

## Practice Exercises for Introduction to Excel

Follow the directions below to create the exercises. 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 on the Undo button on the Quick Access Toolbar.

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

The gray boxes in these exercises 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.

### Opening the Excel Program

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.

### Budget Exercise

#### Part 1: Entering the Information

1. Enter the text in the designated cells as shown in the picture to the right. The complete text in cell *A10* is **Internet Connection**.

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.

#### Part 2: Entering Formulas & Functions



1. Select cell *B14* and then click on the *AutoSum* button in the *Editing* group on the *Home* tab on the *Ribbon* at the top of the screen. After making sure that the moving dash lines are surrounding cells *B5* thru *B13*, press the *Enter* key on the keyboard to apply the formula.

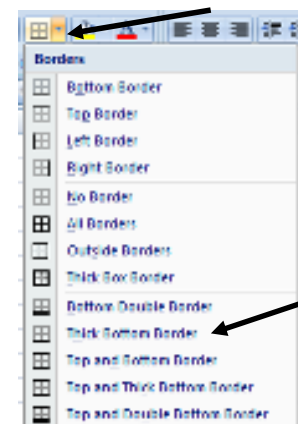
	A	B	C	D
1	Household Budget		Income Total	
2			Expenses Total	
3			Difference	
4	Expenses			
5	Rent/Mortgage	250		
6	Electric	50		
7	Gas	100		
8	Phone	30		
9	Cable	50		
10	Internet Conne	35		
11	Food	300		
12	Misc.	100		
13	Transportation	75		
14	Total Expenses			
15				
16				
17	Income			
18	Paycheck #1	250		
19	Paycheck #2	250		
20	Paycheck #3	250		
21	Paycheck #4	250		
22	Paycheck #5			
23	Total Income			
24				

2. Select cell *B23* and click on the *AutoSum* button again. After making sure that the moving dash lines are surrounding cells *B18* thru *B22*, press the *Enter* key.
3. Select cell *D1*. You want to put a formula here that will automatically repeat whatever number is in cell *B23*, which contains the total income for the month. A formula can be as simple as the equal sign and then just one cell reference. In cell *D1* type **=B23** and press the *Enter* key.
4. Select cell *D2*. Here, you want to put a formula that will automatically repeat whatever number is in cell *B14* which contains the total expenses for the month. Type in **=B14** and press the *Enter* key.
5. Select cell *D3*. In this cell, you want to put a formula that will take the total income in cell *D1* and subtract the total expenses in cell *D2*. Type in **=D1-D2** and press the *Enter* key.

*An alternate method to enter formulas is using Point & Click. Select cell D3 and press the = key on the keyboard. Use the mouse to click on cell D1 and press the – key on the keyboard. Use the mouse to click on cell D2 and then press the Enter key on the keyboard.*

### Part 3: Formatting the Worksheet

1. To make column *A* wider, position your mouse pointer over the vertical line separating column *A* and column *B* in the light blue area above the columns until  you see the mouse pointer change to a two headed arrow. Double click to automatically resize the column to fit the longest text in that column.
2. Repeat the above step to resize column *C* by positioning the mouse pointer on the vertical line separating columns *C* and *D*.
3. Select cells *B5* thru *B23* and click on the *Accounting Number Format* command in the *Number* group on the *Home* tab. It looks like a \$ sign. This will change the numbers displayed to monetary values.
4. Select cells *D1* thru *D3* and click on the *Accounting Number Format* button again.
5. Select cells *A4* thru *B4* and click on the *Merge & Center* command in  the *Alignment* group on the *Home* tab to center this label over both columns. Then click on the *Bold* command in the *Font* group on the *Home* tab to make the text stand out.
6. Repeat step 5 above for cells *A17* thru *B17* to apply formatting to this label also.
7. Select cells *A1* thru *D23* and change the font for all the cells to *Times New Roman* by using the *Font* command in the *Font* group on the *Home* tab. Change the font size to *12* by using the *Font Size* menu in the *Font* group on the *Home* tab.
8. After changing the font size, some columns may need to be resized again. This will be indicated by the ##### symbols replacing cell contents. To resize the columns, position your mouse pointer over the vertical lines between the column headers in the light gray area above the columns and when it changes to the two headed arrow, click and drag to the right or double click to *AutoFit*.
9. Select cells *C2* thru *D2*. Put a border at the bottom of these cells by clicking on the drop down arrow to the right of the *Borders* button in the *Font* group on the *Home* tab. A drop down selection of borders will appear. Click on the *Thick*



*Bottom Border* choice about halfway down the menu.

10. Select cells *A13* thru *B13* and place a border at the bottom of these cells by repeating step 9 above.
11. Select cells *A22* thru *B22* and place a border here as well, following instructions in step 9 above.
12. You will now insert a new row between rows *11* and *12*. Begin by positioning your mouse pointer over the number label for row *12* in the light blue box at the far left side of the row. When the mouse pointer changes to a thick black arrow pointing to the right, click once to select the entire row.
13. Click on the down arrow next to the *Insert* command in the *Cells* group on the *Home* tab and click on *Insert Sheet Rows* from the drop down menu.
14. Click in the new cell *A12*, type **Clothes**, press the *Tab* key on the keyboard, type **100** in cell *B12*, and press the *Enter* key on the keyboard. Notice how adding this information has changed the amounts in cells *B15*, *D2*, and *D3*.

#### Part 4: Saving the Budget File

1. Click on the *Office* button at the top left corner of the screen 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 **My Budget**.
4. Click on the *Save* button in the bottom right corner of the *Save As* dialog box.
5. Close this file by clicking on the *Office* button and clicking on *Close* from the drop down menu. This closes the file you were working on only. The Excel program is still open.

### Cookie Exercise

#### Part 1: Entering the Information

1. Start a new Excel file by clicking on the *Office* button in the upper left corner of the screen and then click on *New* from the drop down menu.
2. Now, enter the following text in the designated cells. Cell names are in *Italics*. The information to be typed in those cells immediately follows on the same line and is in **Bold**.

<i>A1</i>	<b>Store Bought Chocolate Chip Cookies</b>	<i>C3</i>	<b>8.2</b>
<i>A2</i>	<b>Brand Name</b>	<i>C4</i>	<b>7.5</b>
<i>A3</i>	<b>Store Brand</b>	<i>C5</i>	<b>9.2</b>
<i>A4</i>	<b>Chips Ahoy</b>	<i>C6</i>	<b>8.5</b>
<i>A5</i>	<b>Chips Deluxe</b>		
<i>A6</i>	<b>Famous Amos</b>	<i>D2</i>	<b># of Chips</b>
		<i>D3</i>	<b>2.2</b>
<i>B2</i>	<b>Overall Taste</b>	<i>D4</i>	<b>9.1</b>
<i>B3</i>	<b>5.5</b>	<i>D5</i>	<b>7.6</b>
<i>B4</i>	<b>8.7</b>	<i>D6</i>	<b>8.2</b>
<i>B5</i>	<b>8</b>		
<i>B6</i>	<b>7.8</b>	<i>E2</i>	<b>Aroma</b>
<i>C2</i>	<b>Taste of Chips</b>	<i>E3</i>	<b>4.3</b>

*Don't get worried if it looks like the text you just typed has disappeared or doesn't fit in the cell. We will fix that later in the exercise.*

E4 10  
E5 7.5  
E6 7.8

F3 6.8  
F4 8.7  
F5 8.5  
F6 9.4



## F2 Texture

What you just typed should look like this:

Store Bought Chocolate Chip Cookies						
Brand Name	Overall Taste	Taste of CI	# of Chips	Aroma	Texture	
Store Brand	5.5	8.2	2.2	4.3	6.8	
Chips Ahoy	8.7	7.5	9.1	10	8.7	
Chips Delu	8	9.2	7.6	7.5	8.5	
Famous Ar	7.8	8.5	8.2	7.8	9.4	

## Part 2: Completing Your Table Data

### Finding Totals Using AutoSum & AutoFill:

1. Select cell G2 and type **Total**.
2. Select cell G3 and click on the *AutoSum* button. The  moving dash lines should be surrounding cells B3 thru F3.
3. Press the *Enter* key on the keyboard.
4. Select cell G3 again.
5. Look for the little black box in the bottom right corner of the cell. Move your mouse pointer onto it, until the pointer becomes a thin black cross. 
6. Click and hold down the left mouse button and drag the mouse down to cell G6.
7. Release the left mouse button. This should have highlighted all the cells between cell G3 and cell G6 and there should now be numbers in each of these cells. It has used the AutoFill option to duplicate the formula in each cell.

You can also total these rows by manually typing the formula `=SUM(B3:F3)` into cell G3.

*If you use the AutoSum button to add each row, watch the area Excel highlights!*

### Finding Averages Using a Formula:

1. Select cell H2 and type **Average Score**
2. Select cell H3 and type `=G3/5`
3. Press the *Enter* key.
4. Now, select cell H3 again.
5. Move your mouse pointer onto the little black box in the selection border as in the above section until the pointer becomes a thin black cross. Click and hold down the left mouse button.
6. Drag the mouse down to cell H6.
7. Release the left mouse button. This should have highlighted all the cells between H3 and H6 and there should now be numbers in these cells. Once again, you have used the AutoFill option to duplicate the original formula in the following cells.

*Excel also features an Average function. Go back and try typing `"=AVERAGE (B3:F3)"` in cell I3. You will also get the average of the row.*

## Inserting a Column:

1. Select column *B* by clicking on the gray rectangle above that column containing the letter *B*.
2. Click on the down arrow next to the *Insert* command in the *Cells* group on the *Home* tab.
3. Click on *Insert Sheet Columns* from the drop down menu.
4. Type the following information in the newly created, empty corresponding cells.

*The procedure for adding a row is the same, except you would select the row below where the new one should be and click on "Insert Sheet Rows" instead of "Insert Sheet Columns" from the Insert menu.*

*B2*   **Cost**            *B3*   **2.13**            *B4*   **2.75**            *B5*   **2.5**            *B6*   **3.5**

Your table should now look like this:

Store Bought Chocolate Chip Cookies								
Brand Name	Cost	Overall Taste	Taste of Chips	# of Chips	Aroma	Texture	Total	Average
Store Brand	2.13	5.5	8.2	2.2	4.3	6.8	27	5.4
Chips Ahoy	2.75	8.7	7.5	9.1	10	8.7	44	8.8
Chips Deluxe	2.5	8	9.2	7.6	7.5	8.5	40.8	8.16
Famous Amos	3.5	7.8	8.5	8.2	7.8	9.4	41.7	8.34

**Part 3: Making the Spreadsheet Readable, Uniform, and Pleasing to the Eye**  
**Formatting Cells for Monetary Amounts:**

1. Select cells *B3* thru *B6*.
2. Click on the *Accounting Number Format* command in the *Number* group on the *Home* tab.

**Formatting Cells for Uniformity of Decimal Places:**

1. Select cells *H3* thru *H6*.
2. Click once on the *Increase Decimal* command in the *Number* group on the *Home* tab.
3. Repeat this above step for cells *I3* thru *I6*.



**Centering & Formatting a Title:**

1. Select cells *A1* thru *H1*.
2. Click on the *Merge and Center* command in the *Alignment* group on the *Home* tab.
3. Click on the *Bold* button in the *Font* group on the *Home* tab.



**Formatting the Cells:**

1. Select cells *A2* thru *I2*.
2. Click on the *Bold* and the *Italic* buttons in the *Font* group on the *Home* tab.
3. Click on the down arrow next to the *Border* command in the *Font* group and click on *Top and Thick Bottom Border* from the drop down menu.
4. Select cells *A3* thru *A6*.
5. Click on the *Italic* button in the *Font* group.

### Changing Column Width:

1. Now, click on the light blue box containing the letter *A* above cell *A1* with your mouse pointer looking like the thick black arrow pointing down. This will highlight the entire column *A*.
2. Click on the *Format* command in the *Cells* group on the *Home* tab.
3. Click on *AutoFit Column Width* from the drop down menu.
4. Repeat steps 1 thru 3 above for columns *B* thru *I*.

*The procedure for changing row height is the same, except you would select the row by clicking on the row number with the thick black arrow pointing right as your mouse pointer. Then, click on the Format command in the Cells group on the Home tab and then click on AutoFit Row Height from the drop down menu.*

Your finished table should look like this:

Store Bought Chocolate Chip Cookies								
Brand Name	Cost	Overall Taste	Taste of Chips	# of Chips	Aroma	Texture	Total	Average Score
Store Brand	\$ 2.13	5.5	8.2	2.2	4.3	6.8	27.0	5.40
Chips Ahoy	\$ 2.75	8.7	7.5	9.1	10	8.7	44.0	8.80
Chips Deluxe	\$ 2.50	8	9.2	7.6	7.5	8.5	40.8	8.16
Famous Amos	\$ 3.50	7.8	8.5	8.2	7.8	9.4	41.7	8.34

### Part 4: Previewing the Cookie Exercise File

1. Click on the *Office* button in the upper left corner of the screen and click on the arrow next to *Print* from the drop down menu.
2. Click on *Print Preview* from the fly out menu.
3. The *Print Preview* screen will open. Remember that you can use the *Page Setup* button in the *Print* group to change the page orientation, change the margins, or to center the table on the page horizontally and vertically.
4. Click on the *Close Print Preview* button in the *Preview* group to return to the regular Excel work screen.

### Part 5: Saving the Cookie Exercise File

5. Click on the *Office* button in the upper left corner of the screen and click on *Save As* from the drop down menu.
6. 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.
7. In the *File name:* text box, delete **Book1** and type in **My Cookie Exercise**.
8. Click on the *Save* button in the bottom right corner of the *Save As* dialog box.
9. Close this file and the Excel program by clicking on the *X* button in the upper right corner of your screen.