EXCEL FORMULAS LIST

Generalized Shortcuts	
Excel Fuction	Shortcut Keys
Close a Workbook	Ctrl + W
Repeat Last Command Actions	F4
Open Options	Alt + F + T
Open Help	F1
Undo	Ctrl + Z
Redo	Ctrl + Y
Copy	Ctrl + C
Cut	Ctrl + X
Paste	Ctrl + V
Display Paste Special Dialogue Box	Ctrl + Alt + V
Find Box	Ctrl + F
Find and Replace	Ctrl + H
Find next match	Shift + F4
Find Previous Match	Ctrl + Shift + F4
Create an Embedded Chart	Alt + F1 -
Create Chart in new Worksheet	F11
New Workbook	Ctrl + N
Open Workbook	Ctrl + O
Save Workbook	Ctrl + S
Save As	F12
Print File	Ctrl + P

Open Print Preview	Ctrl + F2
Close Workbook	Ctrl + F4
Close Excel	Alt + F4
Expand or close Ribbon	Ctrl + F1
Activate Access Keys	Alt
Move to next control on Ribbon	Tab
Help	F1
Select all contents of a worksheet.	Ctrl+A
Bold all cells in the highlighted section.	Ctrl+B
Fill the Content of the selected cell on top to bottom. CTRL + D (i.e. Ctrl+ Down)	Ctrl+D
"Search the current sheet.	Ctrl+F
Go to a certain area.	Ctrl+G
Find and replace.	Ctrl+H
Puts italics on all cells in the highlighted section.	Ctrl+I
Inserts a hyperlink.	Ctrl+K
Print the current sheet.	Ctrl+P
Fill Right.	Ctrl+R
Saves the open worksheet.	Ctrl+S
Underlines all cells in the highlighted section.	Ctrl+U
Pastes everything copied onto the clipboard.	Ctrl+V
Closes the current workbook.	Ctrl+W

Cuts all cells within the highlighted section.	Ctrl+X
Repeats the last entry.	Ctrl+Y
Undo the last action.	Ctrl+Z
Changes the format of the selected cells.	Ctrl+1
Bolds all cells in the highlighted section.	Ctrl+2
Puts italics all cells in the highlighted section.	Ctrl+3
Underlines all cells in the highlighted section.	Ctrl+4
Puts a strikethrough all cells in the highlighted section.	Ctrl+5
Shows or hides objects.	Ctrl+6
Shows or hides the toolbar.	Ctrl+7
Toggles the outline symbols.	Ctrl+8
Hides rows.	Ctrl+9
Hides columns.	Ctrl+0
Enters the current time.	Ctrl+Shift+:
Enters the current date.	Ctrl+;
Changes between displaying cell values or formulas in the worksheet.	Ctrl+`
Copies a formula from the cell above.	Ctrl+'
Copies value from the cell above.	Ctrl+Shift+"
Deletes the selected column or row.	Ctrl+-
Inserts a new column or row.	Ctrl+Shift+=

Switches between showing Excel formulas or their values in cells.	Ctrl+Shift+~
Applies time formatting.	Ctrl+Shift+@
Applies comma formatting.	Ctrl+Shift+!
Applies currency formatting.	Ctrl+Shift+$
Applies date formatting.	Ctrl+Shift+#
Applies percentage formatting.	Ctrl+Shift+%
Applies exponential formatting.	Ctrl+Shift+^
Selects the current region around the active cell.	Ctrl+Shift+*
Places border around selected cells.	Ctrl+Shift+&
Removes a border.	Ctrl+Shift+_
Insert.	Ctrl++
Delete.	Ctrl+-
Unhide rows.	Ctrl+Shift+(
Unhide columns.	Ctrl+Shift+)
Selects the array containing the active cell.	Ctrl+/
Selects the cells that have a static value or don't match the formula in the active cell.	Ctrl+\
Selects all cells referenced by formulas in the highlighted section.	Ctrl+[
Selects cells that contain formulas that reference the active cell.	Ctrl+]

Selects all cells directly or indirectly referenced by formulas in the highlighted section.	Ctrl+Shift+{
Selects cells that contain formulas that directly or indirectly reference the active cell.	Ctrl+Shift+}
Selects the cells within a column that don't match the formula or static value in the active cell.	Ctrl+Shift+|
Fills the selected cells with the current entry.	Ctrl+Enter
Selects the entire column.	Ctrl+Spacebar
Selects the entire worksheet.	Ctrl+Shift+Spacebar
Move to cell A1.	Ctrl+Home
Move to the last cell on a worksheet.	Ctrl+End
Move between Two or more open Excel files.	Ctrl+Tab
Activates the previous workbook.	Ctrl+Shift+Tab
Inserts argument names into a formula.	Ctrl+Shift+A
Opens the drop-down menu for fonts.	Ctrl+Shift+F
Selects all of the cells that contain comments.	Ctrl+Shift+F
Opens the drop-down menu for the point size.	Ctrl+Shift+P
Pastes what is stored on the clipboard.	Shift+Insert
In a single column, highlights all cells above that which are selected.	Shift+pg up
In a single column, highlights all cells above that which are selected.	Shift+pg dn
Highlights all text to the left of the cursor.	Shift+Home

Highlights all text to the right of the cursor.	Shift+End
Extends the highlighted area up to one cell.	Shift+↑
Extends the highlighted area down one cell.	Shift+↓
Extends the highlighted area left one character.	Shift+←
Extends the highlighted area right one character.	Shift+→
Cycles through applications.	Alt+Tab
Opens the system menu.	Alt+Spacebar
Undo.	Alt+Backpspace
While typing text in a cell, pressing Alt+Enter will move to the next line, allowing for multiple lines of text in one cell.	Alt+Enter
It creates a formula to sum all of the above cells.	Alt+=
Allows formatting on a dialog box.	Alt+'
Opens the Help menu.	F1
Edits the selected cell.	F2
After a name has been created, F3 will paste names.	F3
Repeats the last action. For example, if you changed the color of the text in another cell, pressing F4 will change the text in a cell to the same color.	F4
Goes to a specific cell. For example, C6.	F5
Move to the next pane.	F6

Spell check selected text or document.	F7
Enters Extend Mode.	F8
Recalculates every workbook.	F9
Activates the menu bar.	F10
Creates a chart from selected data.	F11
Save as.	F12
Opens the "What's This?" window.	Shift+F1
It allows the user to edit a cell comment.	Shift+F2
Opens the Excel formula window.	Shift+F3
Brings up a search box.	Shift+F5
Move to the previous page.	Shift+F6
Add to selection.	Shift+F8
Performs calculate function on the active sheet.	Shift+F9
Open Excel Name Manager.	Ctrl+F3
Closes current Window.	Ctrl+F4
Restores window size.	Ctrl+F5
Next workbook.	Ctrl+F6
Previous workbook.	Ctrl+Shift+F6
Moves the window.	Ctrl+F7
Resizes the window.	Ctrl+F8
Minimize the current window.	Ctrl+F9

Maximize the currently selected window.	Ctrl+F10
Inserts a macro sheet.	Ctrl+F11
Opens a file.	Ctrl+F12
Creates names by using those of either row or column labels.	Ctrl+Shift+F3
Moves to the previous worksheet window.	Ctrl+Shift+F6
Prints the current worksheet.	Ctrl+Shift+F12
Inserts a chart.	Alt+F1
Save as.	Alt+F2
Exits Excel.	Alt+F4
Opens the macro dialog box.	Alt+F8
Opens the Visual Basic editor.	Alt+F11
Creates a new worksheet.	Alt+Shift+F1
Saves the current worksheet.	Alt+Shift+F2
Cell Formatting Shortcut Keys	
To edit a cell	F2
To copy and paste cells	Ctrl + C, Ctrl + V
To italicize and make the font bold	Ctrl + I, Ctrl + B
To center align cell contents	Alt + H + A + C
To fill color	Alt + H + H
To add a border	Alt + H + B
To remove outline border	Ctrl + Shift + _

To add an outline to the select cells	Ctrl + Shift + &
To move to the next cell	Tab
To move to the previous cell	Shift + Tab
To select all the cells on the right	Ctrl + Shift + Right arrow
To select all the cells on the left	Ctrl + Shift + Left Arrow
To select the column from the selected cell to the end of the table	Ctrl + Shift + Down Arrow
To select all the cells above the selected cell	Ctrl + Shift + Up Arrow
To select all the cells below the selected cell	Ctrl + Shift + Down Arrow
To add a comment to a cell	Shift + F2
To delete a cell comment	Shift + F10 + D
To display find and replace	Ctrl + H
To activate the filter	Ctrl + Shift + L, Alt + Down Arrow
To insert the current date	Ctrl + ;
To insert current time	Ctrl + Shift + :
To insert a hyperlink	Ctrl + k
To apply the currency format	Ctrl + Shift + $
To apply the percent format	Ctrl + Shift + %
To go to the "Tell me what you want to do" box	Alt + Q
Row and Column Formatting Shortcut Keys	
To select the entire row	Shift + Space

To select the entire column	Ctrl + Space
To delete a column	Alt+H+D+C
To delete a row	Shift + Space, Ctrl + -
To hide selected row	Ctrl + 9
To unhide selected row	Ctrl + Shift + 9
To hide a selected column	Ctrl + 0
To unhide a selected column	Ctrl + Shift + 0
To group rows or columns	Alt + Shift + Right arrow
To ungroup rows or columns	Alt + Shift + Left arrow
Pivot Table Shortcut Keys	
To group pivot table items	Alt + Shift + Right arrow
To ungroup pivot table items	Alt + Shift + Left arrow
To hide pivot table items	Ctrl + -
To create a pivot chart on the same sheet	Alt + F1
To create a pivot chart on a new worksheet	F11

Database Excel Formulas & Functions

Functions	Excel Formulas	Description
DGET	=DGET(database,field,criteria)	Extracts from a database a single record that matches the specified criteria
DSUM	=DSUM(database,field,criteria)	Adds the numbers in the field column of records in the database that match the criteria
DAVERAGE	=DAVERAGE(database,field,criteria)	Returns the average of selected database entries
DCOUNT	=DCOUNT(database,field,criteria)	Counts the cells that contain numbers in a database
DCOUNTA	=DCOUNTA(database,field,criteria)	Counts nonblank cells in a database
DMAX	=DMAX(database,field,criteria)	Returns the maximum value from selected database entries
DMIN	=DMIN(database,field,criteria)	Returns the minimum value from selected database entries
DPRODUCT	=DPRODUCT(database,field,criteria)	Multiplies the values in a particular field of records that match the criteria in a database
DSTDEV	=DSTDEV(database,field,criteria)	Estimates the standard deviation based on a sample of selected database entries
DSTDEVP	=DSTDEVP(database,field,criteria)	Calculates the standard deviation based on the entire population of selected database entries
DVAR	=DVAR(database,field,criteria)	Estimates variance based on a sample from selected database entries

Functions	Excel Formulas	Description
DVARP	=DVARP(database,field,criteria)	Calculates variance based on the entire population of selected database entries

Date & Time Excel Formulas & Functions

Functions	Excel Formulas	Description
DATE	=DATE(year,month,day)	Returns the serial number of a particular date
DATEVALUE	=DATEVALUE(date_text)	Converts a date in the form of text to a serial number
DAY	=DAY(serial_number)	Converts a serial number to a day of the month
HOUR	=HOUR(serial_number)	Converts a serial number to an hour
MINUTE	=MINUTE(serial_number)	Converts a serial number to a minute
MONTH	=MONTH(serial_number)	Converts a serial number to a month
NOW	=NOW()	Returns the serial number of the current date and time
SECOND	=SECOND(serial_number)	Converts a serial number to a second
TIME	=TIME(hour,minute,second)	Returns the serial number of a particular time

Functions	Excel Formulas	Description
TIMEVALUE	=TIMEVALUE(time_text)	Converts a time in the form of text to a serial number
TODAY	=TODAY()	Returns the serial number of today's date
YEAR	=YEAR(serial_number)	Converts a serial number to a year
DAYS360	=DAYS360(start_date,end_date,method)	Calculates the number of days between two dates based on a 360-day year
EDATE	=EDATE(start_date,months)	Returns the serial number of the date that is the indicated number of months before or after the start date
EOMONTH	=EOMONTH(start_date,months)	Returns the serial number of the last day of the month before or after a specified number of months
NETWORKDAYS	=NETWORKDAYS(start_date,end_date,[holidays])	Returns the number of whole workdays between two dates
NETWORKDAYS.INTL	=NETWORKDAYS.INTL(start_date,end_date,[weekend],[holidays])	Returns the number of whole workdays between two dates using parameters to indicate which and how many days are weekend days
WEEKDAY	=WEEKDAY(serial_number,[return_type])	Converts a serial number to a day of the week
WEEKNUM	=WEEKNUM(serial_number,[return_type])	Converts a serial number to a number representing where the

Functions	Excel Formulas	Description
		week falls numerically with a year
WORKDAY	=WORKDAY(start_date, days, [holidays])	Returns the serial number of the date before or after a specified number of workdays
WORKDAY.INTL	=WORKDAY.INTL(start_date,days,weekend,holidays)	Returns the serial number of the date before or after a specified number of workdays using parameters to indicate which and how many days are weekend days
YEARFRAC	=YEARFRAC(start_date,end_date,basis)	Returns the year fraction representing the number of whole days between start_date and end_date

Information Excel Formulas & Functions

Functions	Excel Formulas	Description
CELL	=CELL(info_type, [reference])	Returns information about the formatting, location, or contents of a cell
ISBLANK	=ISBLANK(value)	Returns TRUE if the value is blank
ISERROR	=ISERROR(value)	Returns TRUE if the value is any error value
ISNONTEXT	=ISNONTEXT(value)	Returns TRUE if the value is not text

Functions	Excel Formulas	Description
ISNUMBER	=ISNUMBER(value)	Returns TRUE if the value is a number
ISTEXT	=ISTEXT(value)	Returns TRUE if the value is text
ERROR.TYPE	=ERROR.TYPE(error_val)	Returns a number corresponding to an error type
INFO	=INFO(type_text)	Returns information about the current operating environment
ISERR	=ISERR(value)	Returns TRUE if the value is any error value except #N/A
ISEVEN	=ISEVEN(number)	Returns TRUE if the number is even
ISLOGICAL	=ISLOGICAL(value)	Returns TRUE if the value is a logical value
ISNA	=ISNA(value)	Returns TRUE if the value is the #N/A error value
ISODD	=ISODD(number)	Returns TRUE if the number is odd
ISREF	=ISREF(value)	Returns TRUE if the value is a reference
N	=N(value)	Returns a value converted to a number
NA	=NA()	Returns the error value #N/A
TYPE	=TYPE(value)	Returns a number indicating the data type of a value

Lookup & Reference Excel Formulas

Functions	Excel Formulas	Description
ADDRESS	=ADDRESS(row_num, column_num, [abs_num], [a1], [sheet_text])	Returns a reference as text to a single cell in a worksheet
COLUMN	=COLUMN([reference])	Returns the column number of a reference
COLUMNS	=COLUMNS(array)	Returns the number of columns in a reference
HLOOKUP	=HLOOKUP(lookup_value,table_array,row_index_num,[range_lookup])	Looks in the top row of an array and returns the value of the indicated cell
INDEX	=INDEX(array,row_num,[column_num])– 2 types	Uses an index to choose a value from a reference or array
INDIRECT	=INDIRECT(ref_text,a1)	Returns a reference indicated by a text value
MATCH	=MATCH(lookup_value,lookup_array,match_type)	Looks up values in a reference or array
OFFSET	=OFFSET(reference,rows,cols,height,width)	Returns a reference offset from a given reference
ROW	=ROW([reference])	Returns the row number of a reference
ROWS	=ROWS(array)	Returns the number of rows in a reference

Functions	Excel Formulas	Description
VLOOKUP	=VLOOKUP(lookup_value,table_array,col_index_num,[range_lookup])	Looks in the first column of an array and moves across the row to return the value of a cell
CHOOSE	=CHOOSE(index_num,value1,value2,...)	Chooses a value from a list of values
GETPIVOTDATA	=GETPIVOTDATA(data_field,pivot_table,field,item,...)	Returns data stored in a PivotTable report
HYPERLINK	=HYPERLINK(link_location,friendly_name)	Creates a shortcut or jump that opens a document stored on a network server, an intranet, or the Internet
TRANSPOSE	=TRANSPOSE(array)	Returns the transpose of an array
AREAS	=AREAS(reference)	Returns the number of areas in a reference

Text Excel Formulas & Functions

Functions	Excel Formulas	Description
EXACT	=EXACT(text1,text2)	Checks to see if two text values are identical
LOWER	=LOWER(text)	Converts text to lowercase
PROPER	=PROPER(text)	Capitalizes the first letter in each word of a text value
TRIM	=TRIM(text)	Removes spaces from text
UPPER	=UPPER(text)	Converts text to uppercase
CHAR	=CHAR(number)	Returns the character specified by the code number
CLEAN	=CLEAN(text)	Removes all nonprintable characters from text
CODE	=CODE(text)	Returns a numeric code for the first character in a text string
DOLLAR	=DOLLAR(number,decimals)	Converts a number to text, using the $ (dollar) currency format
FIXED	=FIXED(number,decimals,no_commas)	Formats a number as text with a fixed number of decimals

Functions	Excel Formulas	Description
PHONETIC	=PHONETIC(reference)	Extracts the phonetic (furigana) characters from a text string
REPT	=REPT(text,number_times)	Repeats text a given number of times
SUBSTITUTE	=SUBSTITUTE(text,old_text,new_text,instance_num)	Substitutes new text for old text in a text string
T	=T(value)	Converts its arguments to text
VALUE	=VALUE(text)	Converts a text argument to a number
ASC	=ASC(text)	Changes full-width (double-byte) English letters or katakana within a character string to half-width (single-byte) characters
BAHTTEXT	=BAHTTEXT(number)	Converts a number to text, using the ß (baht) currency format

Most Common Excel Formulas & Functions

Functions	Excel Formulas	Description
FIND	=FIND(find_text,within_text,start_num)	Finds one text value within another (case-sensitive)
LEFT	=LEFT(text,num_chars)	Returns the leftmost characters from a text value
LEN	=LEN(text)	Returns the number of characters in a text string
MID	=MID(text,start_num,num_chars)	Returns a specific number of characters from a text string starting at the position you specify
REPLACE	=REPLACE(old_text,start_num,num_chars,new_text)	Replaces characters within text
RIGHT	=RIGHT(text,num_chars)	Returns the rightmost characters from a text value
SEARCH	=SEARCH(find_text,within_text,start_num)	Finds one text value within another (not case-sensitive)

Engineering Excel Formulas & Functions

Functions	Excel Formulas	Description
CONVERT	=CONVERT(number,from_unit,to_unit)	Converts a number from one measurement system to another
DELTA	=DELTA(number1,number2)	Tests whether two values are equal
ERF	=ERF(lower_limit,upper_limit)	Returns the error function
ERFC	=ERFC(x)	Returns the complementary error function
GESTEP	=GESTEP(number,step)	Tests whether a number is greater than a threshold value
ERF.PRECISE	=ERF.PRECISE(X)	Returns the error function
ERFC.PRECISE	=ERFC.PRECISE(X)	Returns the complementary ERF function integrated between x and infinity
BESSELI	=BESSELI(x,n)	Returns the modified Bessel function In(x)
BESSELJ	=BESSELJ(x,n)	Returns the Bessel function Jn(x)
BESSELK	=BESSELK(x,n)	Returns the modified Bessel function Kn(x)

Functions	Excel Formulas	Description
BESSELY	=BESSELY(x,n)	Returns the Bessel function Yn(x)
BIN2DEC	=BIN2DEC(number)	Converts a binary number to decimal
BIN2HEX	=BIN2HEX(number,places)	Converts a binary number to hexadecimal
DEC2OCT	=DEC2OCT(number,places)	Converts a decimal number to octal
HEX2BIN	=HEX2BIN(number,places)	Converts a hexadecimal number to binary
HEX2DEC	=HEX2DEC(number)	Converts a hexadecimal number to decimal
HEX2OCT	=HEX2OCT(number,places)	Converts a hexadecimal number to octal
IMABS	=IMABS(inumber)	Returns the absolute value (modulus) of a complex number
IMAGINARY	=IMAGINARY(inumber)	Returns the imaginary coefficient of a complex number
IMARGUMENT	=IMARGUMENT(inumber)	Returns the argument theta, an angle expressed in radians
IMCONJUGATE	=IMCONJUGATE(inumber)	Returns the complex conjugate of a complex number
IMCOS	=IMCOS(inumber)	Returns the cosine of a complex number

Functions	Excel Formulas	Description
IMDIV	=IMDIV(inumber1,inumber2)	Returns the quotient of two complex numbers
IMEXP	=IMEXP(inumber)	Returns the exponential of a complex number
IMLN	=IMLN(inumber)	Returns the natural logarithm of a complex number
IMLOG10	=IMLOG10(inumber)	Returns the base-10 logarithm of a complex number
IMLOG2	=IMLOG2(inumber)	Returns the base-2 logarithm of a complex number
IMPOWER	=IMPOWER(inumber,number)	Returns a complex number raised to an integer power
IMPRODUCT	=IMPRODUCT(inumber1,inumber2,...)	Returns the product of complex numbers
IMREAL	=IMREAL(inumber)	Returns the real coefficient of a complex number
IMSIN	=IMSIN(inumber)	Returns the sine of a complex number
IMSQRT	=IMSQRT(inumber)	Returns the square root of a complex number
IMSUB	=IMSUB(inumber1,inumber2)	Returns the difference between two complex numbers
IMSUM	=IMSUM(inumber1,inumber2,...)	Returns the sum of complex numbers

Functions	Excel Formulas	Description
OCT2BIN	=OCT2BIN(number,places)	Converts an octal number to binary
OCT2DEC	=OCT2DEC(number)	Converts an octal number to decimal
OCT2HEX	=OCT2HEX(number,places)	Converts an octal number to hexadecimal