HP10BII Financial Calculator Quick Reference Guide

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 [+1] 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
- [SHIFT] [DISP] Sets the number of decimal points displayed
- [+/-] 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] [P/YR] 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] [x,y] Calculates the mean of entries in a statistics list
**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.

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**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]).
- 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]

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### 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 [÷][P/YR] | 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.