hp calculators

HP 20b Introduction to the Learning Modules

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Use of the Learning Modules

HP provides these learning modules to help readers learn about the HP 20b, or to gain experience in its use. They do not replace the manuals but offer a hands-on way to try some of the many HP 20b features. Readers who do not have an HP 20b but wish to learn about it can benefit by studying these modules too. The examples are provided purely for practice and do not represent any real situations or people.

Special Symbols

The learning modules use special symbols to show keys on the HP 20b and characters on the screen (also called the display).

The shift key has a blue front to it and is displayed in these learning modules as \text{\textsuperscript{a}}. Any key pressed after one of these two is called a “shifted key” and is shown as two keypresses. For example to execute the round function or RND, it is necessary to press the shift key \text{\textsuperscript{a}RND} and then the \text{\textsuperscript{a}e} key. This would be shown in the learning modules as \text{\textsuperscript{a}e}.

The top right corner of the HP 20b screen displays a number of annunciators indicating the status of the calculator or various modes that might be set. One of these annunciators is a small battery shape that indicates it is time to replace the HP 20b batteries. See the user’s guide for how to do this. The meanings of the other annunciators are shown in the table below.

\begin{tabular}{|c|}
\hline
RPN & RPN mode is active. This is set in the \text{\textsuperscript{a}Mode} menu. Algebraic and chain mode are the other alternative operating modes. \\
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STO & \text{\textsuperscript{a}STO} has been pressed. The next key pressed, if 0-9 or \text{\textsuperscript{a}N}, \text{\textsuperscript{a}Y}, \text{\textsuperscript{a}V}, \text{\textsuperscript{a}M}, or \text{\textsuperscript{a}F}, will store the displayed value into that storage register or time value of money register. \\
\hline
RCL & \text{\textsuperscript{a}RCL} has been pressed. The next key pressed, if 0-9 or \text{\textsuperscript{a}N}, \text{\textsuperscript{a}Y}, \text{\textsuperscript{a}V}, \text{\textsuperscript{a}M}, or \text{\textsuperscript{a}F}, will store the displayed value into that storage register or time value of money register. \\
\hline
INPUT & Indicates that the value displayed in a menu may be input by the user, if desired. \\
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\textbf{\textsuperscript{a}} & Indicates shift key \text{\textsuperscript{a}} has been pressed. The next key pressed will execute the blue shifted function on the front of the key. Press it again to turn it off, if desired. \\
\hline
\textbf{\textsuperscript{a}} & Low battery annunciator. If this is on, it is time to replace the batteries. See the user’s guide. \\
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\textsuperscript{a} & The small equal sign annunicator in the top right of the display indicates that the value displayed in a menu may be computed by pressing the \text{\textsuperscript{a}key.} \\
\hline
BEG & The keystroke sequence \text{\textsuperscript{a}BEG} was performed to indicate that payments occur in the beginning of the period; to change back to end mode and deactivate the annunicator, press \text{\textsuperscript{a}End}. This is reset to end mode when the TVM mode is reset. \\
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RAD & Radians mode is active for trigonometric calculations. This is set in the \text{\textsuperscript{a}Mode} menu. The alternative mode is degrees. Degrees mode is indicated with the RAD annunicator is not shown. \\
\hline
360 & When dealing with dates, a 360-day year is being used with 12 months of 30 days each. This is set in the \text{\textsuperscript{a}Mode} menu. The other choice is to use the actual number of days. This “actual days” mode is indicated by the 360 annunicator not being shown in the display. \\
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\end{tabular}
Special Key Combinations

The learning modules assume that the HP 20b modes and settings are as they would be when a new HP 20b is turned on the first time. Changes to these settings needed for examples are described in the learning modules. After some examples have been worked through, the HP 20b settings might be very different from the original ones. A quick way to return to the standard settings is to perform a MEMORY CLEAR, but note that this will clear all of the calculator memory.

The "master clear" of the HP 20b is accomplished when the following sequence is executed:

- press and hold \( \text{[FN]} \);
- press and hold \( \text{[N]} \);
- press \( \text{[F]} \).

DO NOT DO THIS IF YOU WANT TO KEEP ANY INFORMATION THAT IS IN YOUR CALCULATOR. If you want to keep what is in memory but return the settings to their original values, you will have to change the settings one by one.

You can also remove the back cover of the HP 20b and press a small paperclip through the reset hole. This procedure is described in the user's guide.