

Excel Part 1

1) Layout of Excel: The Ribbon, Name Box, Formula Bar, Worksheet, Cells, Workbook

- The **Ribbon** contains all the Excel **commands**.
- You will have **tabs** on top of the ribbon. Similar commands will be organized into **groups**.



- **The Name Box** displays the “name” of an activated cell. Excel will name the cell based on the letter on top of the spreadsheet (columns) with the number (rows) on the left. For example: **F16** (see right).
- **The Formula Bar** reflects the contents of the active cell. When a cell contains a formula, the formula bar will display the formula and the cell will display the result.

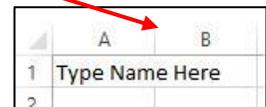


- Below the Name Box and Formula Bar is the core of the Excel document: The **Worksheet**.
- **A worksheet** is divided up into columns (A, B, C, etc.) and rows (1, 2, 3, etc.). The intersection of a column and row is called a **cell**. For example, A1 is the top, leftmost cell. Worksheets are also referred to as **Spreadsheets**.

2) Entering and Editing Data

Exercise 1: Type text into some of the cells in worksheet 1 and change width of a column.

- Click into **cell A1** and type your first and last name, then press the **enter key**.
- Your name may have spilled over to the next cell. Actually, it just overlapped **cell B1**.
- Double left click on the vertical line between letters A and B in the column row.
- This action will *auto fit* the text in column A. Select undo to go back to previous width.
- You can also manually change the width of each column. Hover your mouse over the vertical line between A and B again. Hold down your left mouse button and drag your mouse to the left.
- Click on **Cell A2** and type “Ela Area Public Library.”



Exercise 2: Edit and delete text inside a cell.

- Double click inside cell **A1**. The cursor will appear, and you can edit text inside the cell.
- To delete text within a cell: click once on cell **A2** and press the delete key on your keyboard.

3) Navigating the Excel Worksheet

Exercise: Maneuver around the cells of Excel.

- ▶ Move right: Tab Key, Right Arrow Key
- ▶ Move left: Shift + Tab Key, Left Arrow Key
- ▶ Move up: Up Arrow Key
- ▶ Move Down: Down Arrow Key, Enter Key
- ▶ You can also move to any cell by clicking it with your mouse.

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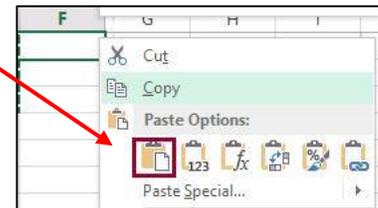
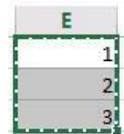
The cursor changes appearance often in Excel. See table below:

	Select Mode: Use to select cells, columns & rows by clicking and dragging
	Click and Drag: Use to cut & paste from one cell to another by clicking and dragging.
	Autofill: Use to fill or complete a series (such as months or formulas).
	Resizing: Use to resize columns or rows.
	I-beam: Use in an area where you can type text or enter data.

4) Copy and Paste (a group of cells)

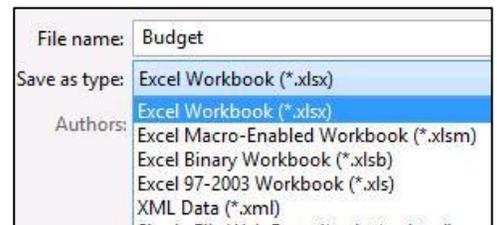
Exercise: Copy numbers from group of cells and paste them into another group of cells.

- Type the numbers 1, 2, and 3 into cells E1, E2, and E3, respectively.
- Highlight the series of numbers you have in column E.
- Right-click within the highlight and select **Copy**.
- Notice the dotted line that blinks around the highlighted cells.
- Right-click on cell F1 and hover over **Paste**. Select the first of the paste options.
- Double-click on any empty cell to remove the dotted line.
- Highlight all the numbers in columns E and F and delete them.



5) Saving an Excel Workbook

- Click on the **File** tab. Then click **Save** or **Save As** if saving for the first time. If **Save As**, click computer and save to Documents folder.
- A dialogue box will appear. As with Word you can name your document and select type of file in which you want it saved.
- **Excel Workbook:** will save file in the current version (**xlsx** extension).
- **Excel Macro-Enabled Workbook:** will allow enabling macros on your workbook so you can edit and share a document, write, and save macros to save time, etc. (**xlsm** extension).
- **Excel Binary Workbook:** will save the workbook in binary encoding that is more suitable for large macros and large amounts of data (**xlsb** extension).
- **PDF:** will publish your spreadsheet as a PDF.
- Save the current workbook as an “Excel Workbook” with the name “Budget.”



6) Closing and Opening an Excel Workbook

- To close a workbook, you must click on the **File** tab and then the **Close** command. This action will close the workbook but not the Excel program.
- To close the workbook and the Excel program, click on the **X** in the top right corner.
- As practice, close the workbook you have just typed.
- Reopen from **File** tab - Click **Open** and then browse to your document.

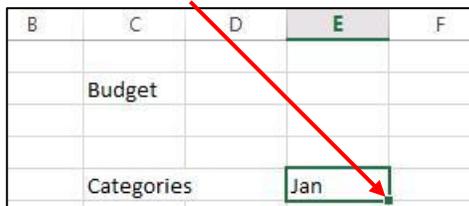


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7) Using Excel to Create a Quick and Easy Table with Columns and Rows

Exercise: Create a table and use the fill handle.

- Many people consider it to be easier to use Excel than Word to create a table with columns and rows. You simply type the desired column headings in cells towards the top of the worksheet and then type the applicable information in cells below.
- Type **Budget** in cell **C2**; Type **Categories** in **C5**; Type **Jan** in **E5**.
- You could type the rest of the months in the cells to the right of the **Jan** entry, but it is easier to use the **fill handle** which automatically fills in the months for you.



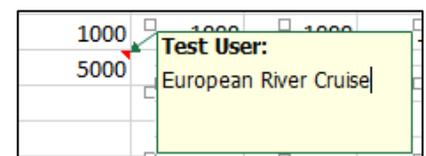
- Click cell **E5** to make it the active cell. Click on the small green square in the lower-right corner of that cell. When the cursor turns into a narrow black plus sign (+) click and hold. Then drag the mouse to cell **J5**. When you let go of the mouse button, you will notice that Excel filled in the consecutive months through June. The fill handle can be used in many situations like this to avoid unnecessary typing.
- Next, type the category **Groceries** in **C7**; type **Mortgage** in **C8**; and **Entertainment** in **C9**.
- Type the number 1000 in cell **E8**. Drag the fill handle to cell **J8** in order to copy the 1000 entry to all months.
- Enter the values **200, 230, 180, 150, 200, and 150** into cells **E7 through J7**. Enter the values **5000, 150, 170, 200, 100, and 280** in cells **E9 through J9**.
- Save your workbook to prevent losing important data. **So far, your table should look like this:**

	A	B	C	D	E	F	G	H	I	J
1										
2			Budget							
3										
4										
5			Categories		Jan	Feb	Mar	Apr	May	Jun
6										
7			Groceries		200	230	180	150	200	150
8			Mortgage		1000	1000	1000	1000	1000	1000
9			Entertainment		5000	150	170	200	100	280

8) Add a New Comment to a Cell

Exercise: Add a comment to explain the high figure in cell **E9**.

- Click the **Review** tab and then select the “Insert Comment” command.
- In the box that appears, type **European River Cruise** and then click any blank cell. A small red triangle (or purple) will appear indicating that the cell has a comment.
- (You can also add a comment by right clicking and then selecting **New Comment**).
- To delete comment, right click the cell and select **Delete Comment** or highlight cell and click **Delete** at the top of the **Review** tab.

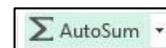


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9) Computing Subtotals of Columns and Rows

Exercise 1: Calculate category totals with **AutoSum** command.

- First, type **Category Total** in cell **K5** and type **Monthly Total** in cell **C11**.
- Activate cell **K7** to make it the active cell. Double click **AutoSum** button in the **Home tab**. The total of 1110 should appear indicating how much was spent for groceries from January through June.
- Drag the **Fill Handle** from cell **K7** through cell **K9** in order to obtain the subtotals for the other categories as well. The values 1100, 6000, and 3900 should appear in K7-K9.



Jun	Category Total
150	1110
1000	6000
280	5900

Exercise 2: Calculate monthly totals with **AutoSum** command.

- Activate cell **E11** and double click the **AutoSum** button. The value 6200 should appear. Drag the **Fill Handle** from **E11** to **J11**. Values should be: 6200, 1380, 1350, 1350, 1300, and 1430.
- Click on cell **E11** and notice that the formula **=SUM(E7:E10)** appears in the formula bar. This formula uses the built-in SUM function to add values in the range of **E7-E9** (**E10** is blank). Excel anticipated that you wanted the numbers in cells **E7**, **E8**, and **E9** added together and that you wanted the total placed in cell **E11** because that is where you put your cursor.
- Manually type the following formula in cell **K11**: **=SUM(K7:K9)** and then press the Enter key on your keyboard. You should have 13010. * **All formulas start with the = sign.**

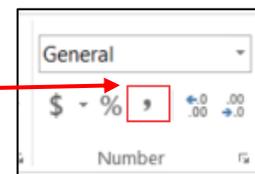
10) Change Font Styles and Sizes: Format Cells with Dollar Signs and Commas: Borders

Exercise 1: Change font size and make some text bold.

- Click on cell **C2** (Budget). Click the **Bold** button (**B**) in the Home tab on the ribbon or use the keyboard shortcut (**Control + B**).
- Change the **Font Size** of the text to 14 by clicking on the drop-down arrow next to the number 11 on your ribbon and select 14.
- Highlight cells **E5-K5** and press **Control + B**. Make cells **C5-C11** bold as well.

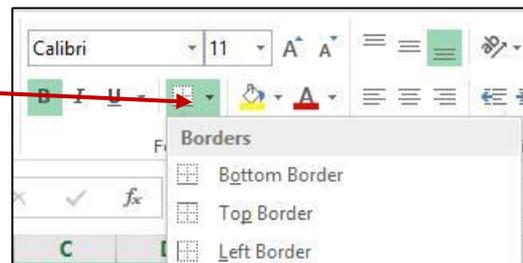
Exercise 2: Format cells with different “numbers group” commands.

- Highlight cells **E7 – K11**. A rectangle will form around all highlighted cells.
- In the **Number Group** click on the **Comma Style** command (,).
- Click on the **Accounting Number Format** command (\$). Click drop-down arrow for more currencies.
- Click twice on the **Decimal Decrease** button to remove zeroes but keep the dollar signs.



Exercise 3: Create a simple border around our budget table.

- Highlight cells **C5 – K11**.
- In the **Font** group click the arrow next to the **Border** command (it looks like a window frame).
- Click on the drop-down arrow next to the frame. Select **Thick Box Border** (or **Thick Outside Border**).



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- Resize any columns that may need to be expanded.
- So far, your table should look like this:

Budget							
Categories	Jan	Feb	Mar	Apr	May	Jun	Category Total
Groceries	\$ 200	\$ 230	\$ 180	\$ 150	\$ 200	\$ 150	\$ 1,110
Mortgage	\$ 1,000	\$ 1,000	\$ 1,000	\$ 1,000	\$ 1,000	\$ 1,000	\$ 6,000
Entertainment	\$ 5,000	\$ 150	\$ 170	\$ 200	\$ 100	\$ 280	\$ 5,900
Monthly Total	\$ 6,200	\$ 1,380	\$ 1,350	\$ 1,350	\$ 1,300	\$ 1,430	\$ 13,010

11) Verify the Formulas on Your Worksheet

- Hold down the **Ctrl (Control) Key** on your keyboard and then press the **tilde (~)** in the upper left area of your keyboard to audit your formulas.
- Formula audits are important when numbers are not adding up right.
- Formulas will appear in the cells which contain our totals.
- To get back to the normal view: Hold down the **Control Key and Press the tilde key.**

12) Using the Auto Calculate Area of the Status Bar

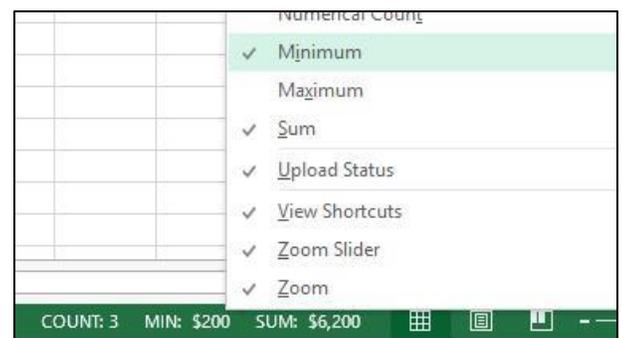
- At any time while you are viewing a worksheet, you can use the status bar at the bottom of the screen to compute some handy statistics.
- Highlight cell range **E7-E9**.
- Look at the status bar in the lower right corner of the worksheet window. Note the Average, Count, and Sum of the highlighted cells.



- Select another range of cells to notice how any given sum, average, count, etc. can be quickly and easily computed without using a formula or calculator.

Exercise: Add another category to Auto Calculate.

- Right-click in the **Auto Calculate** area of the status bar to bring up menu.
- Select **Minimum**. The minimum number should appear in your status bar.



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13) Printing and Sheet Options

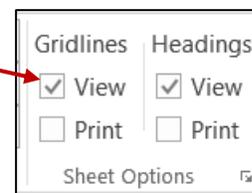
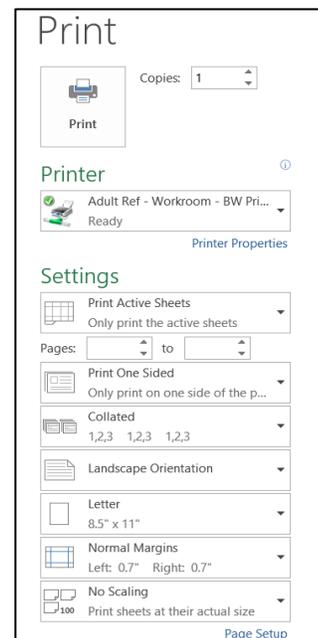
To print an Excel document, click on the **File** tab, click print, and then click the **Print** button. **Preview** the document before you print to make sure your information fits. We would like our budget table to fit on **one** page.

Exercise 1: Make changes to print job from print preview setting.

- Let's change the orientation from **Portrait** to **Landscape** and see the difference in the Preview.
- Below *orientation*, you can adjust the page size (from letter to legal, for example) or change the margin.
- The last option allows you to *scale* (size by percentage) or fit a row, column, or entire page on one sheet.
- Notice the cells and headings do not appear. You can add to your print job. We will examine this shortly.

Exercise 2: Make changes to print and view from **Page Layout** tab.

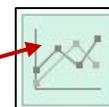
- Exit the Print option and then select the **Page Layout** tab. Notice the **Page Setup** group and **Scale to Fit** groups.
- Notice the **Sheet Options** group. Here you have more print and viewing options. By default, the **View** check boxes under **Gridlines** and **Headings** should be checked. Uncheck them and see how it changes the document.
- Recheck the **View** two boxes. Check the **Print** boxes under Gridlines and Headings. Go to **File/Print** and examine the preview.
- After you have accessed **Print**, when you go back to your original worksheet, you will notice dotted lines (or page breaks) across your worksheet.



14) Creating a Chart with Chart Wizard

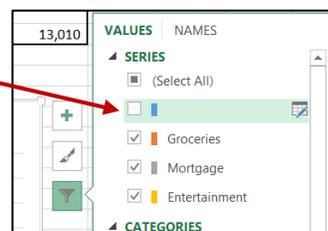
Exercise: Create a line chart with the data on the budget table.

- **Highlight** the range from **C5** to **K9**. Then click the **Insert Tab**.
- You can select one of the charts from the **Charts** group or you can click on the drop-down arrow in the bottom right corner to access all chart styles.
- Click the arrow and review some of the recommended charts.
- Click the **All Charts** tab, click **Line** on the left, and then select **Line with Markers**.
- Review your options and then click **OK**.
- If your chart inserts over your table, click and hold on a blank space within the chart and then drag it out of the way.



15) Remove Unnecessary Blank Line from Chart Legend

- You will notice a blue, unnamed line in the legend. The blue line is there because Excel is looking at Row 6 even though it is blank (it has no data).
- Hover over chart and click the filter icon on the right of it. Uncheck the box next to the blue line under **series**.



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16) Updating the Table and Chart

- Suppose you need to change the March Entertainment value to 3000. Double-click cell G9 and replace the 170 with 1000. You may have to use the Backspace and/or Delete keys to erase the 170. The total and the chart will adjust accordingly. You can change values in a worksheet and the formulas, calculations, and charts automatically update.

Exercise: Add a new month (July) and budget figures.

- At the top of the worksheet click the letter K to highlight the whole column. 
- **Right-click** your mouse on the letter **K** and select **Insert**.
- A new column appears (between June and Category Totals) allowing you to add the month of July. The totals are not affected. In fact, all of the affected formulas automatically change. Type Jul, 120, 1000, and 170 into cells **K5, K7, K8, and K9** respectively.
- Click cell **K11** and double-click the AutoSum button. ** This provides an incorrect total in **K11!** Can you explain why?
- Click the **Undo** command to erase this incorrect data and formula.
- Click cell **K11** to make it the active cell and click in the formula bar. Type the correct for July expenses. (Even better, click cell **J11** and use the fill handle to drag to **K11**).
- Delete one of the empty rows in your table by right clicking the row heading 10 and choosing the **Delete** command. Notice that all of the totals remain accurate.

17) Backgrounds

- You can change the background of your spreadsheet to an image such as a company logo.
- Click the **Page Layout Tab** and then click the **Background Button** (in the **Page Setup** group).
- Use the **From a file** option and browse to the **Documents** folder.
- Direct into the **Documents** folder and click **Logo.JPG**
- Click the **Insert Button**. The **Background** image is similar to a watermark; however, you may need to adjust the transparency if the image is dark.
- NOTE: For some reason, Excel will NOT print the background image. If you wish to print an Excel document with the background, you will need to use paper that already has the background image on it.



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Recommended Additional Resources:

Other technology classes

Go to <http://www.eapl.org/events> to view and signup for other computer classes.

Class handouts

Download copies of class handouts and materials for all of our computer classes at:

<http://eapl.org/events/computer-programs/class-handouts> .

Librarian and computer aide assistance

We are glad to help you out at the second-floor reference desk as best we can while helping others.

Help appointments

Ela Library cardholders can schedule one-on-one appointments with librarians for further help. We can help with our Digital Media Labs or with general technology questions in our areas of expertise.

Appointments last up to one hour. Paper appointment request forms are available at the 2nd floor reference desk. You can also request appointments online:

- Go here <http://www.eapl.org/DMLhelp> to sign up for a Digital Media Lab appointment.
- Go here <http://www.eapl.org/computer-programs/one-one-technology-help-appointment-request> to request a general tech help appointment.

Databases

The Library offers card holders access to many premium databases. These include two which can help you learn more about technology.

- [Gale Courses](#) offers a wide range of highly interactive, instructor led courses that you can take entirely online. As an Ela Area Public Library card holder in good standing, you are entitled to these courses at no cost. Courses run for six weeks and new session begin every month.
- [Lynda.com](#) offers technology training with over 20,000 training videos on over 300 topics with exercise files included. The Library pays for you card holders in good standing to access this resource, however you will be required to create a free account. **Please remember to log out when you are finished.*

Access both of these databases from the library Research page: <http://www.eapl.org/resources>

Books

A few books in the library collection related to this book are:

- **Microsoft Excel 2013: Step by Step** by Curtis D. Frye
Call Number: 005.54 EXCEL
- **Microsoft Excel 2019: Step by Step** by Curtis D. Frye
Call Number: 005.54 EXCEL

Free online tech training websites

<http://www.gcflearnfree.org/> , <https://techboomers.com/> , <http://digitallearn.org/>

Computer Class Evaluation

Class Title: **Excel 1**

Date: **8/18/2021**

In terms of your skill with computers, how do you consider yourself?

- Absolute Beginner (no or little experience with computers, *NOT* yet comfortable using a mouse and keyboard)
- Beginner
- Intermediate
- Advanced

In terms of your skill using *Microsoft Excel*, how do you consider yourself?

- Absolute Beginner (no experience)
- Beginner (some experience, but not comfortable using)
- Intermediate (some experience, comfortable with the basics)
- Intermediate/Advanced (experienced with basic and intermediate functions, but require training on advanced functions)

How much do you feel that you learned?

- I learned a lot
- I learned some
- I didn't learn much
- I learned nothing

How did you perceive the pace of the class?

- Too Fast
- Just Right
- Too Slow

Were the handouts helpful?

- Yes No If no, why not?

What did you like most about the class?

What did you like least about the class?

What other topics would you like to see in a future computer class?

How do you normally find out about library computer classes?

- Footnotes (Library Newsletter)
- Library Website
- Other _____

If you are not an Ela Area Public Library card holder, where is your home library?

Any additional comments: