



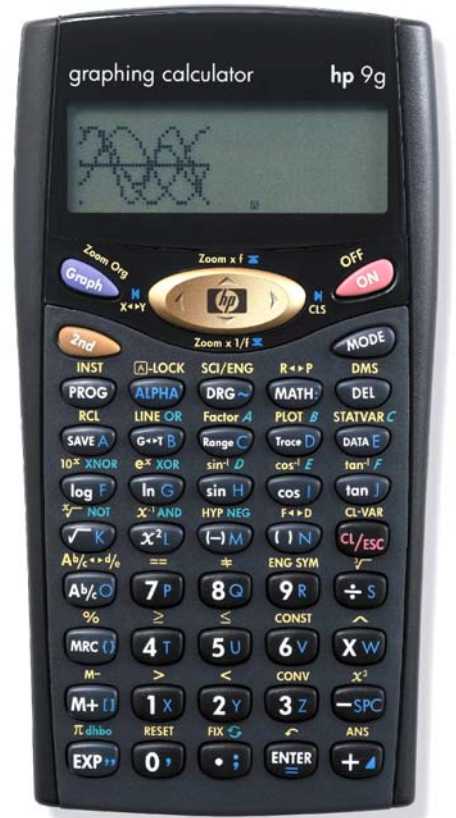
hp calculators

HP 9g Clearing, Editing and Correcting

Resetting and Clearing Memory

Editing and Correcting the Entry Line

Practice Editing the Entry Line



This learning module describes how to reset the memory and clear data, as well as the different techniques for editing the entry line and correcting errors.

Resetting and clearing memory

Pressing 2nd RESET displays the message RESET: N Y. If you now press $\text{}$ and ENTER the entire user memory is cleared and the message "MEM CLEARED" is displayed. All variables, programs, pending operations, statistical data, answers, previous entries will be lost. Press ENTER or C/ESC to cancel the reset operation.

Whenever the calculator does not respond to keystrokes, the reset operation described above is not possible. In such case try pressing the EXP and MODE keys at the same time. This procedure should unblock the calculator and all settings will return to their default values. Unlike a soft reset or a warm start on the HP 49, *all* memory is cleared by the EXP - MODE key combination, just like the above procedure.

Graphs are cleared by pressing 2nd CLS (the right arrow key). Programs are cleared in the PROG mode (MODE 3): when the PROG menu is displayed select DEL and press ENTER or just press 3Z . A new menu is displayed with three options: ONE to clear only one program (which is selected from the non-empty programs present in memory), ALL to clear all the programs and EXIT to exit this menu without clearing any program. Before clearing either one or all the programs, a confirmation menu is displayed. Statistical data can be deleted by selecting D-CL and pressing ENTER in the STAT menu (MODE 1X , select D-CL and ENTER). All data sets will be lost.

A variable can be individually cleared by storing 0 in it. This same technique can be applied to more than one variable in a step:

Example 1: Clear variables A through F

Solution: 0 $\text{}$ SAVE A SAVE A ALPHA DRG $\text{}$ log F

Notice that the Alpha indicator is automatically set after pressing SAVE A .

Answer: 0. Press 2nd RCL to review the values of the variables.

In order to clear all the variables at once, press 2nd CL-VAR . Please be warned that no confirmation message is displayed. The running memory M is cleared by pressing the MRC key twice in a row. Refer to the HP 9g learning module *Using Memories to Solve Problems* for more information on the running memory and the standard memory variables.

Editing and correcting the entry line

The keys used to edit the entry line are the left and right arrow keys: $\text{}$ and $\text{}$ that make the blinking cursor move to the left or to the right respectively. Holding these keys down make the cursor move quickly. The cursor is always in "insert" mode, that is, a newly keyed in character does not overwrite the existing one. To move to the beginning or the end of the line press ALPHA $\text{}$ and ALPHA $\text{}$ respectively.

The well-known 2nd key is used to enter or execute a function with a yellow label. The 2nd annunciator appears in the display indicating that the next key you press will be a yellow key. This is the way nearly all calculators work, but what is less known is that the HP 9g has a way to *lock* the 2nd key: press ALPHA 2nd and not only one but all the next key presses will be selecting the second functions. This special mode can be stopped by pressing the 2nd key again.

Alphabetic function keys are in blue on the keyboard and they are entered by pressing first the ALPHA key. Once pressed, the A annunciator is turned on. As before, this mode can be locked by pressing 2nd AL-Lock to enter several characters consecutively. Just press ALPHA to unlock this mode.

There are two keys to delete characters in the entry line: DEL and CL/ESC . The CL/ESC key works in two ways. If there are characters at the right of the cursor, pressing CL/ESC deletes all these characters: from the cursor to the end of the entry line. But if there aren't any characters beyond the blinking cursor, pressing CL/ESC deletes the entire entry line, that is, all characters from the beginning to the cursor (the end of the line).

To replace a character with another one, place the cursor where the character to be replaced is, press DEL and key in the new character. If the cursor is at the end of the entry line, pressing DEL deletes the previous character. In fact, the term character does not only mean a number or a letter in this context, but also a function name.

Once ENTER has been pressed the entry line is processed and the result appears in the result line. But the expression is not lost, it's kept internally in a "history stack." Up to 252 characters from already evaluated expressions are stored in this stack, not only from the most recent expression but older expressions are also stored and can be recalled by the up and down cursor keys: ^ and v . To go to the top of the history stack (i.e. the oldest entry) press ALPHA ^ and to go to the bottom of the stack press ALPHA v and the most recent entry will be displayed.

The HP 9g has a very handy function to *undo* a deletion: 2nd f (on the ENTER key). It undoes what both DEL and CL/ESC do, just make sure no other character has been entered since the deletion for the undo function to work.

In the following examples, unless stated otherwise, assume that the cursor is at the beginning of the line, as if the expression had been evaluated and recovered from the history stack

Practice editing the entry line

Example 2: Change $89 + 65 \times 2$ to $99 + 65 \times 2$.

Solution: 9 R DEL

Example 3: Change $89 + 65 \times 2$ to $89 - 65 \times 2$

Solution: >> SPC DEL

Example 4: Change $89 + 65 \times 2$ to $89 + 65 \times 3$

Solution: ALPHA ▶ ◀ DEL 3 Z

Example 5: Change $89 + 65 \times 2$ to $89 + 65 / 3$

Solution: ALPHA ▶ ◀◀ CL/ESC ÷ 5 3 Z

Example 6: Enter $30 + \sin^{-1}(0.58)$ but, before executing it, you realized you wanted to calculate $30 + \cos^{-1}(0.58)$ instead.

Solution: Let's key in the first expression: 3 Z 0 , + 2nd sin^{-1} 0 . 5 8 0 . The ENTER key has not yet been pressed, that is to say, the cursor is still blinking in the entry line and the result line remains blank. To

replace the arcsin function with the arcos function, you don't have to delete all the three letters s, i, and n: it is the entire function name that is deleted at once. Place the cursor on the arcsin function by pressing <<< now press DEL and $\text{2nd} \cos^{-1} E$ to enter the arcos function. Now press DEL again to delete the left parenthesis inserted automatically by the arcos function. Of course, you can always insert the new function first and then delete the old one: $\text{2nd} \cos^{-1} E \text{DEL} \text{DEL}$. Note that the number of keystrokes is the same as before.

Example 7: Correct the previous expression again but, this time, once the expression has been evaluated.

Solution: Let's key in the expression again : $\text{3Z} \text{0} \text{' } \text{+} \text{2nd} \sin^{-1} \text{D} \text{.} \text{:} \text{5U} \text{8O}$ and now press ENTER . To retrieve the evaluated expression press \wedge , the cursor is at the beginning of the entry line, press $\text{2nd} \cos^{-1} E \text{DEL}$ to replace the arcsin function.