Worksheet Function Examples

This worksheet contains sample formulas you can use to complete common spreadsheet tasks.
Cells containing formulas are yellow. To view a sample formula, select the cell to display the formula in the formula bar.

Summing, Counting, and Other Statistical Functions

The formulas in the following table use the sample data located in cells G10:J16.

Functions and Operators	Using Cell References	Using Defined Names
SUM()	199,500	Err:508
COUNT()	6	Err:508
AVERAGE()	33,250	Err:508
MIN()	16,000	Err:508
MAX()	50,000	Err:508
FACT()	362,880	Err:508
STDEV()	13,856	Err:508
STDEVP()	12,648	Err:508
SUMSQ()	129,260	Err:508
VAR()	7,002	Err:508
VARP()	5,835	Err:508

Sample List

Name	Salary	Dept.
Bill	16,000	9
Chris	25,000	3
Dave	28,500	3
Ed	30,000	12
Fred	50,000	9
George	50,000	12

Factorial Data:	9

Indexing, Matching, and Looking Up Values

The formulas in the following table use the sample data located in cells G10:J16.

Functions and Operators	Using Cell References	Using Defined Names
VLOOKUP()	126	Err:508
HLOOKUP()	28,500	Err:508
MATCH()	4	Err:508
INDEX()	30,000	Err:508
INDEX(MATCH())	28,500	Err:508

Sample List For HLOOKUP()

Bill	Chris	Dave
16,000	25,000	###
9	3	3
19	129	234

LOOKUP()	9	Err:508
CHOOSE()	Tue	
OFFSET()	28,500	

Manipulating Text

Use the LEFT, MID, and RIGHT functions to extract characters from a text string.

Sample_Text: **The rain falls gently!**

Functions and Operators	Using Cell References	Using Defined Names
LEFT()	The rain	Err:508
MID()	falls	Err:508
RIGHT()	gently!	Err:508
CONCAT (&)	Err:508	Err:508
LEN()	22	Err:508
LOWER()	the rain falls gently!	Err:508
UPPER()	THE RAIN FALLS GENTLY!	Err:508
SUBSTITUTE()	The rain falls gently!	Err:508
FIND()	10	Err:508
SEARCH()	10	Err:508
REPLACE()	The Snow falls gently!	Err:508
PROPER()	The Rain Falls Gently!	Err:508
TRIM()	The rain falls gently!	Err:508
CLEAN()	The rain falls gently!	Err:508
REPLACE()	The Snow falls gently!	Err:508
CHAR()	Hi	
CODE()	84	
DOLLAR()	$1,000.00	
EXACT()	1	
REPT()	Hi Hi Hi Hi	
T()	Hi Hi Hi Hi	
TEXT()	10 1/8	

Date Functions

Start Date	1/1/57
End Date	2/1/93

Number of months between above dates:	**433**
Number of days between above dates:	**13180**
Number of years between above dates:	**36**

Functions and Operators	Using The Current Date
NOW()	**8/6/24 13:57**
TODAY()	**8/6/24**
WEEKDAY()	**Tue**
MONTH()	**8**
DAY()	**6**
YEAR()	**2024**
DATE()	**8/6/24**

Time Functions

Summing Time

Start Time	End Time	Elapsed Time
8:15 AM	5:30 PM	**9:15**

Accumulating Time Over 24 Hours

	9:00
	12:30
	16:05
	22:00
Total (in decimal):	**59.58**
Total ([h]:mm:ss):	**2.48263888888889**

Converting Time in h:mm Format to Decimal Format

17.83	17:50

Converting Time in Decimal Format to h:mm Format

4:30:00	4.5

Functions and Operators	Using The Current Time
NOW()	**8/6/24 13:57**
HOUR()	**13**
MINUTE()	**57**
SECOND()	**12**
TIME()	**0.581388889**
TIMEVALUE()	**0.541655093**

Business and Financial Functions

Functions and Operators	Using Constants
PMT()	**$439.43**
PPMT()	**$321.56**
PV()	**$17,999.89**
RATE()	**0.0799952399609449**
FV()	**$4,774.55**
IPMT()	**$117.87**
NPER()	**36.9779331174627**
NPV()	**$811.57**
IRR()	**4%**
MIRR()	**5%**

Sample Data for IRR()

Name	Salary
Investment	-60,000
Return	9,590
Return	10,580
Return	12,790
Return	15,830
Return	18,930

Functions and Operators	Using Constants
DB()	$1,451.52
DDB()	$1,457.73
SLN	$1,285.71
SYD	$1,607.14
VDB	$1,041.23

Math Functions

Functions and Operators	Using Cell References
ABS()	500
INT()	122
LN()	3.00022217882684
LOG()	1
LOG10()	2
SQRT()	3
EXP()	20.0855369231877
ROUND()	123.46
TRUNC()	123.45
FLOOR()	1.2
CEILING()	1.25
ODD()	125
EVEN()	124
TYPE()	1
N()	1.23
SIGN()	-1
VALUE()	3

SIN()	0.893996663600558
COS()	-0.44807361612917
TAN()	-1.99520041220824

Sample Data

ABS()	-500
INT()	122.6
LN()	20
LOG()	10
LOG10()	100
SQRT()	9
EXP()	3
ROUND()	123.4568
ROUND()	123.4568
FLOOR()	1.2346
CEILING()	1.2346
ODD()	123.5
EVEN()	123.5
TYPE()	124.5
N()	1.23
SIGN()	-1.00
VALUE()	3

SIN()	90
COS()	90
TAN()	90

ASIN()	**-1.5707963267949**
ACOS()	**1.0471975511966**
ATAN()	**1.29249666778979**
ASINH()	**1.96572047164965**
ACOH()	**0.622362503714779**
ATANH()	**0.549306144334055**

ASIN()	-1.0
ACOS()	0.5
ATAN()	3.5
ASINH()	3.5
ACOSH()	1.2
ATANH()	0.5

Misc. Functions

Functions and Operators	Using Cell References
IF()	**Yes**
INDIRECT()	**1**
ERROR.TYPE()	**7**

Sample Data

IF()	1
INDIRECT()	H177
ERROR.TYPE()	#N/A

MOD()	**2**
ROW()	**144**
ROWS()	**35**
COLUMN()	**7**
COLUMNS()	**2**
ADDRESS()	**G144**
AND()	**1**
OR()	**1**
NOT()	**1**

PI()	**3.1415926536**
RAND()	**0.806513148026442**
TRUE()	**1**
FALSE()	**0**
NA()	**#N/A**

Test Functions

Functions and Operators	True Expressions	False Expressions
ISBLANK()	**$1.00**	**$0.00**
ISERR()	**$1.00**	**$0.00**
ISERROR()	**$1.00**	**$0.00**
ISLOGICAL()	**$0.00**	**$0.00**
ISNA()	**$1.00**	**$0.00**
ISNONTEXT()	**$1.00**	**$0.00**
ISNUMBER()	**$1.00**	**$0.00**
ISREF()	**$1.00**	**$0.00**
ISTEXT()	**$1.00**	**$0.00**

Sample Data

	1
Err:508	1
#N/A	1
1	1
#N/A	1
1	Text
1	Text
A1	1
Text	1

Qty Sold
19
129
234
199
126
45

Ed
30,000
12
199