

Arrays

Arrays may be integer, real, or string. The maximum number of subscripts is 64. A DIM statement must appear in the program for a variable before it is used. The subscripts used in arrays may be integer or real numbers; however, the program will convert the real numbers to integers (rounding, not truncating), thus reducing execution speed.

Functions and Named Subroutines

User-defined one line functions are available. There may be 0 to 4 arguments and they may be integer, real, or string. All function names must start with FN. Functions may be integer, real, or string. They can be anywhere in the program and don't need to precede the use of the function. For example:

```
100 DEF FNA$(T$)=T$+".COD"
```

User-defined multi-line named subroutines are available. There may be 0 to 4 arguments and they may be integer, real, or string. All subroutine names must end with an @ symbol. See SUB command for more information.

Special note: In most cases the system will automatically convert between real and integer numbers. In user-defined functions and named subroutines, however, the argument must be the same in the definition and when the function or subroutine is used.

Operators

The following arithmetic operators are available for integers and real numbers: +, -, *, /, ^. For integers, the MOD operator causes a division and its result is the remainder. In the following example, 50 is divided by 8 and T% is set equal to the remainder.

```
100 T%=50% MOD 8%
110 PRINT T%
RUN
2
```

The plus sign may be used to concatenate strings. For example:

```
100 A$="ABC": B$="DEF"
110 C$=A$+B$: PRINT C$
RUN
ABCDEF
```

The following relational operators are available: >, >=, =, <=, <, <>. In the following line, if T% is greater than A%, the program will branch to line 100:

```
50 IF T%>A% THEN 100
```

Relation conditions can be combined using AND and OR operators. In the following line, if T% is greater than A%, or B1\$ is less than NAME1\$, the program will branch to line 100:

```
50 IF T%>A% OR B1$<NAME1$ THEN 100
```