

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
 DATE\$
 DAY\$
 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