postage requirement, no charge will be made for such repair or replacement. Texas Instruments strongly recommends that you insure the product for value, prior to mailing.

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Printed in Taiwan
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