## **Basic Reference**

## **Binary Operators**

Precedence	Operator	Notes
5	!	Byte and Word indirection. e.g. A!5 means "the word at address A+5". (See Ch39 of the BBC Micro User Guide for more). Replaces PEEK, DEEK and so on.
	?	
4	*	
	1	Forward slash is floating point divide. 22/7 is 3.142857
	١	Backward slash is integer divide, 22/7 is 3
	%	Modulus of integer division ignoring signs
	>>	Logical shifts up to 32 places, inserting zeros at the appropriate ends.
	<<	
	+	
3	-	
2	<	Compares as numbers or strings. If either is floating point it is compared as such, and the match is not exactly equal, but about 1 part in 100,000. Returns -1 for true, 0 for false.
	<=	
	>	
	>=	
	<>	
	=	
1	&	Binary operators on integers, but can be used as logical operators. Equivalent to and, or and exclusive or.
	^	

## **Unary Operators**

Operator	Notes		
\$nn	Unary operator, \$nn is a hexadecimal marker.		
asc(s\$)	Return ASCII value of first character or zero for empty string		
atan(n)	Arctangent of n in degrees		
chr\$(n)			
cos(n)	Cosine of n, n Is in degrees.		
event(v,r)			
exp(n)	e to the power n		
inkeys()			
int(n)	Whole part of the float value n. Integers are unchanged.		
isval(n)			
key()			
left\$()			
len(a\$)	Return length of string in characters.		
log(n)	Natural Logarithm (e.g. ln2) of n.		
mid\$()			
rand(n)	Random integer 0 < x < n (e.g. 0 to n-1)		
right\$()			
rnd(n)	Random number $0 < x < 1$ , ignores n.		
sin(n)	Sine of n, n Is in degrees.		
sqr(n)	Square root of n		
str\$()			
tan(n)	Tangent of n, n Is in degrees.		
time			