

TRS-80

Model 100

Quick

Reference Guide

Note: You may redefine any of the function keys within BASIC. See KEY under Keyboard Input for details.

NUMERIC AND STRING OPERATORS

+ Addition or unary plus (numeric) or concatenation (string)
 - Subtraction or unary minus
 * Multiplication
 / Division
 \ Integer division
 ^ Exponentiation
 MOD modulus arithmetic

RELATIONAL OPERATORS

< less than
 > greater than
 = equal
 <= or =< less than or equal to
 >= or => greater than or equal to
 <> or >< not equal to

LOGICAL OPERATORS

AND logical AND operation
 OR logical OR operation
 XOR exclusive OR operation
 EQV equivalence operation
 IMP implication operation
 NOT logical NOT operation

OPERATOR HIERARCHY

Parentheses, ^, +-, */ , MOD, +-, {<> ==>
 <=> } NOT, AND, OR, XOR, EQV, IMP

NOTE: Within an expression, operators on the same level are evaluated from left to right, with the exception of parentheses, which are evaluated from inside to outside.

DATA RANGES

Integers: -32768 to 32767
 Single precision: +- 10⁻⁶⁴th to +- 10⁶²nd (6 significant digits)
 Double precision: +- 10⁻⁶⁴th to +- 10⁶²nd (14 significant digits)
 Strings: 0 to 255 characters

NOTE: Unless explicitly defined, the Model 100 considers all constants and variables, as well as numeric functions, as double precision.

DECLARATION TAGS

% integer
 ! single precision
 # double precision
 \$ string

ERROR CODES

1 NF NEXT without FOR
 2 SN Syntax Error
 3 RG RETURN without GOSUB
 4 OD Out of Data
 5 FC Illegal function call
 6 OV Overflow
 7 OM Out of Memory
 8 UL Undefined line
 9 BS Bad Subscript
 10 DD Doubly Dimensioned Array
 11 /0 Division by Zero
 12 ID Illegal Direct
 13 TM Type Mismatch
 14 OS Out of String Space
 15 LS String Too Long
 16 ST String Formula Too Complex
 17 CN Can't Continue
 18 IO Error
 19 NR No RESUME
 20 RW RESUME Without Error
 21 UE Undefined Error
 22 MO Missing Operand
 23-49 UE Undefined Error
 50 IE Undefined Error
 51 BN Bad File Number
 52 FF File Not Found
 53 AO Already Open
 54 EF Input Past End of File
 55 NM Bad file name
 56 DS Direct Statement in File
 57 FL Undefined Error
 58 CF File Not Open
 59-255 UE Undefined Error

BASIC KEYWORDS

ABS(*numeric expression*)
 ASC(*string expression*)
 ATN(*numeric expression*)
 CALL *address, expression1, expression2*

FUNCTION KEYS

LABEL display the labels
 PRINT LCOPY {enter}
 SHIFT/PRINT LLIST {enter}
 F1 FILES {enter}
 F2 LOAD"
 F3 SAVE"
 F4 RUN {enter}
 F5 LIST {enter}
 F8 MENU {enter}

CDBL(numeric expression)
 CHR\$(numeric expression)
 CINT(numeric expression)
 CLEAR *string space, high memory*
 CONT
 COS(numeric expression)
 CSNG(numeric expression)
 DATA constant list
 DATES\$
 DAYS\$
 DEFDBL *letter list*
 DEFENT *letter list*
 DEFSNG *letter list*
 DEFSTR *letter list*
 DIM *variable name(dimensions)*
 EDIT *line number range*
 END
 ERL
 ERR
 ERROR *numeric expression*
 EXP(numeric expression)
 FIX(numeric expression)
 FOR *counter = initial TO final*
 [STEP *increment*]
 NEXT [*counter variable*]
 FRE(*expression*)
 GOSUB *line number*
 RETURN
 GOTO *line number*
 HIMEM
 IF *relational-or-logical expression*
 THEN *command(s)1*
 ELSE *commands(s)2*
 INP(*port number*)
 INSTR(*start position, source\$,target\$*)
 INT(numeric expression)
 LEFT\$(*string\$, length*)
 LEN(*string\$*)
 [LET]*variable = expression*
 LOG(numeric expression)
 MENU
 MID\$(*string\$, position, length*)
 MID\$(*string\$, position, length*)=*string\$*
 NEW
 ONERRORGOTO *line number*
 ONTIME\$="HH:MM:SS"GOSUB *line number*
 ON *numeric expression* GOTO *line number list*
 ON *numeric expression* GOSUB *line number list*

OUT *portnumber, bytevalue*
 PEEK(*memory address*)
 POKE *memory address, byte value*
 POWER(numeric expression)
 POWER CONT
 POWER OFF, RESUME
 READ *variable list*
 REM comments
 RESTORE *line number*
 RESUME *line number*
 RETURN
 RIGHT\$(*string\$, length*)
 RND(numeric expression)
 RUN *line number*
 SGN(numeric expression)
 SIN(numeric expression)
 SPACE\$(length)
 SQR(numeric expression)
 STOP
 STR\$(numeric expression)
 STRING\$(length, character)
 TAN(numeric expression)
 TIMES\$
 TIME ON or OFF or STOP
 VAL(*string\$*)
 VARPTR(*variable name*)

PRINT Formats

PRINT USING *format; variable list*

Format is a string with some of the following:

\$\$	Display a "\$" at beginning of number
#	Number place holder
-	Sign place holder
!	Character
//	String
**	Leading Asterisks
,	Insert Commas
.	Insert decimal point

SOUND

MODEM/SERIAL PORT PARAMETERS

r - Baud Rate:

This is a number from 1 to 9, where
 1=75; 2=110; 3=300; 4=600; 5=1200;
 6=2400; 7=4800; 8=9600; 9=19200.

w - Word Length:

This is a number from 6 to 8, where
 6=6bits; 7=7bits; 8=8bits.

p - Parity:

Either E,O,I, or N, where E=even;
 O=odd; I=ignore; N=none

b - Stop Bits:

Either 1 or 2, where 1=1 stop bit;
 2=2stop bit.

s - Xon/Xoff Status:

Either E or D, where E=enable;
 D=disable