
Microsoft Excel

INTRODUCTION

After you complete all of the assigned readings, activities, and exercises in the *Microsoft Office Excel* study unit, you'll be ready to complete your final graded project. The project requires you to use your Excel skills to create a simple worksheet to calculate the cost of office supplies and to track their increase or decrease in cost over a two-month period. Throughout this project, you'll input specific information in an exact location, ensuring that the formulas and functions reference the proper information. You'll then create a graph to visually display the results.

You must enter all functions and formulas using cell references. If at any point in the project you simply enter a value into the cell instead of the proper function or formula, or use a value rather than cell references in a formula or function, that part of the project will be considered incorrect and points will be deducted.

In working through the graded project, you'll use many of the same functions and layouts you've already worked with in the study unit exercises. After completing the project you'll send the file to the school for grading.

PROJECT SCENARIO

The office where you work would like to track the cost of office supplies used for a two-month period. As office manager, you're asked to compare two months' worth of inventory and prepare a graphical representation of the comparison to show the increase or decrease in supply use.

You're given the amounts by the purchasing department and must prepare an Excel spreadsheet to be sent to the Chief Financial Officer of your company.

CREATING THE WORKSHEET

To begin, launch Excel and create the worksheet shown in Figure 1. Please be sure to include the shading in cell ranges A17:F17 and H17:K17. (The color choice is yours.) Save your file as **Office Supplies**.

January					February				
Office Supplies	Cost/Unit	Number of Units	Total Cost	% of Grand Total	Cost/Unit	Number of Units	Total Cost	% of Grand Total	
Copy Paper	2.99	25			3.29	30			
Highlighters	1.59	15			1.59	10			
Paper Clips	0.59	40			0.59	20			
Pens	0.99	30			0.99	40			
Printer Cartridges	25.99	3			26.99	4			
Scotch Tape	0.39	30			0.39	35			
Correction Fluid	0.99	40			0.99	20			
Markers	1.39	25			1.39	15			
Pencils	0.79	100			0.79	150			
Post-it Notes	0.99	50			1.09	40			
Rubber Bands	0.99	60			0.99	50			
Staples	0.69	25			0.69	40			
Grand Total									

FIGURE 1—Worksheet Data

Highlight the range of cells **A1:F1**, merge the cells, and center the text. Format “January” in Arial, 12 point, bold font.

Highlight the range of cells **H1:K1**, merge the cells, and center the text. Format “February” in Arial, 12 point, bold font.

Click in cell **A3**. Format the text in Arial, 10 point, bold font. Format all the remaining text in row 3 in Arial, 10 point, bold font. Right align the text in the cells.

Your worksheet should now look like Figure 2.

	January				February			
	Cost/Unit	Number of Units	Total Cost	% of Grand Total	Cost/Unit	Number of Units	Total Cost	% of Grand Total
Copy Paper	2.99	25			3.29	30		
Highlighters	1.59	15			1.59	10		
Paper Clips	0.59	40			0.59	20		
Pens	0.99	30			0.99	40		
Printer Cartridges	25.99	3			26.99	4		
Scotch Tape	0.39	30			0.39	35		
Correction Fluid	0.99	40			0.99	20		
Markers	1.39	25			1.39	15		
Pencils	0.79	100			0.79	150		
Post-it Notes	0.99	50			1.09	40		
Rubber Bands	0.99	60			0.99	50		
Staples	0.69	25			0.69	40		
Grand Total								

FIGURE 2—Worksheet with Data Entered

In column E (cell ranges **E5:E16**), use an appropriate formula to calculate the total cost for each type of office supply. Format the results in the Currency style. (**Note:** You'll need to create your own formulas. There are several formulas you can use, but the ones you choose *must* produce the correct results and you *must* use cell references in your formulas.)

In cell **E18**, use an appropriate formula to calculate the grand total of column E. Format the result in the Currency style.

In column F (cell ranges **F5:F16**), use an appropriate formula to calculate the percentage of the grand total for each type of office supply. Format the results in the Percentage style. If necessary, decrease the decimal places to round the results to the nearest whole percent.

In cell **F18**, use an appropriate formula to calculate the total percentage. Format the result in the Percentage style and decrease the decimal places if necessary to round the result to the nearest whole percent. (Obviously, the result should equal 100%.)

Repeat these procedures for column J (Total Cost) and column K (% of Grand Total) for the month of February. (Place the grand total of column J in cell **J18** and the grand total of column K in cell **K18**.) Again, remember to use formulas and cell references.

Sort the office supplies alphabetically in ascending order (A–Z). Remember: To make sure all your calculations remain correct, you must select all information in cell ranges **A5:K16** before doing the sort.

Format columns C and H in the Currency style if you haven't done so yet.

Type “% Change from January to February” in cell **A21**.

In cell **D21**, type the formula to calculate the % change from January to February: **=(J18-E18)/ABS(E18)**. Format the result in the Percentage style and decrease the decimal places if necessary to round the result to the nearest whole percent.

Your worksheet will now look like Figure 3.

	January				February			
Office Supplies	Cost/Unit	Number of Units	Total Cost	% of Grand Total	Cost/Unit	Number of Units	Total Cost	% of Grand Total
Copy Paper	2.99	25	\$74.75	14%	3.29	30	\$98.70	17%
Correction Fluid	0.99	40	\$39.60	8%	0.99	20	\$19.80	3%
Highlighters	1.59	15	\$23.85	5%	1.59	10	\$15.90	3%
Markers	1.39	25	\$34.75	7%	1.39	15	\$20.85	4%
Paper Clips	0.59	40	\$23.60	5%	0.59	20	\$11.80	2%
Pencils	0.79	100	\$79.00	15%	0.79	150	\$118.50	21%
Pens	0.99	30	\$29.70	6%	0.99	40	\$39.60	7%
Post-it Notes®	0.99	50	\$49.50	9%	1.09	40	\$43.60	8%
Printer Cartridges	25.99	3	\$77.97	15%	26.99	4	\$107.96	19%
Rubber Bands	0.99	60	\$59.40	11%	0.99	50	\$49.50	9%
Scotch Tape®	0.39	30	\$11.70	2%	0.39	35	\$13.65	2%
Staples	0.69	25	\$17.25	3%	0.69	40	\$27.60	5%
Grand Total			\$521.07	100%			\$567.46	100%
% Change from January to February				9%				

FIGURE 3—Your Worksheet So Far

GRAPHING YOUR RESULTS

Graphing data is useful when you wish to determine a change in data from one period of time to another, and where a graphical representation would make those changes easier to see.

You'll graph your results by creating the 3-D clustered column graph shown in Figure 4. The graph includes the name of the office supplies and the total costs for January and February. (*Hint:* The labels on the horizontal axis are positioned at a -45 degree angle.) Be sure to add the correct information to the legend and to add a title to the graph. Align the top left corner of the graph with the top left corner of cell A23 when positioning the graph in the worksheet. Adjust the width and height of the graph as necessary to show all of the content.

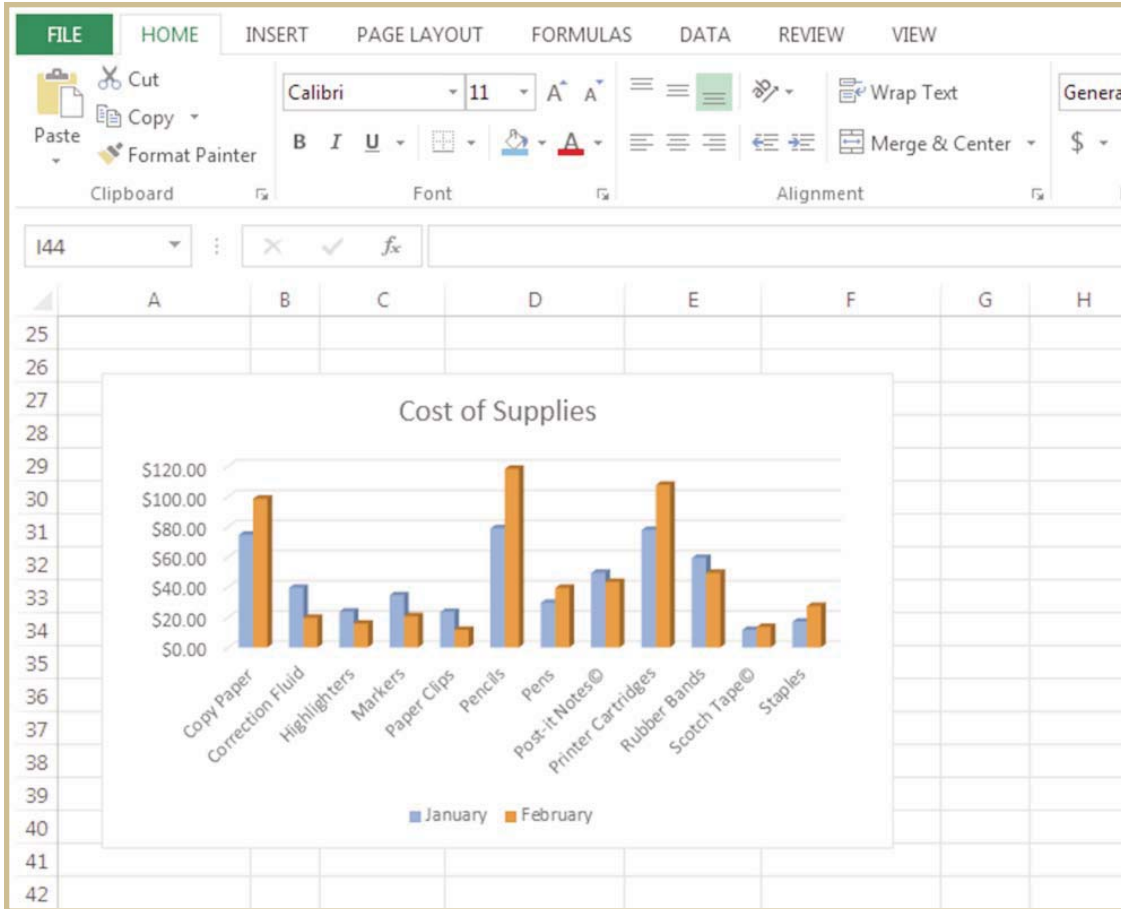


FIGURE 4—Office Supplies Graph

INSPECTING YOUR COMPLETED FILE

Congratulations! Now that you've completed your Excel graded project, you're ready to apply all you've learned about spreadsheets to your own enterprises. All you have left to do with the project is inspect your completed file one last time and send it to the school for grading.

Proofread your work. Check your file for errors. Make sure you used appropriate formulas where required. Your project grade will be based on the accuracy with which you entered and edited the information, and how closely you followed the project directions.

PREPARING YOUR FILE FOR SUBMISSION

Follow this procedure to submit your project online:

1. Log on to the Penn Foster website and go to "My Courses."
2. Click on **Take Exam** next to Microsoft Excel.
3. Attach your file as follows:
 - a. Click on the **Browse** box.
 - b. Locate the file you wish to attach.
 - c. Double-click on the file.
 - d. Click on **Upload File**.
4. Enter your e-mail address in the box provided. (**Note:** This information is required for online submission.)
5. If you wish to tell your instructor anything specific regarding this assignment, enter it in the Message box.
7. Click on **Submit File**.

Your instructor will grade your project according to the following guidelines.

Creating the graph (35 points)	_____
Use of appropriate formulas (35 points)	_____
Formatting and layout (30 points)	_____
Total	_____