

HP10BII Financial Calculator Quick Reference Guide

9933/20050101

Power On and Off

- To turn the calculator on, press the [ON] key in the lower left corner of the keypad.
- To turn the calculator off, press the orange shift key [SHIFT], then the [ON] key.

Display

- To change the display contrast, hold down the [ON] key, then press [+] or [-].
- To specify the number of displayed decimal places, press [SHIFT] [DISP] and enter the number of digits (0 through 9) to appear after the decimal point.
Note: IREM courses use 2 decimal places.

Clearing the Calculator

- To clear one character at a time, press [←]. If you have already pressed [=] or one of the function keys, then [←] will clear the entire display.
- To clear the entire display, press [C].
- To clear the entire display and all financial memory registers press [SHIFT] [C ALL].

Setting Periods per Year

Most calculations use one period per year (annual payments) or twelve periods per year (monthly payments).

- To set annual payments, press 1 [SHIFT] [P/YR]
- To set monthly payments, press 12 [SHIFT] [P/YR]

Adding or Subtracting a Percent

- To add a percent, enter the figure, press [+], enter the percentage and press [%] [=].
- To subtract a percent, enter the figure, press [-], enter the percentage and press [%] [=].

BASIC KEYS

[ON]	Turns the calculator on
[SHIFT] [ON]	Turns the calculator off
[ON] [+] [-]	Changes the contrast of the display (press simultaneously)
[SHIFT] [DISP]	Sets the number of decimal points displayed
[SHIFT]	Accesses the alternate function printed on the lower half of the keys in orange
[←]	Clears one character at a time
[C]	Clears the entire display
[SHIFT] [C ALL]	Clears the entire display and all financial memory registers
[+/-]	Changes the sign of the number in the display
[SHIFT] [BEG/END]	Sets begin or end mode
[SHIFT] [P/YR]	Sets the number of periods per year
[INPUT]	Stores parameters for multi-variable functions
[SHIFT] [STO]	Store a number to a memory register
[RCL]	Retrieves data already entered in a memory register

TIME VALUE OF MONEY REGISTER and AMORTIZATION

[N]	Finds/stores the total number of periods the investment is compounded/discounted
[SHIFT] [x P/YR]	Stores the number of periods after multiplying the term by the payments per year
[I/YR]	Finds/stores the interest rate per year
[PV]	Finds/stores the present value
[PMT]	Finds/stores the payment per period
[FV]	Finds/stores the future value
[SHIFT] [AMORT]	Creates an amortization table

CASH FLOW REGISTER

[CFj]	Stores cash flows
[SHIFT] [Nj]	Stores the number of times the same cash flow amount occurs consecutively
[SHIFT] [IRR/YR]	Finds internal rate of return
[SHIFT] [NPV]	Finds net present value

MARKUP

[MU]	Finds/stores markup percentage
[CST]	Finds/stores cost before markup
[PRC]	Finds/stores price after markup
[MAR]	Finds/stores margin percentage after markup

STATISTICS

[STATS]	Accesses the alternate function printed above the keys in purple
[STATS] [n]	Displays the number of entries in a statistics list
[STATS] [Σx]	Sums entries in a statistics list
[SHIFT] [x̄,y]	Calculates the mean of entries in a statistics list

HP10BII Financial Calculator Quick Reference Guide

Time Value of Money (TVM) Registers and Amortization

To solve for one of the TVM registers, you must enter non-zero values in three of the other four registers (the HP10BII will assume that the value for the fourth register is zero).

To Solve for Payment:

1. Clear all registers. [SHIFT][C ALL]
2. Store the amount of the loan. *Amount* [PV]
3. Store the annual interest rate. *Rate* [I/YR]
4. Store the number of payments. *Payment* [N]
5. Press the payment key. [PMT]

To Amortize the Loan:

6. View principal paid in Year 1. [SHIFT][AMORT] [=]
7. View interest paid in Year 1. [=]
8. View the current loan balance. [=]
9. To view the next range of principal, interest, and loan balance, repeat Steps 6-8.

Cash Flow Registers

The cash flow registers allow you to solve for internal rate of return (IRR) and net present value (NPV).

To Solve for IRR or NPV:

- Store the number of periods per year. *Number* [SHIFT][P/YR]
- Store the amount of the initial investment. *Amount* [CFj]
- Store the amount of the next cash flow and press [CFj] (if the amount entered occurs more than once consecutively, enter the number of times it occurs and press [SHIFT] [Nj]). *Amount* [CFj]
- Repeat step 3 for each cash flow.
- Solve for IRR. [SHIFT] [IRR/YR]

OR

- Store the annual interest rate. *Rate* [I/YR]
- Solve for NPV. [SHIFT] [NPV]

Practice Problem

You are currently negotiating with a tenant who is interested in leasing 25,600 square feet of vacant space. The tenant has proposed an annual rent of \$22.50 per square foot to be paid monthly, and wants an improvement allowance of \$400,000. In addition, they are asking for free rent for the first year. The lease term is 5 years. The owners' required rate of return is 11% percent. What is the annual effective rent?

	Keystrokes	HP10BII Display
Set to 12 payments per year	12 [SHIFT] [P/YR]	12.00
Clear all data	[SHIFT] [C ALL]	12 P_Yr 0.00
Store Cash Flow 0	400000 [+/-] [CFj]	C-FLOW CF 0 C-FLOW CF -400,000.00
Store Cash Flow 1	0 [CFj]	C-FLOW CF 1 C-FLOW CF 0.00
Repeat Cash Flow 1	12 [SHIFT] [Nj]	C-FLOW N 1 C-FLOW N 12.00
Calculate monthly rent and store as Cash Flow 2	25600 [x] 22.5 [=] 12 [=] [CFj]	48,000.00 C-FLOW CF 2 C-FLOW CF 48,000.00
Repeat Cash Flow 2	4 [x] 12 [SHIFT] [Nj]	C-FLOW N 2 C-FLOW N 48.00
Store I/YR	11 [I/YR]	11.00
Solve for NPV	[SHIFT] [NPV]	1,264,566.51
Store payments per year	5 [SHIFT] [x P/YR]	60.00
Solve for payment	[PMT]	-27,494.74
Solve for annual payment per square foot	[÷] 25600 [x] 12 [=]	-12.89

The annual effective rent is \$12.89 per square foot.



IREM Institute of Real Estate Management

National Headquarters
430 North Michigan Avenue
Chicago, Illinois 60611-4090

Telephone (800) 837-0706
Facsimile (800) 338-4736
Internet www.irem.org