HP-41C
Home Management Pac
Quick Reference Card

Home Budgeting

(Minimum size 063)

XEQ BUDGET

Press [orange] A to initialize

(Caution: destroys data in $R_{00} \rightarrow R_{63}$)

Input month (max. 6 characters).

Press F, input monthly forecast in each category.

Press A, input actual expenditures in each category, press R/S, *without data entry,* to advance to next category.

For tax deductible items: press D after keying-in entry.

To delete expenditure entries: access category, reinput erroneous entry with negative sign.

To obtain current balance: press B, R/S

To obtain summary of month: press E, R/S

To store monthly data: press G, insert blank card.

To read in monthly data: press I, read in data card.

For Year-to-Date Data:

Update at *end* of month only, by pressing [f] [D]
Press [f] [E] as desired for YTD summary
To store YTD data: press [H], insert blank card
To read in YTD data: press [J] read in data card
For interim storage execute STORE or RELOAD as desired

Travel Expense Record

(Minimum size 063)

[XEQ] TRAVEL, press [A] to initialize (Caution: destroys data in $R_{00} \rightarrow R_{63}$)
Input date (in mm.ddyyyy format)
Input expenses in each category, press [R/S] *without data entry* for next category.
For following days: press [B], input date and proceed as above.
To correct errors: press [B], input date of erroneous entry, access category, reinput error with negative sign, input correct data and continue. Then press [B] and input current date to return to current status.
To recall category totals, press [C], [R/S]
To recall daily totals, press [D], [R/S]
To record data: press [f] [E], insert blank cards
To read data: press [E], read in data cards
For interim storage of data, execute STORE or RELOAD as desired.

Stock Portfolio Evaluation

(Minimum size 063)

Place overlay on keyboard.
Begin program: [XEQ] STOCKS

To Input Portfolio Data:

Press [A] , see ***NO. STOCKS=?***
Input number of different stocks in portfolio, [R/S] , see ***NAME=?***
Input alpha name of first stock (max. 6 characters), [R/S] , see ***NO. SHS*** (name) ***=?***
Input number of shares, [R/S] , see ***PRC*** (name) ***=?***
Input price (in XXX.YZ format), [R/S] , see ***COMM=?***
Input the commission, [R/S] , see ***NAME=?***
Repeat above steps until all stocks have been input. ***END*** will be displayed.

To Correct or Change Data:

Press [E] , see ***NAME=?***
Input name of the stock to be corrected, press [R/S] , see ***NO. SHS=?*** etc.
Input correct data for the *single* stock to be corrected.
Repeat as necessary by pressing [E] for each stock to be corrected.

Adding New Stocks:

Press [C] , see ***NAME=?***
Input name of new stock, [R/S] , and other data as above.
Repeat inputs for all new stocks. When completed, press [R/S] *without prior data entry,* see ***END***.

To Delete a Stock:

Press [D] , see ***NAME=?***
Input name, [R/S] . Stock is deleted, ***END*** is displayed.

To Review Historical Data:

Press [f] [B] , see name of stock.
Press [R/S] to obtain number of shares and price.
Continue for rest of stocks until ***END*** is displayed.

Calculate Current Value:

Press [B] [R/S] , see ***PRC***(name)=***?***
Input current price, [R/S] , see ***BETA=?***
Input Beta, [R/S] , see ***DIV=?***
Input ann. div/sh, [R/S] , display ***%CH=***
Continue to next stock, until all have been input and ***END*** is displayed.

Evaluation and Summary:

Press [f] [A] [R/S] , display ***ORIG=***
Press [R/S] to display evaluation of total portfolio.

To Store Data on Card:

Press [f] [D], input blank card(s). Label card(s) and retain.

To Read Data Card:

Press [f] [E], input data cards.
For interim storage execute STORE and RELOAD as desired.

Checking Account Reconciliation

(Minimum size 007)

[XEQ] CHECK, input in order:

- The bank statement balance
- The checkbook balance
- Service charge on account, if any

or, • Interest paid on account, if any

Calculator prompts with pause:
CHECKS OUT
CHECK≠1=?
Input amount of each outstanding check, press [R/S] *without data entry* when all have been entered. Total of outstanding checks is displayed.
Press [R/S], calculator prompts:
DPSTS OUT
DPST≠1=?
Input outstanding deposits as above.

Press [R/S] after all deposits are input.
Calculator displays: total deposits outstanding, adjusted bank statement balance, adjusted checkbook balance and difference.
Positive difference: more money in account than shown by checkbook. Negative difference: less money.

Your Financial Calculator

(Minimum size 010)

Place overlay on keyboard.
[XEQ] FINANCE, see ***0.00***.

To clear financial registers: press [f] [E], see ***0.00***

Set proper payment mode:
Press [f] [C] see ***BEGIN*** or ***END***. Repeat until proper display is seen.

Calculations
Input 3 (or 4) of following in any order:

- Number of periods, n [A]
  or nx12 [f] [A]
- Interest rate per period, i [B]
  or i÷12 [f] [B]
- Present Value, PV [C]
- Payment, PMT [D]
- Future Value, FV
  or Balance, BAL [E]

(Caution: be sure to observe sign convention: negative for cash paid out, positive for cash received).

Calculate unknown quantity by pressing appropriate key without prior data entry.

n	A
i	B
PV	C
PMT	D
FV (or BAL)	E

To Review Data:

Press [f] D . See mode setting, press R/S for n, i, PV, PMT, FV. Or,

RCL A for n
RCL B for i
RCL C for PV
RCL D for PMT
RCL E for FV.

Repeat calculations with new data as desired by inputting only the data which has changed. Press [f] E as necessary to clear all financial registers for new data.

Accumulated Interest and Remaining Balance

(Minimum size 011)

Place *Finance* overlay on keyboard.
[XEQ] BAL, see ***REM BAL.***
Follow instructions as above to calculate the values n, i, PV, PMT, FV.
Input number of first payment period, n_1, in the time frame of interest.
Press [J], see ***N***=(n_1), press [R/S], see ***N=?***
Input number of the last payment period, n_j, in the time frame of interest. Press [R/S] to see remaining balance, accumulated principal, accumulated interest and incremental interest. Repeat for other periods as desired.

Home Owner's Equity Analysis

(Minimum size 019)

[XEQ] HOME, see ***PRICE=?***
Input price of house, [R/S], see ***DOWN=?***
Input down payment, [R/S], see ***%INT=?***
Input interest rate on mortgage, [R/S],
see ***TERM=?*** Input the term of the mortgage in years.
Press [R/S] to display mortgage payment.
Press [R/S], see ***%APPR=?***
Input expected annual depreciation rate, [R/S],
see ***MONTHS=?***

Input number of months remaining in the year of purchase, [R/S], see ***TAXES=?***
Input annual property tax, [R/S], see ***%INC=?***
Input expected % increase of taxes per year.
Press [R/S] for monthly payment, total equity, tax deductibles, and appreciated value for first year. Continue pressing [R/S] for each succeeding year.

The Rent or Buy Decision

(Minimum size 018)

[XEQ] BUY?
Input the following in order, pressing [R/S] after each input:

- Price of the house
- Down payment
- % interest on mortgage loan
- Term of the mortgage, in years.

The monthly mortgage payment is displayed.
Press [R/S] and input the following in order, pressing [R/S] after each:

- Number of years you will occupy the house
- Expected yearly % appreciation of the house

The anticipated market value at end of occupacy is displayed.
Press [R/S] and input % commission paid to sell house, [R/S]. The Net Cash Proceeds on Resale are displayed.

Press R/S and input, in order, pressing R/S after each:

- Closing costs on transaction
- Total marginal income tax rate (%)
- Monthly property taxes
- Monthly maintenance expenses
- Alternative monthly rent

The annual rate of return (% yield) on an investment in the house is displayed.
Press R/S and input the rate of interest obtainable on an alternative investment, R/S . The net $GAIN (or loss) upon buying is displayed.
Press R/S twice to obtain the market value of house needed to provide an annual yield equivalent to the alternate investment. Press R/S again to obtain yearly % appreciation needed to obtain this market value.

Tax Free Individual Retirement Account (IRA) or Keogh Planning

(Minimum size 013)

XEQ IRA, input in order:

- Annual investment
- Years until retirement
- % annual interest paid on the investment.

Calculator displays total paid in, future value of (tax-free) investment, and total dividends earned.
Input current income tax rate and expected tax rate (in %) at retirement.
Future value of the investment at the anticipated retirement tax rate is displayed.
Input anticipated annual % inflation and see the future value, diminished due to inflation.
Program then calculates the future value of an identical but taxable investment and its value diminished by inflation.

The True Cost of an Insurance Policy

(Minimum size 008)

XEQ INS, see ***AMT=?***
Input face amount of policy, R/S , see ***DIV=?***
Input annual dividend, R/S , see ***PREM=?***, input annual premium, R/S , see ***CASH VAL BEG=?***, input cash value at beginning of year, R/S , see ***CASH VAL END=?***, input same at end of year, R/S , see ***% INT=?*** Input interest rate obtainable on alternative investment, R/S . See displayed ***TRUE COST=$/THOU***.
To calculate interest paid on savings portion of policy, press R/S , input cost of $1000 of term insurance, R/S . See ***% INT=***.

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