



## Sphygmic Software Spreadsheet Help

If you are familiar with Microsoft Excel, the spreadsheet is broadly compatible and will behave similarly and accept most formulae that Excel accepts.

### Entering Values and Formulae

You may enter numeric values directly. You may use commas to separate thousands. You may enter fractions (e.g. 1/3).

Text values may be entered directly. To enter a number, or an expression starting with a number, as a text value precede it with a single quote.

To enter a formula, precede it with an equals sign For example. =sum(A1:C1). A full list of allowable formulae can be found under [Spreadsheet Formulae](#). To sum a list of cells, select the cell at the end of the list (vertically or horizontally) and select the AutoSum tool bar button (the eleventh button no the toolbar).

### Spreadsheet Navigation

You may use the following keys to navigate around the current spreadsheet.

Key	Action
UUp Arrow	Active cell up one row
UDown Arrow	Active cell down one row
ULeft Arrow	Active cell left one column
URight Arrow	Active cell right one column
Ctrl + Arrow	Moves to next range of cells containing data
PageUp	Up one screen
PageDown	Down one screen
Ctrl PageUp	Left one screen
Ctrl PageDown	Right one screen
Home	First column
End	Last column
Ctrl Home	Row 1 Column 1
Ctrl End	Last row and column containing data
Enter	Accepts current entry
Tab	Accepts current entry
F2	Enters edit mode
F9	Recalculates spreadsheet
Del	Clears current selection
Esc	Cancels current operation

### Entering Cell References

Cell references are entered as follows:

- A1      Relative reference pointing to cell A1
- \$A\$1    Absolute reference pointing to cell A1
- \$A1     Absolute column reference, relative row reference pointing to cell A1

To point to a cell in another spreadsheet, precede it with the spreadsheet name followed by an exclamation mark. For example mysheet!A1.

## **Formula Operators**

The following operators may be used

+	Addition
-	Subtraction
/	Division
*	Multiplication
%	Percentage
^	Exponentiation
&	Text concatenation
=	Equal to
>	Greater than
<	Less than
>=	Greater than or equal to
<=	Less than or equal to
<>	Not equal to
:	Range in cell reference. For example A1:A5

## Spreadsheet Formulae

The spreadsheet accepts the following formulae.

ABS(number)	Absolute Value of number
ACOS(number)	Arc Cosine of number
ACOSH(number)	Inverse hyperbolic cosine of number
ADDRESS(row,col,ref_type)	Returns cell address as text. A ref_type of 1 returns an absolute address. 2 returns a relative column address. 3 returns a relative row address. 4 returns a fully relative address
AND(logical list)	Returns True if all arguments are true. False otherwise.
ASIN(number)	Arc Sine of number
ASINH(number)	Inverse hyperbolic sine of number.
ATAN(number)	Arc Tangent of number
ATAN2(x,y)	Arc Tangent of specified co-ordinates
ATANH(number)	Inverse hyperbolic tangent of number
AVERAGE(number list)	Returns average of supplied numbers
CEILING(number,significance)	Rounds up a number to nearest multiple of specified significance
CHAR(number)	Returns character for specified ANSI code
CHOOSE(index,item list)	Returns value based on the index supplied
CLEAN(text)	Removes non-printable characters from text
CODE(text)	Returns numeric code of first character
COLUMN(reference)	Returns column number of supplied reference
COLUMNS(range)	Returns number of columns in a range reference
COS(number)	Returns the cosine of an angle
COSH(number)	Returns hyperbolic cosine of a number
COUNT(value list)	Returns number of values in the supplied list
COUNTA(expression list)	Returns number of non-blank characters
DATE(year,month,day)	Returns serial number of supplied date
DATEVALUE(text)	Returns serial number of date supplied as text
DAY(serial number)	Returns day of month of date represented by serial number
DB(cost,salvage,life,period)	Returns real depreciation of an asset using fixed declining balance method. Also accepts an additional months argument for number of months in first year.
DDB(cost,salvage,life,period)	Returns real depreciation of an asset using double declining balance method. Also accepts an additional factor argument for rate at which balance declines.
DOLLAR(number[,precision])	Returns number formatted as text in currency format
EVEN(number)	Rounds number up to nearest even number
EXACT(expr1,expr2)	Returns true if expr1 identical to expr2
EXP(number)	Returns e raised to specified power
FACT(number)	Returns factorial of number
FALSE()	Returns logical value False
FIND(search text,text,start) at which text occurs	Searches for search text in text string and returns start position
FIXED(number,precision)	Rounds number to specified precision. Formats and returns as text. Use an additional argument equal to 1 to suppress commas
FLOOR(number,significance)	Rounds number down to nearest multiple of specified significance
FV(int,nper,pymnt[,pv][,type])	Returns future value of annuity based on regular payments and fixed interest
HOUR(serial number)	Returns hour component of specified time in 24 hour format
IF(condition,true val,false val)	Tests condition and returns specified value
INDEX(reference)	Returns contents of cell from specified range. Also accepts further arguments of row,col,range number.
INDIRECT(ref text)	Returns contents of the cell referenced by the specified cell.

INT(number)	Returns specified number rounded down to nearest integer
IPMT(int,per,nper,pv[,fv][,type])	Returns interest payment of an annuity for a given period, based on regular payments and a fixed interest rate
ISBLANK(reference)	Determines if specified cell is blank
ISLOGICAL(expression)	Determines if specified expression returns a logical value
ISNA(expression)	Determines if specified expression returns the #N/A! error
ISNONTEXT(expression)	Determines if specified expression is not text
ISNUMBER(expression)	Determines if specified expression is a number
ISREF(expression)	Determines if specified expression is a range reference
ISTEXT(expression)	Determines if specified expression is text
LEFT(text,num chars)	Returns leftmost characters from string
LEN(text)	Returns length of string
LN(number)	Returns natural log of number
LOG(number[,base])	Returns logarithm of number to specified base (default 10)
LOG10(number)	Returns logarithm of number to base 10.
LOOKUP(val,lookup,result)	Searches for val in lookup range and returns contents of corresponding position in result range
LOWER(text)	Returns text as lower case
MATCH(val,lookup,comp)	A specified value is compared against a range. The position of the matching value in the search range is returned
MAX(number list)	Returns largest value in list of numbers
MID(text,start,num chars)	Returns specified number of characters from a text string, beginning with the specified start position
MIN(number list)	Returns smallest value in number list
MINUTE(date serial)	Returns the minute that corresponds to specified date
MOD(number,divisor)	Returns the remainder after dividing a number by the specified divisor
MONTH(date serial)	Returns the month that corresponds to the supplied date
N(value)	Tests supplied value and returns the value if it is a number
NA()	Returns the error value #N/A
NOT(logical)	Returns the opposite logical value
NOW()	Returns current date and time as serial number
NPV(discount rate,value list)	Returns net present value of an investment based on a series of periodic payments and discount rate
ODD(number)	Rounds up number to nearest odd integer
OFFSET(ref,rows,cols)	Returns contents of a range that is offset from a starting point in the spreadsheet. Accepts additional values for height and width to increase number of rows and columns in the offset range.
OR(logical list)	Returns true if at least one of the values is true
PI()	Returns value of pi to 15 significant digits
PMT(int,nper,pv[,fv][,type])	Returns the periodic payment of an annuity based on regular payments and a fixed rate of interest
PPMT(int,per,nper,pv[,fv][,type])	Returns principle paid on an annuity for a given period
PRODUCT(number list)	multiples a list of numbers and returns the result
PROPER(text)	Returns the specified text in proper case format
PV(int,nper,pmt[,fv][,type])	Returns the present value of an annuity, considering a series of constant payments made over a regular payment period.
RAND()	Returns a random number greater than or equal to 0 and less than 1
RATE(nper,pmt,pv[,fv][,type])	Returns interest rate per period of an annuity, given a series of constant cash payments made over a regular payment period
REPLACE(orig,start,chars,rep)	Replaces part of a text string with another text string. orig specifies original text string, start specifies start position,chars specifies number of characters to replace, rep specifies replacement string

REPT(text,number)	Repeats a text string specified number of times
RIGHT(text,num chars)	Returns rightmost characters of a text string)
ROUND(number,precision)	Rounds a number to specified number of places
ROW(reference)	Returns the row number of the supplied reference
ROWS(range)	Returns number of rows in supplied range
SEARCH(srch txt,txt,start) within another text string	Locates position of the first character of a specified text string
SECOND(serial date)	Returns the second that corresponds to the supplied date
SIGN(number)	Returns the sign of the specified number
SIN(number)	Returns sine of specified number
SINH(number)	Returns hyperbolic sine of specified number
SLN(cost,salvage,life) time using the straight line method	Returns the depreciation of an asset for a specified period of time using the straight line method
SQR(number)	Returns the square root of number
STDDEV(number list) sample of supplied values	Returns the standard deviation of a population based on a sample of supplied values
STDDEVP(number list) entire population of supplied values	Returns the standard deviation of a population based on an entire population of supplied values
SUBSTITUTE(txt,oldtxt,newtxt)	Replaces a specified part of a text string with another text string.
SUM(number list)	Returns the sum of the supplied numbers
SUMSQ(number list)	Returns the sum of the squares of the supplied values
SYD(cost,salvage,life,per) the sum of years method	Returns the depreciation of an asset for a specified period using the sum of years method
T(value)	Tests supplied value and returns it if it is text
TAN(number)	Returns tangent of number
TANH(number)	Returns hyperbolic tangent of number
TEXT(number,format)	Returns given number as text using the specified formatting
TIME(hour,minute,second)	Returns a serial number for specified time
TIMEVALUE(text)	Returns serial value for supplied time represented as text
TODAY()	Returns current date as a serial number
TRIM(text) words	Removes all spaces from text except single spaces between words
TRUE()	Returns logical value True
TRUNC(number,precision)	Truncates the given number to an integer
TYPE(expression)	Returns the argument type of a given expression. 1 - number, 2 - text, 4 - logical, 16 - error value.
UPPER(text)	Returns text as upper case
VALUE(text)	Returns specified text as a number
VAR(number list)	Returns variance of a population based on sample values
VARP(number list) of values	Returns variance of a population based on an entire population of values
VDB(cst,svg,life,start,end) variable method of depreciation.	Returns depreciation of an asset for a specified period using a variable method of depreciation.
WEEKDAY(date serial)	Returns day of the week that corresponds to supplied date
YEAR(date serial)	Returns the year that corresponds to the supplied date

