

Budget Exercise for Intermediate Excel

Follow the directions below to create a 12 month budget exercise. Read through each individual direction before performing it, like you are following recipe instructions. Remember that to move between cells you can use your mouse, the arrow keys on the keyboard, or the Name Box.

Remember, too, that there is usually more than one way to do something. If a different way to do it occurs to you, go ahead and try it! If it doesn't work, you can always click the Undo button.

If you can't remember what a button does, move the cursor over it and pause. A yellow ToolTip will appear describing the button's function.

The gray boxes will contain tips, suggestions, and reminders.

In the instructions, the following terms will be used:

Click – a single left mouse click.

Command - a button displayed on a tab on the Ribbon.

Key – a key on the keyboard.

Part 1: Opening the Excel Program & Entering the Information

1. Locate the *Excel* icon on the computer's desktop and then double click on it to open the program OR
2. Click on the *Start* button and locate the *Excel* program under *All Programs* and then *Microsoft Office*. Click once on the name of the program, *Microsoft Excel*, to open it.
3. Enter the text in the designated cells. REMEMBER that you can move to the next cell down by pressing the *Enter* key and you can move the next cell to the right by pressing the *Tab* key. You can also select the cell you want to type in with a single mouse click and then begin typing the text. Cell References are in *Italics* and cell content is in **Bold**. Note that there is nothing entered in cell *A1*.

<i>A2</i>	Expenses	<i>A12</i>	Paycheck #1
<i>A3</i>	Rent / Mortgage	<i>A13</i>	Paycheck #2
<i>A4</i>	Electric	<i>A14</i>	Paycheck #3
<i>A5</i>	Gas	<i>A15</i>	Paycheck #4
<i>A6</i>	Phone	<i>A16</i>	Paycheck #5
<i>A7</i>	Cable	<i>A17</i>	Total Expenses
<i>A8</i>	Food	<i>A18</i>	Total Income
<i>A9</i>	Misc.	<i>A19</i>	Difference!!!
<i>A10</i>	Transportation		
<i>A11</i>	Income	<i>B1</i>	January

4. Select cell *B1* and position the mouse pointer over the *Fill* handle (the little black square in the lower right hand corner of the active cell). When your mouse pointer changes to a thin black plus sign, click and drag to the right until you have included cell *M1* in the box outline and the word **December** appears next to the mouse pointer. All the months of the year should now appear in row 1.



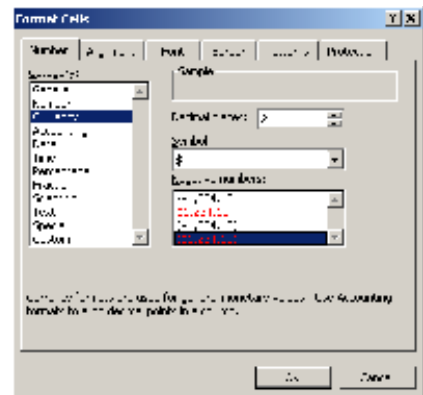
Part 2: Saving & Formatting the Worksheet

Saving the File for the First Time:

1. Click on the *Office Button* and click on *Save As* from the drop down menu.
2. The *Save As* dialog box will open. Using the down arrow at the right end of the *Save in:* text entry box, select the drive or folder from the drop down menu where you wish to save the exercise by clicking on your choice.
3. In the *File name:* text box, delete **Book1** and type in **12 Month Budget**.
4. Click on the *Save* button in the bottom right corner of the *Save As* dialog box. This has performed the initial save of the file. Further on in this exercise you will be instructed to save updates to the file.

Making the Spreadsheet Readable, Uniform, and Pleasing to the Eye:

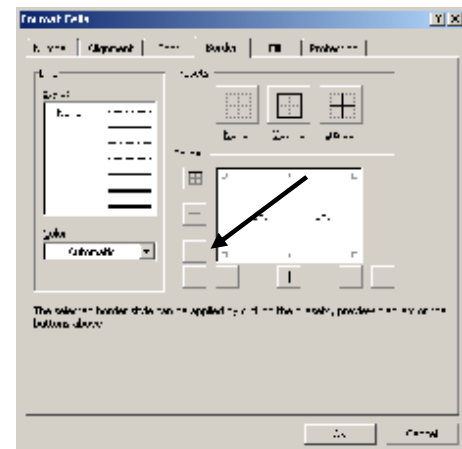
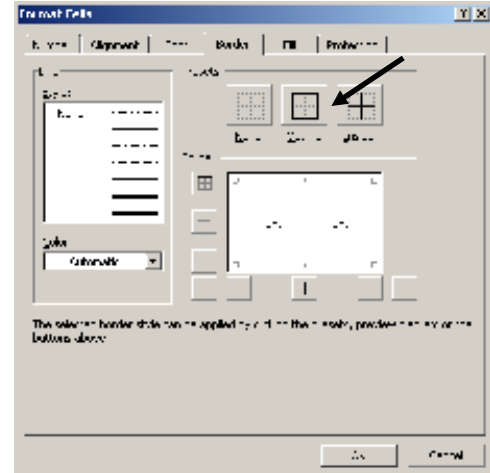
1. Select cells *B2* thru *M19*. NOTE: It may be easier to start in cell *M19* and click and drag up and to the left to select this group of cells.
2. Click on the dialog box launcher in the *Number* group on the *Home* tab on the *Ribbon*.
3. When the *Format Cells* dialog box opens, verify you are on the *Number* tab. Under the *Category:* menu on the left side, click on *Currency*. On this screen you will only have to change the *Negative numbers:* to the last choice on the menu. This will display any negative numbers on your worksheet in red with a set of parentheses around them. Click on the *OK* button to close the dialog box and return to your worksheet.
4. Select cells *B1* thru *M1* and click the on the *Bold* command in the *Font* group on the *Home* tab on the *Ribbon*. With these cells still highlighted, also click on the *Center Align* command in the *Alignment* group.
5. Select columns *B* through *M*. You can do this by positioning the mouse pointer on top of the *B* label for column *B* in the gray area at the top of the column and when the mouse pointer changes to a thick black arrow pointing down, click and drag to the right until column *M* is highlighted.
6. Click on the *Format* command in the *Cells* group on the *Home* tab on the *Ribbon* and then click on *Column Width* from the drop down menu.
7. On the *Column Width* dialog box that appears, change the number currently displayed to **12** and click on the *OK* button.
8. Select cells *A2* thru *A19* and make their text bold by clicking on the *Bold* button in the *Font* group on the *Home* tab.
9. Position your mouse pointer over the vertical line separating the column *A* from the column *B* in the light gray header area. When it changes to a two headed arrow, double click. This will automatically resize the column to fit the longest text in that column.
10. Select cells *A1* thru *M1*. Click on the dialog box launcher in the *Font*, *Alignment*, or *Number* group on the *Home* tab on the *Ribbon*.



Can't remember which button does what? Hover over Ribbon commands with the mouse pointer to see a screen tip with the name of the button.




11. When the *Format Cells* dialog box opens, click on the *Border* tab. Under the *Presets* area, click on the *Outline* button.
12. Now, click on the *Fill* tab. Click on a light color square and click on the *OK* button to apply these changes to your worksheet.
13. Select cells *A2* thru *M10*. NOTE: It may be easier to start with cell *M10* and then click and drag up and to the left to cell *A2* to select this group of cells.
14. Click on the dialog box launcher in the *Font*, *Alignment*, or *Number* group on the *Home* tab.
15. When the *Format Cells* dialog box opens, click on the *Border* tab. Under the *Presets* area, click on the *Outline* button.
16. Now, click on the *Fill* tab. Click on a different light color square and click on the *OK* button to apply these changes to your worksheet.
17. Select cells *A11* thru *M16* and repeat steps 14 thru 16 above to put a border around these cells and another color inside.
18. Select cells *A17* thru *M19* and repeat steps 14 thru 16 above to put a border around these cells and another color inside.
19. Select cells *A18* thru *M18* and open the *Format Cells* dialog box again by clicking on the dialog box launcher in the *Font*, *Alignment*, or *Number* group on the *Home* tab.
20. Again, click on the *Border* tab. But, this time click on the *Bottom border* button (See the picture to the right.) and click on the *OK* button. This will apply a bottom line only under the selected cells.




Part 3: Entering Functions

1. You will now enter the functions that will total the amounts to be put in the cells for each month. Select cell *B17*. Click on the *AutoSum* command in the *Editing* group on the *Home* tab. Σ To indicate which cells are to be added together, click and drag to select cells *B2* thru *B10*. Press the *Enter* key on the keyboard.
2. To double check what you have just done, click on cell *B17* to make it the active cell. Look at the *Formula* bar. It should look like this:

B17	▼	fx	=SUM(B2:B10)
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3. Now, position your mouse pointer over the *Fill* handle of cell *B17* and click and drag to copy the contents to cells *C17* thru *M17*. 
4. Select cell *B18*. Click on the *AutoSum* command in the *Editing* group again. With your mouse pointer, click and drag to select cells *B12* thru *B16* to use them in the function. Press the *Enter* key.
5. To double check what you have just done, click on cell *B18* and look at the *Formula* bar. It should look like this:

B18	▼	fx	=SUM(B12:B16)
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6. Next, position your mouse pointer over the *Fill* handle of cell *B18* and click and drag to copy the contents to cells *C18* thru *M18*.
7. Select cell *B19*. This cell will contain a formula that subtracts the total month expenses from the total month income. To enter this formula using the Point & Click method, press the = key on the keyboard. Using your mouse, click on cell *B18*. Press the – key on the keyboard. Using your mouse, click on cell *B17*. Press the *Enter* key on the keyboard.
8. Select cell *B19* again. The *Formula* bar should look like this:

9. Now, position your mouse pointer over the *Fill* handle of cell *B19* and click and drag to copy the contents to cells *C19* thru *M19*.
10. Click on the *Office Button* and then on *Save* from the drop down menu to update your save copy of this worksheet.

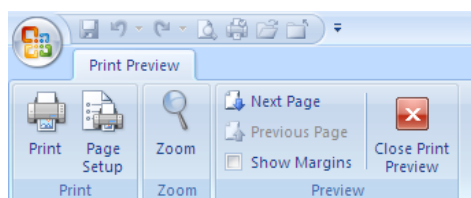
Part 4: Applying Freeze Panes

When working with large worksheets that require scrolling down or to the right, it is easy to become confused when the initial columns or rows are no longer visible.

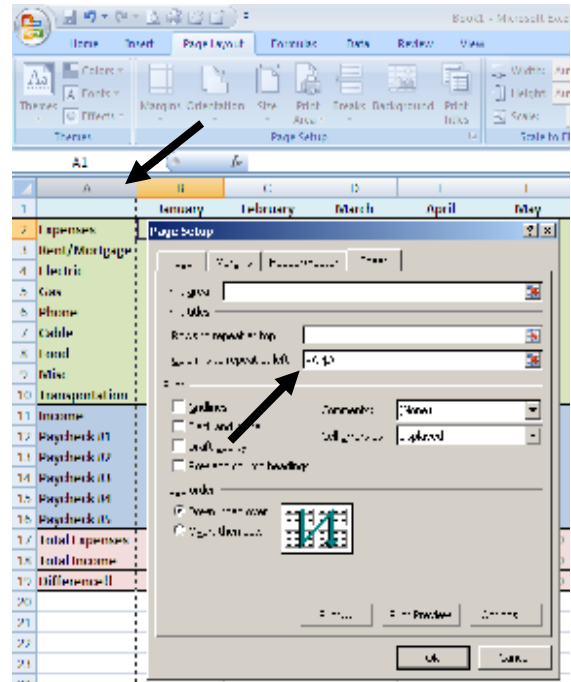
1. Scroll to the right using the horizontal scrollbar at the bottom of the worksheet. When you cannot see column *A*, it is difficult to know which row is for which category.
2. Scroll to the left until you can again see column *A* and row *1*. Select cell *B2*.
3. Click on the *View* tab on the *Ribbon*, click on the *Freeze Panes* command in the *Window* group, and click on *Freeze Panes* from the drop down menu. This will cause the rows above the selected cell and the columns to the left of the selected cell to remain in place when a scroll bar is used.
4. Now, scroll down and scroll right. Note that row *1* and column *A* remain in place.

Part 5: Worksheet Formatting

1. Click on the *Office Button* and *Print* from the drop down menu. Then click on *Print Preview* on the fly out menu. When the *Print Preview* screen opens, the *Print Preview* toolbar will look like this:
2. Click on the *Next Page* command to see a preview of the next page. Click on the *Previous Page* command to see the previous page. Look at the *Status* bar at the bottom of the screen to see how many pages total this worksheet will be when it prints. Click on the *Zoom* button to see a larger view of the page. NOTE that you cannot make changes to the cells while you are in *Print Preview*.
3. Notice that it is hard to tell on page 2 what categories each row represents. *Freeze Panes* made it easier to view the worksheet on screen, but it does not affect how the worksheet is printed.
4. On the *Print Preview Ribbon* click on the *Close Print Preview* command to return to the *Normal* work view for the worksheet. DO NOT click on the *X* button in the upper right hand corner of the window. This would close the file.
5. Click on the *Page Layout* tab on the *Ribbon* and then on the dialog box launcher in the *Page Setup* group.

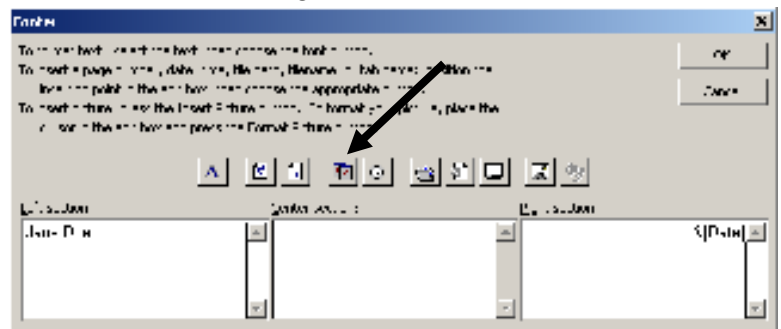


6. When the *Page Setup* dialog box opens, click on the *Sheet* tab.
7. Click once in the empty text entry box to the right of *Columns to repeat at left:* You should now see an insertion point blinking in the box.
8. Click once on the letter *A* label for column *A* — the *Page Setup* dialog box will remain open. In the text box, it should now read **\$A:\$A**. (See the picture below.) If you had wanted two columns to repeat, you would have had to click and drag on the column labels to select them and include both columns.
9. On the *Page Setup* dialog box, click on the *Print Preview* button and move to page 2 and page 3 using the *Next Page* button on the *Print Preview Ribbon*. Note that on each page column *A* is repeated. Now, when the worksheet is printed the reader will know what each row represents on every printed page, not just the first.



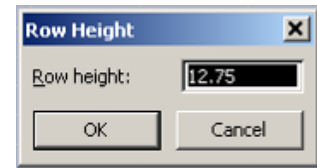
10. Click on the *Close Print Preview* command on the *Print Preview Ribbon*.
11. The *Page Setup* area can also be used to change the margins on the printed page, page orientation, and to insert header and footers. Click on the *Page Layout* tab on the *Ribbon* and then on the dialog box launcher in the *Page Setup* group again. Click on the *Page* tab on the *Page Setup* dialog box.
12. At the top of the dialog box, click in the radial button next to the word *Landscape*. This will have the page print on the paper horizontally instead of the usual vertical orientation.
13. Click on the *Margins* tab. Use the spin dials to change all of the margins (*Left*, *Right*, *Top*, and *Bottom*) to 1 inch. Be careful not to change the spin dials for *Header* and *Footer*!
14. Click on the *Header/Footer* tab then click on the *Custom Footer* button.
15. There are three text entry sections in the *Footer* dialog box that opens. Click in the *Left* section and type in your name.

16. Click in the *Right* section. The insertion point will be blinking on the far right side.
17. On the toolbar in the middle of this screen, click on the button that looks like a calendar. (See the picture to the right.) This will cause the computer to insert the current date each time this worksheet is printed.



18. Click on the *OK* button to apply these changes.

19. Click on the *Print Preview* button on the *Page Setup* dialog box to go to *Print Preview* and see the changes you have made to the printed worksheet. Keep in mind that *Margins*, *Headers*, and *Footers* will not be visible in the *Normal* Excel work view, only in *Page Layout* view, *Print Preview* or on the printed pages themselves.
20. When you have finished looking at each page (using the *Next* and *Previous Page* commands), click on the *Close Print Preview* command on the *Print Preview Ribbon* to return to the *Normal* work view for your worksheet.
21. Select rows 1 thru 19 by positioning your mouse pointer over the number 1 label for row 1 in the gray area on the far left side of the screen. When the mouse pointer changes to a thick black arrow pointing to the right, click and drag down to the number 19 label for row 19.
22. Click on the *Home* tab on the *Ribbon*. In the *Cells* group, click on the *Format* command and then on *Row Height* from the drop down menu.
23. On the *Row Height* dialog box that opens, change the current *Row height* number to **25** and click on the *OK* button.
24. With rows 1 thru 19 still selected, click on the dialog box launcher in the *Alignment* group.
25. On the *Alignment* tab of the *Format Cells* dialog box under the *Text alignment* section, click on the down arrow in the *Vertical* section at the end of the text entry area currently containing the word *Bottom*. Click on *Center* from the drop down menu. Click on the *OK* button.
26. Preview your worksheet again by clicking on the *Office Button* and *Print* from the drop down menu. Then click on *Print Preview* on the fly out menu. The worksheet will now print out on two pages only.
27. Click on the *Close Print Preview* command on the *Print Preview Ribbon* to return to the *Normal* work view for your worksheet.



Part 6: Entering the Monthly Data & Creating a Chart

1. Click on any cell to unselect rows 1 thru 19.
2. Next, you will fill in data for the month of January to test the worksheet. Again, cell references are in *Italics* and cell content is in **Bold**.
In the following cells enter these numbers:

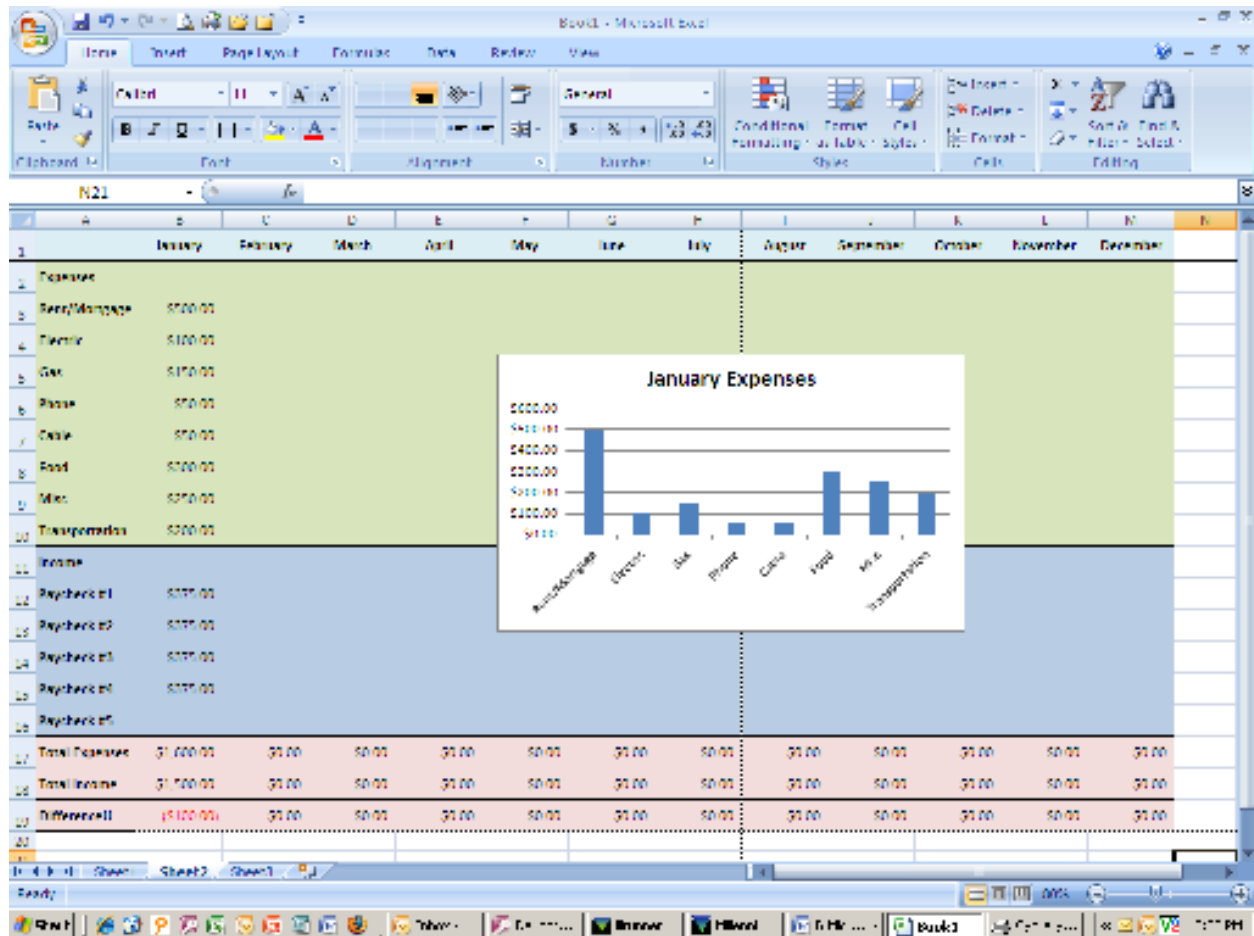
<i>B3</i>	500	<i>B9</i>	250
<i>B4</i>	100	<i>B10</i>	200
<i>B5</i>	150	<i>B12</i>	375
<i>B6</i>	50	<i>B13</i>	375
<i>B7</i>	50	<i>B14</i>	375
<i>B8</i>	300	<i>B15</i>	375

3. To make a chart of the expenses for January, begin by selecting cells *A3* thru *B10*.
4. Click on the *Insert* tab on the *Ribbon*.
5. Click on the *Column* command in the *Charts* group and then click on the first option under *2-D Column*, *Clustered Column*.
6. Your work screen should now show a chart that details the expenses for the month of January. Remember that you can make changes to the chart by using

options on the *Chart Tools* tabs on the *Ribbon*, which should be visible whenever your chart is selected. Click on the *Chart Tools Layout* tab on the *Ribbon*.

7. Click on the *Legend* command in the *Labels* group and click on *None* from the drop down menu to remove it from the chart.
8. Click on the *Chart Title* command in the *Labels* group and click on *Above Chart* from the drop down menu.
9. You will now need to select the text **Chart Title** currently displayed in the title text box you just inserted. With that text selected, type **January Expenses** to replace it.
10. Click on the *Office Button* and then on *Save* from the drop down menu to update the saved version of your worksheet.
11. You can continue to enter data for the rest of the months of the year, if you would like more practice and to double check the rest of your formulas and functions.

Your finished worksheet should look like this:



DISCLAIMER

The PC Center staff and Carnegie Library of Pittsburgh are not responsible for any errors in the execution of the instructions in this exercise if it is actually applied to a real life situation.