## hp calculators

HP 10BII Operating Modes

Operating Modes
Display Formatting

- Thousands Separator
- Number of Decimal Digits Displayed

Begin / End Mode
Practice changing the HP 10BII's mode settings


## Operating Modes

The HP 10BII calculator has several operating modes that affect the way in which it operates. These modes fall into two broad categories, one affecting the display and the other the way the HP 10BII calculator solves financial problems.

## Display Formatting

There are two primary ways the HP 10BII display can be changed.
Thousands separator. By default and after an All Clear, the HP 10BII displays commas to separate digits in a large number and a point to indicate where the decimal is. This is the U.S. standard. In many other countries, however, a point is used to separate thousands and a comma is used to place the decimal.

The mode can be changed by pressing the yellow shift key and then the decimal point key, 1,0 .
Number of Decimal Digits Displayed. Although two digits after the decimal may be sufficient in many problems dealing with money, there are other situations where more digits are required. On the HP 10BII, the number of digits displayed can be changed using the yellow-shifted DISP function, located above the zero key.

To change the number of digits displayed to 4 decimals, press 0 . 4 . To change it back to 2 decimals, press 0 OIse 2.

## Begin / End Mode

A special mode setting relates to the solution of problems known as annuities. This mode tells the HP 10BII to solve these problems assuming that payments are made either at the beginning of a period or at the end of a period, which is why this mode is called Begin / End mode.

When the HP 10BII is in Begin mode, the display will show the word BEGIN in the space below numbers. There is no indication in the HP 10BII display when the calculator is in End mode, other than by the absence of the word BEGIN.

This mode is changed using the yellow-shifted BEG/END function, located above the MAR key, or - Ireem . This function will change the mode from whatever mode the calculator is presently in to the other mode - it will cycle through the modes if pressed repeatedly.

If you receive an unexpected result when solving an annuity problem, make sure that the calculator is in the proper mode and try resolving the problem.

Begin / End mode does not affect compound interest problems or any other type of calculation other than annuities.

## Practice changing the HP 10BII's mode settings

Example 1: Change the HP 10BII to show one digit after the decimal.
Solution: 0 oise 1
Answer: The calculator will now display numbers with one digit after the decimal.
Example 2: Return the HP 10BII to its normal setting of two digits after the decimal point.

Solution: -2
Answer: $\quad$ The calculator will now display numbers with two digits after the decimal.
Example 3: Your friend shows you his HP 10BII and wonders why the decimal point is showing up as a comma. What keys do you press to return the display to the U.S. standard?

Solution: 0.1,
Answer: $\quad$ The decimal point will no longer show up as a comma.
Example 4: Jim did not get the same answer as his instructor on an annuity problem. His display shows the word "BEGIN" and he doesn't think it is supposed to be doing that. What keys do you press to change this setting?

Solution: $-\mathbb{B E G E N O}$
Answer: $\quad$ The calculator should now be in END mode. Jim should retry the problem's solution.

