Contents

Using CTICalc

Navigation and control

Keyboard controls

Mouse controls

Keyboard controls

The following table lists the keys to move the active cell, display different portions of the worksheet, and perform other actions.

Key	Description
[Up arrow]	Moves active cell up one row
[Down arrow]	Moves active cell down one row
[Left arrow]	Moves active cell left one column
[Right arrow]	Moves active cell right one column
[Page up]	Moves up one screen
[Page down]	Moves down one screen
[CTRL] [Page up]	Moves left one screen
[CTRL] [Page down]	Moves right one screen
[Home]	Moves to first column of current row
[End]	Moves to last column of current row containing data
[CTRL] [Home]	Moves to row 1, column 1
[CTRL] [End]	Moves to last row and column containing data
[Tab]	Moves right one column
[SHIFT] [Tab]	Moves left one column
[Shift] [Arrow key]	Extends selection to next row or column
[F2]	Enters edit mode
[F9]	Recalculates entire worksheet
[Del]	Clears current selection
[Esc]	Cancels during data entry or edit

Mouse controls

The following table lists the mouse actions used to move the active cell and perform other actions.

Left click

      Select cell

Left click in Row or Column heading

      Selects entire row or column

Left click in top left corner

      Selects entire worksheet

Left click and drag across row or cell

      Extends selection to row or column

Press [Shift], then left click and drag

      Resize current selection

Press [Ctrl], then left click and drag

      Selects additional range of cells

Drag border of selected cells

      Moves selected cells to new location

Formulas

Formula Operators

The following operators are supported:

Operator	Description
+	addition
-	subtraction
/	division
*	multiplication
%	percentage
^	exponentiation
&	concatenation
=	equals to
>	greater than
<	less than
>=	greater than or equals to
<=	less than or equals to
<>	not equal to
:	range -- refers to all cells between the indicated cells (A1:A10 includes cells A1, A10, and all cells between them)

Operator Precedence

All formulas are evaluated according to the following order of precedence.   Parenthesis should be used to change the order of evaluation. Operators of the same precedence are evaluated left to right.

Operator	Description
()	parenthesis
:	range
-	negation
%	percentage
^	exponentiation
* and /	multiplication and division
+ and -	addition and subtraction
&	text concatenation
= <> <= >= <>	comparison

Examples	Result
1+2*3	7
1+(2*3)	7
(1+2)*3	9

Absolute and Relative References

A relative reference points to a cell based on its relative position to the current cell.   An absolute reference points to a cell at a specific location.   When the cell containing a relative reference is moved or copied, the reference points to the cell with the same relative position as the original reference cell. When a cell contains an absolute reference is copied or moved, the reference remains pointing at the original cell.

Reference	Type
A1	relative reference point to cell A1
A1	absolute reference to cell A1
$A1	absolute reference to column A, relative reference to row 1
A$1	relative reference to column A, absolute reference to column 1

Functions

The following functions are supported:

ABS(number)

returns the absolute value of a number

ABS(-1) returns 1

ABS(1) returns 1

AVERAGE(number_list)

returns the average of the listed numbers

AVERAGE(1, 2, 3) returns 2

AVERAGE(A1:A10) returns the average of cells A1 through A10

IF(condition, true_value, false_value)

tests the condition and returns the specified value

condition = any logical expression

true_value = value returned if condition evaluates to True

false_value = value returned if condition evaluates to False

IF(A1 > 5, "Greater", "Less") returns Greater if the content of A1 is greater than 5 and Less if the content of A1 is <= 5

INT(number)

rounds the supplied number down to the nearest integer

INT(5.66) returns 5

INT(5.001) returns 5

INT(-5.02) returns -6

LOOKUP(lookup_value, lookup_range, result_range)

searches for a value in one range and returns the contents of corresponding position in the second range

lookup_value = value for which to search in first range

lookup_range = first range to search (one row or column)

result_range = range (one row or column) the same size as lookup_range

MAX(number_list)

returns the largest value in the list of numbers

MAX(25, 15, 17) returns 25

MAX(A1:A10) returns the largest value in cells A1 through A10

MIN(number_list)

returns the smallest value in the list of numbers

MIN(25, 15, 17) returns 15

MIN(A1:A10) returns the smallest value in cells A1 through A10

RAND()

returns a random number greater or equal to 0 and less than 1

RAND() returns a number >= 0 and < 1

RAND()*100 returns a number >= 0 and less than 100

ROUND(number, precision)

rounds the number to the specified number of decimal places

ROUND(24.156,2) returns 24.16

SUM(number_list)

returns the sum of the numbers

SUM(5, 7, 3) returns 15

SUM(A1:A10) returns the sum of cells A1 through A10

Inserting

[Inserting a row](#)

[Inserting a column](#)

Inserting a row

To insert a row:

1. Move the active cell to any cell in the row where you want the new row to appear.

2. Click Insert, then click Row to insert a new row.

Inserting a column

To insert a column:

1. Move the active cell to any cell in the column where you want the new column to appear.

2. Click Insert, then click Column to insert a new column.

Clearing cells

Clearing a cell or selected cells

To clear a cell or selected cells:

1. Select the cell or cells to be cleared.
2. Press [Del] or click Edit, then click Clear to display the Clear dialog box.
3. Click All, Formats, or Values in the Clear section of the dialog box.
4. Click the OK button to clear the cell.

Deleting columns and rows

Deleting a row

Deleting a column

Deleting a row

To delete a row:

1. Move the active cell to any cell in the row you want to delete.

2. Click Edit.

3. Click Delete Row.

Deleting a column

To delete a column:

1. Move the active cell to any cell in the column you want to delete.
2. Click Edit.
3. Click Delete Column.

Moving

Moving a cell or selected cells

To move a cell or selected cells:

1. Select the cell or cells you want to move.
2. Position the pointer over the black outline of the selected cell(s).   The pointer changes to an arrow shape.
3. Press the left mouse button and drag the cell(s) to the new location.
4. Release the left mouse button to drop the cell(s) in the new location.

Cut, copy, and paste

Copying and pasting

Cutting and pasting

Copying and pasting

To copy a cell or selected cells:

1. Move the active cell to the cell you want to copy or select the cells to copy.
2. Click Edit, then click Copy.
3. Move the active cell to the location to place the copy.
4. Click Edit, then click Paste to paste the copy at the new location.

Cutting and pasting

To cut a cell or selected cells and paste in a new location:

1. Move the active cell to the cell you want to cut or select the cells to cut.

2. Click Edit, then click Cut.

3. Move the active cell to the location to paste the cell or cells.

4. Click Edit, then click Paste to paste the cell or cells at the new location.

Showing formulas

When you open or create a worksheet, the result of each formula is displayed in the worksheet cells.   To see the formula that generated the result, you must move to a cell to display the formula in the formula bar.

You can set the worksheet so each cell displays the formula instead of the result of the formula.   When you select this option, formulas are shown on the screen and in printed versions of the worksheet.

To show formulas in the worksheet:

1.   Click View.

2.   Click Show Formulas to place a checkmark in front of it and show formulas in the worksheet.

3.   Formulas will be shown when the worksheet is displayed on the screen and when it is printed.

To hide formulas and show the results in the worksheet:

1.   Click View.

2.   Click Show Formulas to remove the checkmark.

3.   Formulas will not be shown when the worksheet is displayed on the screen or when it is printed.

Formatting

Formatting a column

To format a column:

1. Move the active cell to the column you want to format.
2. Click Format.
3. Click Column to display the Column Width dialog box.
4. If you want to enter the column width directly, type the width in the Width text box.
5. If you want to format the column to fit the widest contents of any cell in that column,   click the Auto button.
6. If you want to hide the column, click the Hide button.
7. If you want to show the column, click the Show button.
8. Click OK to apply the changes.
9. Click Cancel to abandon the changes.

Formatting a row

To format a row:

1. Move the active cell to the row you want to format.
2. Click Format.
3. Click Row to display the Row Height dialog box.
4. If you want to directly enter the height, type the height in the Height text box.
5. If you want to format the row to fit the highest contents of any cell in that row,   click the Auto button.
6. If you want to hide the row, click the Hide button.
7. If you want to show the row, click the Show button.
8. Click OK to apply the changes.
9. Click Cancel to abandon the changes.

Alignment

To change the alignment for a cell:

1. Move the active cell to the cell, or select the cells you want to align
2. Click Format.
3. Click Alignment to display the Alignment dialog box.
4. Select the appropriate Horizontal and Vertical alignment.
5. If you want to allow long labels to wrap to multiple lines within a cell, click the Word Wrap check box.
6. Click OK to apply the changes.
7. Click Cancel to abandon the changes.

Number formats

To change the number format for a cell or selected cells:

1. Move the active cell to the cell, or select the cells you want to change.

2. Click Format.

3. Click Number.

4. Select the format from the Format list box.

5. If you want to display only formats of a specific type, click the down arrow button on the Category list and select the appropriate type of format.

6. Click OK to apply the changes.

7. Click Cancel to abandon the changes.

Fonts

To change the font for a cell or selected cells:

1. Move the active to cell or select the cells to format.
2. Click Format.
3. Click Fonts to display the Font dialog box.
4. Select the font from the Font list box.
5. Select the font style from the Font Style list box.
6. Select the size from the Size list box.
7. Click the Strikeout or Underline check box to select those effects.
8. Click the down arrow button on the Color list box to select the text color.
9. Click the OK button to apply the changes.
10. Click the Cancel button to abandon the changes.

Sorting data

To sort data:

1. Select the cells containing the data to be sorted.   Be sure to include all cells to be sorted.

2. Click Data, then click Sort to display the Sort dialog box.

3. Click the Rows or Columns radio buttons to sort by rows or columns.

4. Click the Ascending or Descending radio button to select the sort order.

5. Click the OK button to sort the data.

6. Click the Cancel button to abandon the sort.

Clearing the entire worksheet

To clear the entire worksheet:

1. Click File.

2. Click New to clear the entire worksheet and restore the default settings.

Opening a worksheet

To open a worksheet:

1. Click File.

2. Click Open to display the Open dialog box.

3. Use the Directories and Drives list to select the directory and drive.

4. Type the name of the file to open or select it from the File Name list.

5. Click the OK button to open the file.

6. Click the Cancel button to abandon the operation.

Only files that have been saved in Excel 4 format with an .XLS extension can be opened.

Saving a worksheet under a new name

To save a worksheet under a new name:

1. Click File, then click Save As to display the Save As dialog box.

2. Use the Directories and Drives list to select the directory and drive.

3. Type the name under which to save the file,   or select the name from the File Name list.

4. Click the OK button to save the file.

5. Click the Cancel button to abandon the save.

All files will be saved with an .XLS extension in Excel 4 format.

Saving the current worksheet under the same name

To save the current worksheet under the same name:

1. Click File.

2. Click Save.

If the worksheet was opened or previously saved, it will be saved under the existing name.   If the worksheet has just been created, the Save As dialog box will be displayed.

Changing the page setup

To change the page setup:

1. Click File.

2. Click Page Setup to display the Page Setup dialog box.

3. To change the margins, click the Top, Left, Bottom, and Right text boxes and type the correct margin settings.

4. To undo the centering option on   the worksheet page, click the Center Horizontally or Center Vertically check boxes to remove the check.

5. If you do not want to print gridlines, click the Grid Lines check box to remove the check.

6. To print the worksheet in black and white,   click the Black & White check box to add a check.

7. To print row or column headings,   click the Row Heading or Column Heading check boxes to add a check.

8. To fit the worksheet on a specified number of pages,   click the Fit to Page(s) check box, then enter the correct values in the Pages Wide and Pages High text boxes.

9. To change the scale of the printed worksheet, change the value in the Scale text box.

10. Click the OK button to apply the changes.

11. Click the Cancel button to abandon the changes.

You should not change the text in the Header and Footer text boxes.   The header is automatically set to print your name and section at the top of the page.   The footer is automatically set to print the date, page number, and filename on the bottom of the page.

Printing the worksheet

To print the worksheet:

1. Click File

2. Click Print to display the Print dialog box.

3. If you   do not want to print the entire worksheet, select the Print Range.

4. To print multiple copies of the worksheet, change the value in the Copies text box.

5. To change the print quality, select the setting from the Print Quality list.

6. Click the OK button to print the worksheet on the default printer.

7. Click the Cancel button to abandon printing.

8. Click the Setup button to display the Print Setup dialog box.   The Print Setup dialog box allows you to select any installed printer, change the paper orientation, paper size, and paper source.

To print the worksheet with formulas showing, click View, then click Show Formulas to show formulas before printing.