

MS Excel 2016

Pre: Selecting multiple rows/columns. Highlighting data for long data. Different types of cursors. Shift vs ctrl. Tabs/groups/worksheets/workbook.

Objective 1 Create worksheets and workbooks

1.1 Create worksheets and workbooks

1. Add worksheet to existing workbook (File: Objective 1)
 - a. At the bottom of workbook, click the plus sign.
2. Copy an existing worksheet to the end of the workbook.
 - a. Right click on “employees” worksheet and copy.
3. Move a worksheet.
 - a. Drag “sheet1” to the end of the workbook.
4. Import Data from delimited text file.
 - a. Click on “sheet 1” worksheet
 - b. click in cell A1
 - c. click on Data tab and under the external data group select “from text.”
 - d. Browse to the file “1.1 text file” that you downloaded.
 - e. Accept all defaults.

1.2 Navigate in worksheets and workbooks

5. Search for data in a workbook (find and replace or navigate to range and clear contents using the go to)
 - a. On “Product list” worksheet find the word “equipment” and replace with the word “tools.”
 - b. On the “source data” worksheet, navigate to the defined range “quarter1” and delete the contents.
 - c. Home→Find and select→goto →select quarter1→ok→right click on the highlighted selection and clear contents.
6. Insert and remove hyperlinks (hyperlink within the document).
 - a. Click on worksheet “product list”.
 - b. Click on cell “F13”.
 - c. Right click→hyperlink
 - d. Select “place in document”
 - e. At the top Make sure “A1” is displayed
 - f. Select cell reference “Employee” then hit ok.

1.3 Format worksheets and workbooks

7. Rename worksheet
 - a. Right click on “sheet1” and rename “Perfect.”
8. Inserting/deleting Rows/Columns
 - a. On the “employee” worksheet add a column to the left of column C.
 - b. Insert a Row above row 2 on “employee” worksheet.
9. Hiding rows/columns
 - a. On the “employee” worksheet, hide row 12.
10. Row width/row height/column width/column height. (type in specific number and autofit option-both under home→ “format”)
 - a. On the “product list” worksheet, autofit the column width for columns B and C.
 - b. Highlight B and C →home tab→Cells group→format→autofit column width.
 - c. Change the height of row 1 on “Products list” to 20.
 - i. Right Click on row 1→row height→key in 20
11. Insert header/footer (put some text in right side).
 - a. On the “by product” worksheet, add the word LWTHS in the right header to all pages.
 - i. Select “by product” worksheet→ insert tab→ under the text group → header and footer→ in the right box up top, type “LWTHS”

1.4 Customize options and views for worksheets and workbooks

12. Hide/unhide worksheets and rows/columns.
 - a. unhide the worksheet “by product-customer”
 - i. Right click on worksheet tabs (any)→Unhide→select “by product-customer.”
13. Change view (ex: to page layout).
 - a. Select the “by Product” worksheet and change to “normal” view.
 - i. Select “by product” worksheet→view tab→normal
14. Modify Document properties.
 - a. Add the word “LWTHS” to company name.
 - i. Click file→show all properties→under company type “LWTHS”
15. Display formulas.
 - a. Click on “product list” worksheet→click on formula tab→ under the formula auditing group→show formulas.

1.5 Configure worksheets and workbooks for distribution

16. Set Print area.
 - a. on the “by product” worksheet, set the print area to print A6-D7
 - i. Click on by product worksheet→highlight A6-D7→page layout tab→ page setup group→print area→set print area.
17. Set all or parts of workbook.

18. Make a worksheet fit the printed page.
 - a. on employee worksheet, make worksheet fit the printed page and change orientation to landscape.
 - i. Click on employee worksheet→ file→print→scaling→fit on one page
 - ii. while under print→select landscape
19. Display repeating rows/column tiles on multipage worksheets.
 - a. on product list worksheet, have row 1 display on multipage worksheet.
 - i. click on products list worksheet→ click on page layout tab→under the print setup group→ print titles→select sheet→click on rows to repeat on the top→click on the range→select row 1

Objective 2 Manage data cells and ranges

2.1 Insert data in cells and ranges

1. Copy and paste data.
 - a) On the “sales by region,” copy cells A1:C17 and paste on “sheet1” in cell A1.
2. Auto fill using the drag tool.
 - a) On sheet “order details,” use the autofill tool to complete column F.

2.2 Format cells and ranges

3. Merge Cells
 - a) Under the “employees” sheet, Merge cells A1:C1.
 - i) In the employees sheet, highlight cells A1:C1→home tab→alignment group→find the merge dropdown menu→merge across.
4. Modify cell alignment.
 - a) Under the “employees” sheet, center contents of cell A1.
 - i) In the employees sheet, select cell “A1”, under the home tab, find the alignment group→select center.
5. Wrap text within cells.
 - a) In the “employees” sheet, format the text from C2:C10 so that the text wraps to the next line.
 - i) In the employees sheet→highlight cells c2:c10→right click→format cells→alignment tab→under text control select wrap text.
6. Apply number format-decimal places.
 - a) In the “expense statement” sheet, format cells K10:K23 so that there are two decimal places.
 - i) In the expensesstatement sheet→highlight cells K10:K23→right click→format cells→number→select 2 decimal places→click ok

2.3 Summarize and organize data

7. Insert sparklines
 - a) In the “janfeb” sheet, insert a line sparkline in cell p4 using the data from C4:O4.
 - i) In the janfeb sheet, highlight cells C4:O4→on the insert tab under the sparklines group→choose line sparkline→ in location range type “P4”
8. Apply conditional formatting (make sure cover the top/bottom average rule question).
 - a) On the “orderdetails” sheet, apply a “above average” formatting to column F use “green fill with dark green text.”
 - i) In the orderdetails sheet, Highlight data in column F→click on conditional formatting, click on top/bottom rules→click on above average→select the dropdown “green fill with dark green text.”

Objective 3 Create Tables

3.1 Create and manage tables

1. Create a table from a cell range.
 - a. On the “sales” sheet, convert cells A2:L23 to a table.
 - i. On the sales sheet→highlight cells A2:L23→Insert tab→table→click ok.
2. Convert a table to a cell range. (remove the table functionality but keep formatting. Right click→ convert to range).
 - a. on the “bonuses” sheet, remove the table functionality but keep the formatting.
 - i. On the bonuses sheet, left click on the table→right click→table→convert to range→when prompted “do you want to convert the table to a normal range”→yes
3. add/remove table rows/columns.
 - a. On the “sales” worksheet, delete the column with “November”
 - i. On the sales worksheet→highlight column L→right click→delete

3.2 Manage table styles and options

4. Apply style to a table.
 - a. on the sales sheet, apply table style medium 13.
 - i. On the sales sheet→click on the table→click on the design tab→quick styles→medium 7.
5. Add total row to a table
 - a. At the bottom of the “sales” worksheet, add an average in cell K25.
 - i. On the sales worksheet, select cell L26→design→check the total row box under table style options→ ONCE it adds total row→select the dropdown from cell L27→ select Average (note verbiage for test is usually “add to the table “)

3.3 Filter and sort a table

6. Filter records (don't display x or only display x).
7. sort by multiple columns (multi level custom sort).
 - a. On the sales sheet, sort the table by "total" in descending order then by "name a-z."
 - i. On the sales sheet select A3:L26→on the home tab under the editing group→sort and filter→custom sort→sort by total, largest to smallest→ add a level→then by name a to z.
8. Remove duplicate records.
 - a. In the "sales" worksheet, remove duplicate records.
 - i. In the sales worksheet→click on the table→design tab→under the tools group→remove duplicate records. --> unselect all→select names→ok.

Objective 4. Perform operations with formulas and functions

4.1 Summarize data by using functions

1. Formulas: Sum, Min, Max, Count, Average.
 - a. Sum: take the sum of the data on each of the sheets "spring", "summer", "fall" and "winter."
 - i. On the "spring" sheet, click in cell B6→formulas→in the function library group→auto sum→sum→ enter
 - ii. Repeat the process for the "summer" "fall" and "winter" sheets.
 - b. Min/Max: On the summary sheet, take the minimum sales for each of the "summer", fall, winter and spring sheets and enter it under the corresponding column.
 - i. Click on the summary sheet in cell B2→formulas→more functions→statistical→min→click in number one section and then click on the "spring" sheet→highlight B2:B5→click enter
 - ii. Repeat for the other sheets.
 - c. Do the same for the maximum sales that was done for the minimum sales.
 - i. Click on the summery sheet in cell C2→formulas→more functions→statistical→max→click in number on section and then click on the "spring" sheet→highlight B2:B5→click enter.
 - ii. Repeat for the other sheets.
 - d. Average: on the summary sheet, in cell B6, take the average lowest sales for each of the four seasons. In cell C6, take the average of the highest sales for each of the four seasons.

- i. On the summary sheet, click in cell B6→formulas→autosum→average→enter. Repeat for cell C6.

4.2 Perform conditional operations by using functions

2. If, sumif, averageif, countif
 - a. Countif-on the sales by category sheet, in cell E2, count the number of tools on the spreadsheet.
 - i. On the sales by category sheet→click in cell E2→formula tab→more functions→statistical→ countif→for the range type B2:B92 and for the criteria type tools→enter
 - b. Sumif-on the sales by category sheet, in cell c36, sum the product sales if they are tools. Also in cell C43, sum the product sales if they are soils/sand. Also in cell C53, sum the product sales if they are Pest control.
 - i. On the sales by category sheet→click in cell C36→formula tab→insert function→sumif→ in the “range” highlight cells B2:B35, in the Criteria, type “tools” in the Sum_range, highlight C2:C35→enter.
 - ii. On the sales by category sheet→click in cell C43→formulas→insert function→sumif→in the “range” highlight cells B37:B42, in the criteria, type “soils/sand”, in the Sum_range, highlight C37:C42→enter
 - iii. On the sales by category sheet→ click in the cell C53→formulas→insert function→sumif→in the “range” highlight cells B44:B52, in the criteria, type “Pest control”, in the Sum_range, highlight C44:C52→Enter
 - c. Sum-on the Sales by Category, in cell D7, sum the totals in C36, C43 and C53.
 - i. On the sales by category sheet, click in cell D7→formula→autosum→sum→hold CTRL key and click in cell C36, C43 and C53→enter
 - d. Averageif- on the seasonal sheet, average the sales if they are NW.
 - i. On the seasonal sheet→click in cell C18→ formulas→more functions→statistical→averageif→in the range, highlight B2:B17, in the criteria type NW, in the Average_range, highlight C2:C17→ok

4.3 Format and modify text by using functions

3. Text formulas: right, left, upper, lower, proper, concatenate
 - a. Proper-On sheet Employees, click in cell C1 and apply a “proper” formula to the text in cell B1. Use the drag tool to apply the rule for C2:C20.

- i. On the employees sheet, click in cell C1→formula tab→text→proper→click in cell B1→ok→use the drag tool to fill cells C2:C20.
- b. Upper-on the employees sheet, click in cell D1 and apply a “upper” formula to the text in cell B1. Use the drag tool to apply the rule for D2:D20.
 - i. On the employees sheet, click in cell D1→formula tab→text→upper→click in cell B1→ok→ use the drag tool to fill D2:D20.
- c.

Objective 5 Create charts and objects

5.1 Create charts

1. Create a new chart
 - a. On the fall sales sheet, Insert a bar graph from the data.
 - i. Fall sales sheet→Highlight cells A3:B21 →Insert tab→chart→3D Clustered Column.
2. add additional data series.
 - a. On the fall sales sheet, insert column C data to the existing chart.
 - i. On the chart that was created→Click on the filter tool to the right of the chart→select data--> Reselect A3:C21 on the table->click ok.
3. switch rows and columns in data.
 - a. On the fall sales chart, switch the rows and columns.
 - i. Click on the chart on the fall sales spreadsheet→design tab→switch rows/columns

5.2 Format graphic elements

4. Add /modify chart elements.
 - a. On the fall sales sheet, add a horizontal and vertical access, and remove the legend.
 - i. On the fall sales sheet, click on the chart click on the plus sign→check axis titles→uncheck legend.
5. apply chart layouts/styles
 - a. On the sales sheet, apply style #7 to the pie graph.
 - i. On the sales sheet→click on the pie chart→click on the design tab→under chart styles select 7.
6. move chart to its own sheet.
 - a. On the sales sheet, move the pie chart to its own sheet.
 - i. on the sales sheet→ right click on the sales chart→move chart→new sheet→ok

5.3 Insert and format objects

7. Insert shapes/image
8. modify object properties (rotation, fill, patterns)
9. Add alternative text to an object