

Hewlett Packard 10BII+ Calculator

The HP 10BII+ is the newest Hewlett Packard financial calculator, released in 2011 (after the 4th edition of Math for Business and Life was printed).

The HP 10BII+ is very similar to the HP 10BII, but the HP 10BII+ has additional features. Many of those additional features appear in blue, accessed by pressing the blue shift key (located just above the gold shift key). Keystrokes for the HP 10BII appear in the textbook. Keystrokes for the HP 10BII+ are identical to those of the HP 10BII, *except as noted below*. Keystrokes for the HP 10BII+ that are identical to those of the HP 10BII will not be duplicated here.

Gold key. For the HP 10BII+, the gold key has a downward arrow, indicating the gold function is located on the bottom half of keys.

Blue key. The blue key has an upward arrow, indicating the blue function is located just above keys.

Begin/End key. For the HP 10BII+, the register is identified as “Beg/End” instead of “BEG/END.”

Clear Statistics key. For the HP 10BII+, the register is identified as “CSTAT” instead of $CL\Sigma$.”

Storage registers. The HP 10BII+ has 20 storage registers (the HP 10BII has 10). To store a displayed number on the HP 10BII+, press [GOLD] [STO] followed by one of the 20 registers (0 thru 9, and .0 thru .9). To recall a number, press [RCL] followed by one of the 20 registers.

Clear memory registers. With the HP 10BII, the only way to clear TVM registers is to press [C ALL]; doing so also clears other registers (like storage registers and statistics registers). The HP 10BII+ allows us to clear certain registers without clearing other registers.

<u>To clear</u>	<u>Press</u>
All memory	[GOLD] [C ALL]
TVM registers and depreciation memory	[BLUE] [C MEM] 1
Cash flow registers	[BLUE] [C MEM] 0
Bond registers	[BLUE] [C MEM] 7
Break-even registers	[BLUE] [C MEM] 4
Clear statistics registers	[GOLD] [C STAT]

Unless there is a special reason to keep something in memory, it is easier to just press [GOLD] [C ALL]; that is the approach we will take.

Cash flows. The N_j register is used to indicate repeating cash flows (not limited to a 2-digit number like the HP 10BII). The keystrokes for Example 3 of Unit 19.5 are shown below. To review the cash flows, press [RCL] [CFj]. The initial cash flow will be shown. Pressing [+] will show the frequency of that cash flow: it shows cash flow “0” happened 1 time. Continuing to press [+] shows the next cash flow, then the frequency of the cash flow.

Unit 19.5, Example 3.

<u>keystrokes</u>	<u>display</u>	<u>explanation</u>
[GOLD] [C ALL]	0.00	clear registers
0 [CFj]	0.00	must enter zero as the initial cash flow
2,000 [CFj] 120 [GOLD] [Nj]	120.00	entered the next cash flow and number of times
3,000 [CFj] 60 [GOLD] [Nj]	60.00	entered the next cash flow and number of times
8.5 [÷] 12 [=] [I/YR]	0.71	periodic rate
[GOLD] [NPV]	223,994.61	net present value

Enrichment Topics: ARMS, GEMS, Negative Amortization, and Balloons. Example 2 (GEM).

<u>keystrokes</u>	<u>display</u>	<u>explanation</u>
[GOLD] [C ALL]	0.00	clear registers
8 [÷] 4 [=] [I/YR]	2.00	periodic rate
3,000 [PV]	3,000.00	loan amount
150 [+/-] [PMT]	-150.00	quarterly payment for first 2 years
[N]	25.80	<i>with the HP 10BII+, must do this or must enter an arbitrary value in the n-register</i>
1 [INPUT] 8 [GOLD] [AMORT]	1-8	ready to amortize payments 1 through 8
[=] [=] [=]	BAL 2,227.53	balance after 8 payments
[PV]	2,227.53	entered in PV register
300 [+/-] [PMT]	-300.00	new quarterly payment (for remainder of loan)
[N]	8.12	number of periods left
[+] 8 [=]	16.12	total number of periods to pay off loan
[÷] 4 [=]	4.03	number of years to pay off loan

Enrichment Topics: ARMS, GEMS, Negative Amortization, and Balloons. Example 3 (Negative Amortization).

<u>keystrokes</u>	<u>display</u>	<u>explanation</u>
[GOLD] [C ALL]	0.00	clear registers
7 [÷] 12 [=] [I/YR]	0.58	periodic rate
22,000 [PV]	22,000.00	loan amount
100 [+/-] [PMT]	-100.00	monthly payment
[N]	no Solution	indicates the loan will <i>never</i> be paid off
360 [N]	360.00	<i>with the HP 10BII+, must enter an arbitrary value in the n-register; won't affect results</i>
1 [INPUT] 300 [GOLD] [AMORT]	1-300	ready to amortize payments 1 through 300
[=] [=] [=]	44,951.86	balance after payment 300