Excel® 2010 Introduction

Creating a New Workbook
1. Choose FILE, NEW.
2. Select Blank WORKBOOK, then [Click] CREATE.
   Or, press <Ctrl-N>.

Entering New Data
1. Activate a cell by [Clicking] on it, or by moving to it
   with the keyboard arrow keys.
2. Type the data. If you make a mistake while typing,
   press <Backspace> to delete characters.
3. Press <Enter> or [Click] in the Formula Bar.
   As you type, Excel may provide an AutoComplete
   suggestion based on values already entered in the
   column. Press <Enter> to accept, <Delete> to remove,
   or ignore it by continuing to type.

Pick from a Drop-Down List
To pick from a list of values already entered in a
column, press <Alt-V> then use arrows and <Enter>
and <Delete> to select. Or, [Right Click] the cell, then choose PICK FROM DROP-DOWN LIST.

Replacing the Contents of a Cell
1. [Click] on the cell to change.
2. Type the new data.
3. Press <Enter> or [Click] to verify.

Editing the Contents of a Cell
1. [Click] on the cell to change.
2. [Click] in the Formula Bar. Or to edit directly in the
cell, [Double Click] the cell or press <F2>.
3. Use left/right arrow keys to move, <Backspace> to
delete the left, <Delete> to delete to the right,
or the text to insert.
4. When finished press <Enter>, or [Click] to verify.

Undo or Redo an Action
[Click] or press <Ctrl-Z> to undo an action.
If you mistakenly undo a step, [Click] Redo or
press <Ctrl-Y> to redo the action.
[Click] the drop-down arrow to choose multiple actions from a list.

Resizing Column Width/Row Height
1. [Point] at the dividing line between the column or row
headings. The mouse pointer changes into a double-headed arrow, ↔.
2. [Drag] to change the width or height. Or to AutoFit
   to the widest/highest cell, [Double Click] the cell.

Or
1. Select a cell in the row/column to adjust.
2. Choose HOME, FORMAT, then a CELL SIZE
   option.
   To change several columns or rows at once, [Drag]
   along the column or row headings to select them,
   then follow the above steps.

Inserting Rows or Columns
1. Select a row or column heading. New columns insert
   above the selected row, and new rows insert
   below the selected column.
2. Choose HOME, then INSERT.

Inserting Cells
Select the cells where you wish to insert new ones.
2. Choose HOME, then INSERT, then INSERT CELLS.
3. Specify the direction to shift the selected cells.
   [Click] OK.

Deletng Cell Contents
Select the cells to clear, then press <Delete>.
Formatting is not removed.

Clearing Formatting
1. Select the cells to clear.
2. Choose HOME, then CLEAR, then CLEAR FORMATS.

Deleting Rows, Columns, or Cells
This removes the cells and moves surrounding columns
and cells to the left, <Delete> to delete to the right,
or the text to insert.

To delete rows or columns:
1. Select the row(s) or column(s) to delete.
2. Choose HOME, then DELETE.

To delete cells:
1. Select the cell(s) to delete.
2. Choose HOME, then CLEAR, then CLEAR CELLS.
3. Specify which direction to shift the surrounding cells
to the left, <Delete> to delete to the right,
or the text to insert.

Saving Numbers
1. Select the cells to format. This can be done before
   or after the data has been entered.
2. Choose a format from the Number Format drop-down
   list, found in the NUMBER group on the HOME tab.
   Or, [Click] the following buttons:
   Displays dollars signs, commas, and decimals.
   Displays a percentage.
   Displays commas between thousands, and
two decimal places.
   Adds a decimal place each time you [Click].
   Removes a decimal place each time you [Click].

Borders, Shading, Text Color
Select cells, then choose HOME, then a BORDERS, SHADING, or TEXT COLOR
option.

Input to Selected Cells
1. [Click] the drop-down arrow beside each for options.
   For cell text color, hover over a choice to preview.

Draw a Border Grid
1. [Click] the drop-down arrow of the Borders button then
   Select DRAW BORDER, or to draw a grid, select DRAW GRID BORDERS.
2. [Drag] to create one or more borders.
3. [Click] or press <Esc>.

Erasing a Border
1. [Click] the drop-down arrow of the Borders button then
   Select ERASE BORDER.
2. [Drag] across or [Click] the borders to erase.
3. [Click] or press <Esc>.

Aligning and Merging Cells
To align within the cell, select the cells to align, then choose
HOME, then a LEFT, CENTER, or RIGHT.
To merge cells and center the contents, select the cells
to merge across, and [Click] MERGE & CENTER.
For other merge options, [Click] the drop-down arrow of the MERGE & CENTER button.

Viewing the Worksheet as it Will Print
To show the worksheet as it will print while you work, choose VIEW then PAGE LAYOUT.

Entering Dates
To enter dates in a format that can be used in formulas,
choose one of Excel's date formats, e.g. 3/1/10 or 14-Mar-01.
To change how dates display for specific cells:
1. Select the cells containing dates.
2. [Click] in the NUMBER group of the HOME tab.
3. Select from the DATE category. Dates beginning with T will always match the Windows date format.
[Click] OK.

Entering a Sequence of Numbers
1. Enter the first two numbers or dates of
   the sequence into adjacent cells.
2. Select the two cells.
3. [Drag] the fill handle of the sequence into an adjacent
   range of cells.
   For options, after filling, [Click] then COPY CELLS, FILL FORMATTING ONLY or FILL WITHOUT FORMATTING.

Moving Within the Worksheet
One cell up or down
Cell to the right
Cell to the left
Within selected cells
To the last filled cell in any
direction, or if in a blank
cell, to the next filled cell
To a cell that you specify
Next or previous sheet
[Click] the ar ro w key.
[Click] the column heading.
[Click] the row heading.
[Click] where the row and

Selection Shortcuts
An entire row:
An entire column:
The entire worksheet:
Several separate ranges:
Select one range, press
See: Column Home →
Shift key with any of the Movement
shortcuts listed above will select from the current
position to that location. E.g.:<Shift-Column Home>
selects from the current position back to cell A1.
The Formula

The basic arithmetic operators used in formulas are:

- Addition (+) and multiplication (×)
- Subtraction (−) and division (÷)

All formulas begin with an equals sign (=), e.g., the following formula in cell B4 subtracts the Expenses in cell B3 from the Income in cell B2. The Formula Bar displays the formula =B2−B3 when the formula cell is active and the worksheet cell displays the result:

<table>
<thead>
<tr>
<th>Column</th>
<th>B</th>
<th>C</th>
<th>D</th>
<th>E</th>
</tr>
</thead>
<tbody>
<tr>
<td>Row</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2</td>
<td>Income</td>
<td>1850</td>
<td></td>
<td></td>
</tr>
<tr>
<td>3</td>
<td>Expenses</td>
<td>1320</td>
<td></td>
<td></td>
</tr>
<tr>
<td>4</td>
<td>Saving</td>
<td>540</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Enter the following formulas in cells B2 through E4:

- B2: =Income
- C2: =Expenses
- D2: =Income−Expenses
- E2: =Calculated result

Use () parentheses to surround parts of a formula to be calculated first, e.g., = (B2+B5+B8) * 0.2

Entering a Formula

1. Click in the cell where you want the result of your calculation to appear.
2. Type the formula, beginning with =.
3. While typing the formula, instead of typing a cell reference, you can type the name of the cell on the cell.
4. Press <Enter>, or [Click] [ shifted X ]
   Some examples:
   - B2 * C2
   - (B2+C2) / (B4*C4)

Commonly Used Functions

A function is a built-in calculation that you can use in a formula:

- SUM(B1:B50): Adds the numbers in the range.
- AVERAGE(B1:B50): Averages the numbers in a range. Blank cells are ignored, zero cells are averaged.
- MAX(B1:B50): Returns the highest number in the range. (MIN returns lowest number.)
- TODAY(): Returns the current date.

When typing a function, a ScreenTip provides help on the function structure:

<table>
<thead>
<tr>
<th>ROUND(number, num_digits)</th>
</tr>
</thead>
<tbody>
<tr>
<td>=SUM(B1:B50)/C2</td>
</tr>
</tbody>
</table>

Functions are part of larger calculations, e.g., =SUM(B1:B50)/C2

Entering a SUM Function Quickly

1. Activate the cell in which the result is to appear.
2. [Click] [ Autosum ]
3. Select the range of cells to be summed.
4. Press <Enter> or [Click] [ shifted X ]

Absolute vs. Relative Cell References

- Absolute: A relative reference (e.g., $A$5) changes when copied, maintaining the position of the referenced cell(s) to the formula cell, e.g., it always references cell A5 two cells to the left.
- Absolute: An absolute reference (e.g., A$5) stays exactly the same when copied.

For example, the rate in A1 (absolute reference) will be multiplied by the value "one cell to the left" (relative reference) when the formula is copied down the column:

<table>
<thead>
<tr>
<th>Column</th>
<th>A</th>
<th>B</th>
</tr>
</thead>
<tbody>
<tr>
<td>Row</td>
<td></td>
<td></td>
</tr>
<tr>
<td>1</td>
<td>Rate</td>
<td>$500</td>
</tr>
<tr>
<td>2</td>
<td></td>
<td>5000</td>
</tr>
<tr>
<td>3</td>
<td></td>
<td>5930</td>
</tr>
</tbody>
</table>

Note: To quickly make a cell reference absolute, [Click] on the reference within the formula, and press <F4>.

Copying to Adjacent Cells

1. Select the cell to copy.
2. [Point] at the fill handle in the bottom right corner. The mouse pointer will change to a thin plus sign.
3. [Drag] into the empty cells. Certain data will produce a sequence, e.g., January, Monday, Quarter 1. If this is not wanted, hold down <Ctrl> to force a copy.

Moving or Copying... Cut, Copy, Paste

1. Select the cell(s) to move or copy.
2. To move, choose HOME, then [ Shift ] or press <Ctrl-K>.
3. To copy, choose HOME, then [ Ctrl ] or press <Ctrl-C>.
4. A marquee surrounds the cells.
5. [Click] on the top, left cell of the new location.
6. [Click] PASTE or press <Ctrl-V>.
7. For paste options, or to preview the paste, [Click] Paste Options button and hover over the options.
8. After pasting, press <Ctrl-C> or [Click] the Paste Options button and next to the pasted data.

Drag and Drop

1. Select the cells to move or copy.
2. [Point] at the outline around the selected cells (avoiding the fill handle).
3. The mouse pointer will change to a thin plus sign.
4. To move cells, drag the selection to the new location.
5. To move to a new sheet, press <Alt> while you [Drag] over a worksheet tab.
6. To copy cells, press <Ctrl> while you [Drag].
7. To move and insert, press <Shift> while you [Drag].
8. A vertical bar indicates insert and shift cells down.
9. A vertical bar indicates insert and shift cells right.
10. [Ctrl], [Alt], and [Shift] can be combined.

Renaming a Sheet

1. Double-click the sheet tab.
2. The name, and press <Enter>.

Moving or Copying Sheets

To move: [ Drag ] the sheet tab to the new position—
even to another workbook if visible.
To copy: [ Ctrl-Shift ] [ Drag ] the sheet tab to the position for the new sheet.

Selecting Sheets

- Adjacent sheets: [Click] on the sheet tab at one end, and [Shift] on the tab at the other end.
- Non-adjacent sheets: [Ctrl-Shift] [Click] on sheet tabs.
- All sheets: [ Right Click ] while pointing at the sheet tabs and choose SELECT ALL SHEETS.
- To de-select one sheet: [Ctrl-Shift] [Click] the sheet (it cannot be the active sheet). To de-select all [Click] on a sheet tab that is not selected. If all are selected, [Click] on any sheet tab except the active one.

Moving Among Sheets

[Click] on the sheet tab. If the sheet tab is not visible, use the sheet tab controls ( [ Shift ] and [ Shift ]).

Inserting a Sheet

[Click] [ Insert ] to the right of the sheet tabs.
Or
Choose HOME, then [ Insert ] then INSERT SHEET.

Deleting a Sheet

[Right Click] the sheet tab, then choose DELETE.

Editing Multiple Sheets Simultaneously

When multiple sheets are selected they become grouped. Any changes you make to one sheet, will also change all other selected sheets. The title bar of the workbook will show [Group] while in this mode. Be sure to exit group mode when finished (See Selecting Sheets above).

Copying Data and/or Formatting to Multiple Worksheets

1. Select the cells to copy.
2. Select the destination cells by pressing <Ctrl> or <Shift> while [Clicking] the sheet tabs.
3. Choose HOME, then [ Fill ] ACROSS WORKSHEETS.
4. Choose whether to copy cell CONTENTS, FORMATTING, or both (ALL) [Click] OK.

Printing the Worksheet

1. Choose FILE PRINT.
2. Review the print preview, optionally change PRINTER or SETTINGS. The preview automatically refreshes.
3. To show drag-to-areas, [Click] in the bottom right corner.
4. [Click] PRINT.

Printing a Specific Area

To set a print area that is saved with the file:
1. Select the range to print.
2. Choose PAGE LAYOUT, then PAGE SETUP group [Click] PRINT AREA then SET PRINT AREA.
   Or, to add a second print area on the same worksheet, choose ADD TO PRINT AREA.
3. To clear the print areas on a worksheet:
   Choose PAGE LAYOUT, then CLEAR PRINT AREA.
4. To print a temporary print area:
   Select the range to print, then choose FILE, PRINT.
   Change the first drop-down list under SETTINGS to PRINT SELECTION [Click] PRINT.

Using Page Break Preview to Adjust Page Breaks

1. Choose VIEW, then PAGE BREAK PREVIEW or [Click] on the right side of the status bar.
2. [Drag] page breaks to the best position.
3. Choose VIEW, then NORMAL when done.

Repeating Rows/Columns on Every Page

To print headings of a list on every page:
1. Choose PAGE LAYOUT, then PRINT TITLES.
   [Click] beside ROWS TO REPEAT AT TOP or COLUMNS TO REPEAT AT LEFT, and select the rows and/or columns in the worksheet.
2. [Click] then OK.

Working with Previous File Versions

Files created in Excel versions 97-2003 open in compatibility mode with [COMPATIBILITY MODE] in the title bar.
- Features are disabled or changed to keep the file usable with Excel 97-2003.
- To save a file for use with 97-2003 Excel, choose FILE, SAVE & SEND CHANGE FILE TYPE & Excel 97-2003 WORKBOOK, then [Click] SAVE AS...

A warning will display if the file will behave differently with the older Excel programs.
- To convert to the 2007+ format, choose FILE, INFO then CONVERT.
- Office XP and 2003 can install a Microsoft Office Compatibility Pack from www.microsoft.com/downloads to read the new file format.