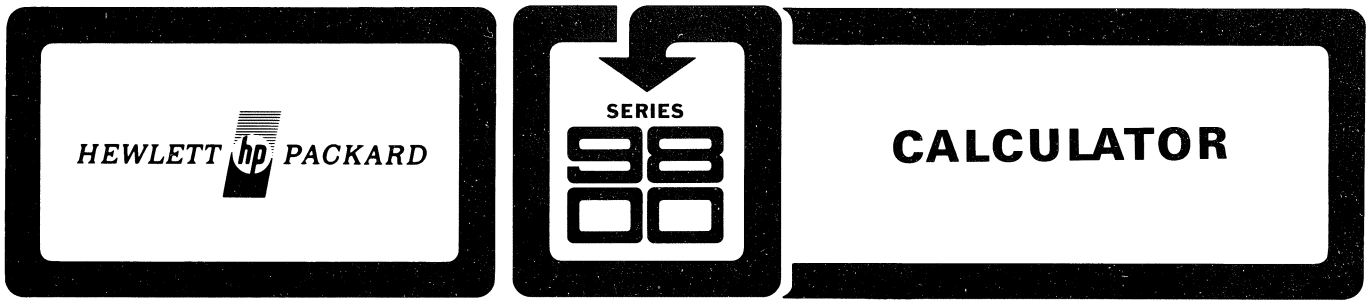
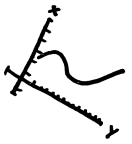

HEWLETT PACKARD
SERIES
9800
CALCULATOR

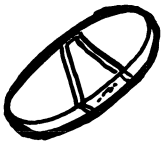
# WHAT COMPRISES THE 9800 SERIES?

* 9810A MAINFRAME CALCULATOR
* 9820A MAINFRAME CALCULATOR
* 9821A MAINFRAME CALCULATOR
* 9830A MAINFRAME CALCULATOR

* ——— * ——— *

- 9860A CARD READER
- 9861A TYPEWRITER
- 9862A X-Y PLOTTER
- 9863A TAPE READER
- 9864A DIGITIZER
- 9865A CASSETTE MEMORY
- 9866A THERMAL LINE PRINTER
- 9868A EXPANDER BOX
- 9869A HOPPER CARD READER
- 9870A CARD READER
- 9880A/B MASS MEMORY
- 2607A LINE PRINTER
- 2748B TAPE READER
- 8100 TAPE PUNCH





PLUS!

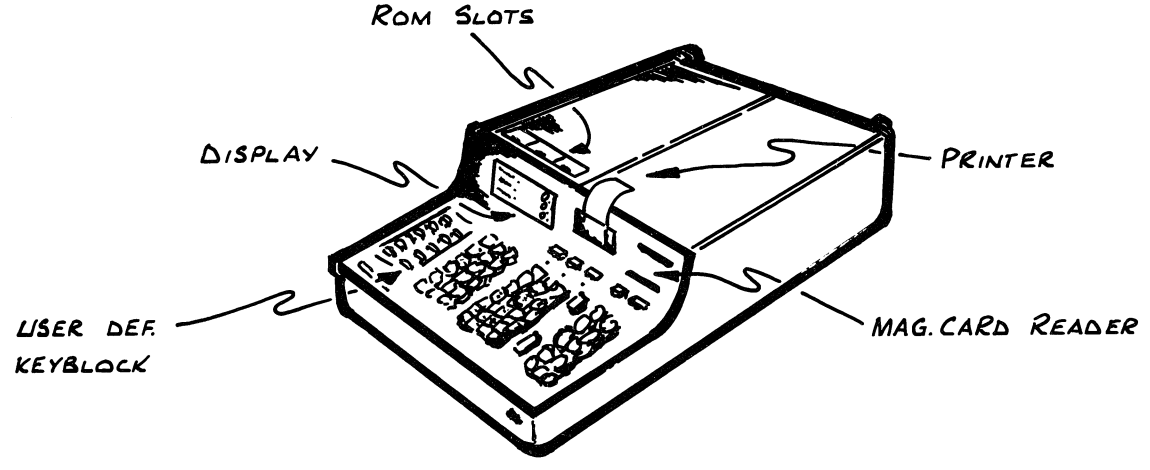
READ ONLY MEMORY
OR
ROM's

HEWLETT hp PACKARD

MODEL 10

# 9810A CALCULATOR

* LANGUAGE ..... REVERSE POLISH NOTATION
* KEYBOARD ..... KEY PER FUNCTION
* ROM SIZE ..... 5K TO 11K (BYTES)
* RWM SIZE ..... 908 TO 2924 (BYTES)
* I/O STRUCTURE ..... GENERAL
* USER DEFINABLE KEYS ..... OPTIONAL — SINGLE KEY
  — SUB-ROUTINE
* RECORDING DEVICE ..... MAGNETIC CARD READER
  CASSETTE OPTIONAL
* DISPLAY ..... 3 REGISTER NUMERIC LED
* PRIMARY PRINTER ..... OPTIONAL
  16 COLUMN ALPHA / NUMERIC, THERMAL PRINTER.

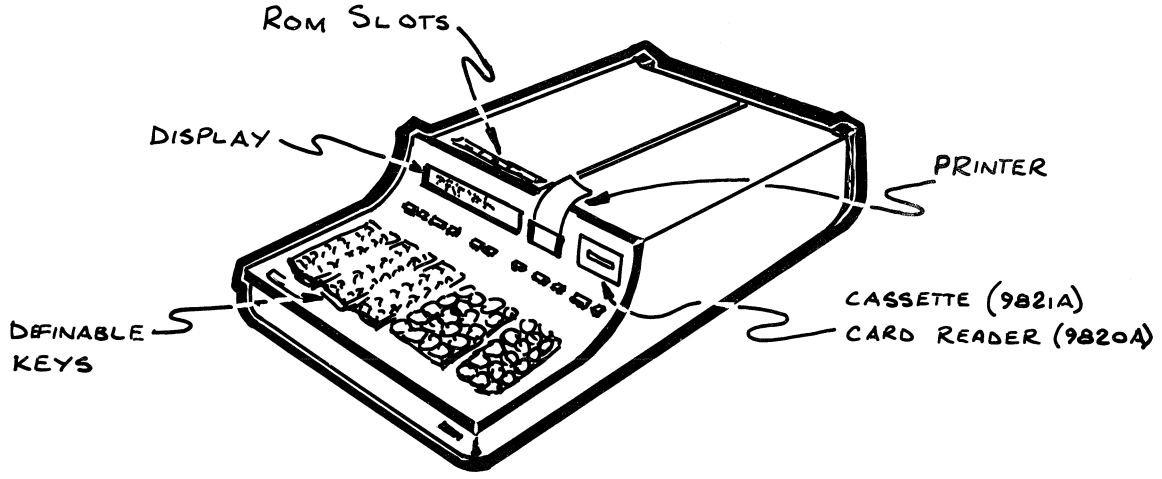


HEWLETT hp PACKARD

MODEL 20

# 9820A CALCULATOR

* **LANGUAGE** ..... ALGEBRAIC
* **KEYBOARD** ..... KEY PER FUNCTION
* **ROM SIZE** ..... 8K TO 14K (BYTES)
* **RWM SIZE** ..... 1384 TO 3432 (BYTES)
* **I/O STRUCTURE** ..... GENERAL
* **USER DEFINABLE KEYS** ..... OPTIONAL - SINGLE KEY
  - SUB-ROUTINE
  - FUNCTIONS
* **RECORDING DEVICE** ..... MAGNETIC CARD (9820A)
  CASSETTE (9821A)
* **DISPLAY** ..... 16 CHARACTER ALPHA/NUMERIC LED.
* **PRIMARY PRINTER** ..... STANDARD 16 COLUMN ALPHA/NUMERIC THERMAL PRINTER.

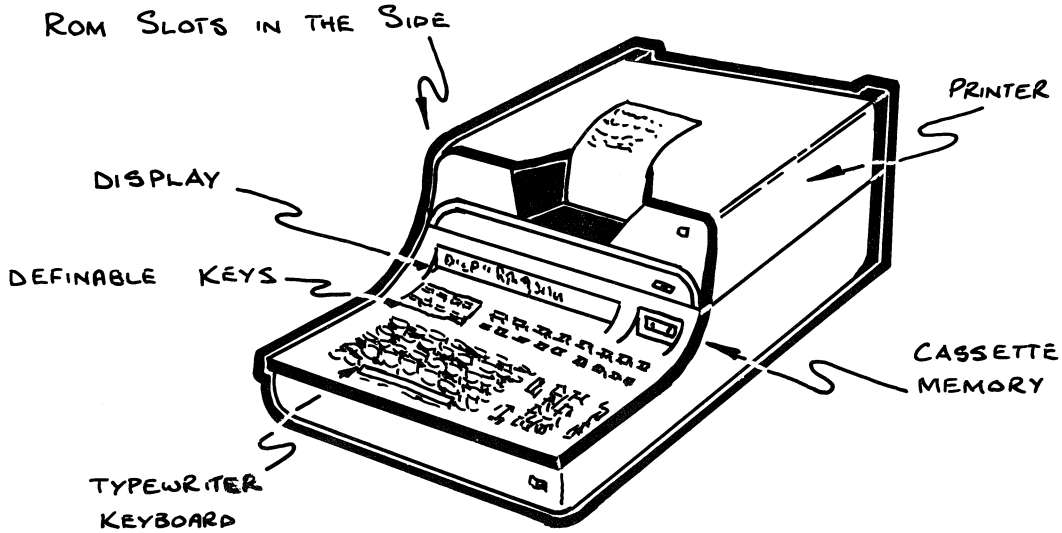


HEWLETT hp PACKARD

MODEL 30

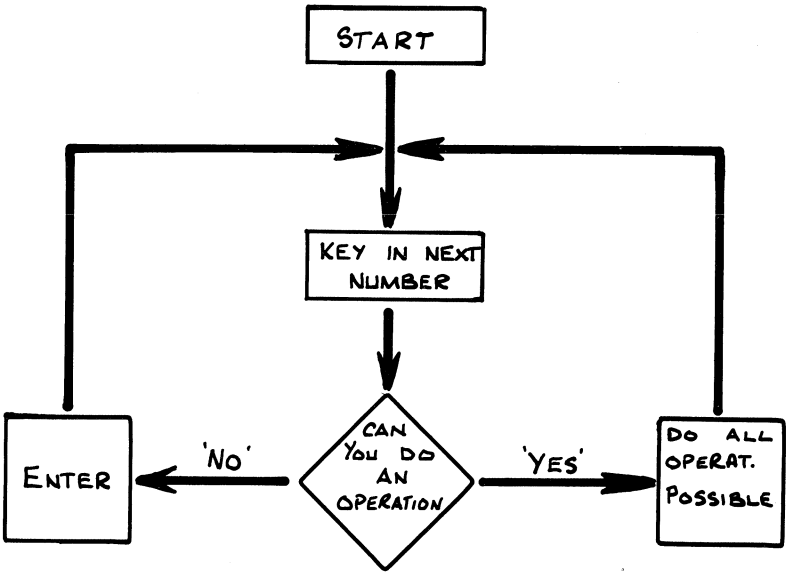
# 9830A CALCULATOR

* LANGUAGE ..... BASIC
* KEYBOARD ..... ALPHA/NUMERIC (TYPEWRITER)
* ROM SIZE ..... 15K TO 31K (BYTES)
* RWM SIZE ..... 3520 TO 7616 (BYTES)
* I/O STRUCTURE ..... GENERAL
* USER DEFINABLE KEYS ..... STANDARD - SUB ROUTINE - FUNCTIONS
* RECORDING DEVICE: ..... STANDARD CASSETTE
* DISPLAY ..... 32 CHARACTERS ALPHA/NUMERIC LED
* PRIMARY PRINTER ..... OPTIONAL 80 COLUMN THERMAL LINE PRINTER ALPHA-NUMERIC.



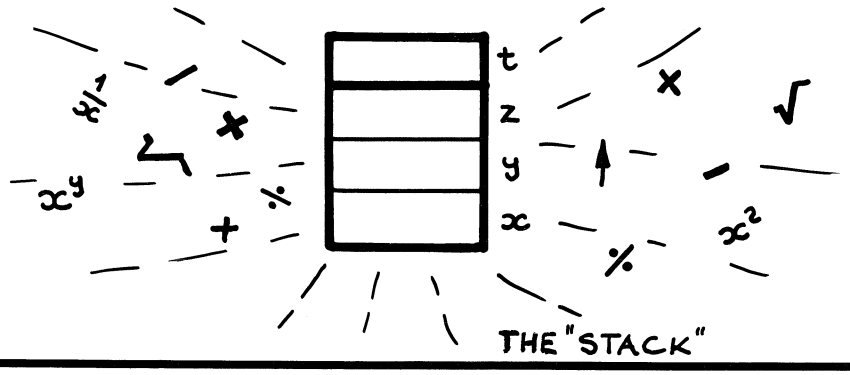
# REVERSE POLISH NOTATION

* **RPN** DEVELOPED BY A POLISH MATHEMATICIAN JAN LUKASIEWICZ




* BASED ON FOUR EASY STEPS RPN CAN BE APPLIED TO ALMOST ALL MATHEMATICAL EXPRESSIONS *

** COMBINED WITH AN OPERATIONAL STACK **RPN** GIVES A POWERFUL, UNAMBIGUOUS LANGUAGE. * *



# ALGEBRAIC LANGUAGE

* COMBINES MANY FEATURES OF ALGOL. FORTRAN. AND BASIC

* PRODUCES A HUMAN ORIENTATED. CONVERSATIONAL LANGUAGE

* FOLLOWS STRUCTURE OF ALGEBRA IN SYMBOLS AND HEIRACHY.

e.g. IF $\sqrt{6}$ = A; GTO 17

* INCLUDES ALSO IMPLIED MULTIPLICATION!

e.g. PRT[-B + $\sqrt{}$ [BB-4AC]]/2A

* PARENTHESIS CAN BE NESTED TO ANY DEPTH TO CHANGE ORDER OF EVALUATION ETC.

* THE MODEL 9820A AND 9821A USE AN *

* ALGEBRAIC LANGUAGE *

# BASIC LANGUAGE

* POWERFUL HIGH LEVEL COMPUTER LANGUAGE CLOSELY RESEMBLING THE ENGLISH LANGUAGE

* LARGE 'BASIC' LIBRARY ALREADY EXISTS

* EASILY LEARNT, AND AN INTERACTIVE, CONVERSATIONAL LANGUAGE

* GOOD USE MADE OF VARIABLES, WHICH CAN BE SINGLE OR DOUBLE SUBSCRIPT (MATRIX), STRING VARIABLES MAY ALSO BE USED.

EXAMPLE :

```
10  DISP "ENTER COST";
20  INPUT A
30  PRINT "ENTER NAME"
40  INPUT B$
 .   .....
 .   .....
 .   .....
100  END
```

* THE MODEL 9830A USES "BASIC" *

# PERIPHERALS

* THE 9800 SERIES INPUT/OUTPUT STRUCTURE IS DESIGNED FOR VERSATILE EASY USE

* CALCULATORS CAN BE EQUIPPED WITH BOTH INTERNAL AND EXTERNAL PERIPHERALS

* INSTRUCTION SETS FOR EXTERNAL PERIPHERALS CONTAINED IN EASILY FITTED ROM's e.g. PLOTTER CONTROL, I/O ROM ETC.

* WITH THE USE OF STANDARD INTERFACE CABLES e.g. 11202A. 11203A ETC. SPECIAL PERIPHERALS CAN BE CONNECTED.