

Excel Merchandise Work Shop

Complete each task in order and save your work frequently

1. Data Entry

- a. Open a new workbook.
- b. Use “Save As” to **name** and **save** the file on your H: drive (use any file name you want).
- c. Input Column Descriptions
 1. A2 = Product Code
 2. B2 = Product Description
 3. D2 = Unit Sales
 4. E2 = Sales Volume
 5. F2 = Avg Price
 6. G2 = Avg Inventory
 7. H2 = Inventory Days on Hand
 8. I2 = Percent of Sales
 9. J2 = Reorder Flag
- d. Highlight the range A2:J2 and Format the Cell Alignment to Wrap Text.
- e. Increase the width of column B and H so the text wraps to only two lines.
- f. Input the following values in the Product Code column
 1. Cell A3 = 4
 2. Cell A4 = 2
 3. Cell A5 = 8
 4. Cell A6 = 1
 5. Cell A7 = 3
 6. Cell A8 = 10
 7. Cell A9 = 7
 8. Cell A10 = 6
 9. Cell A11 = 9
 10. Cell A12 = 5
- g. Input the following values in the Unit Sales column
 1. Cell D3 = 2500
 2. Cell D4 = 5000
 3. Cell D5 = 1500
 4. Cell D6 = 1000
 5. Cell D7 = 3000
 6. Cell D8 = 7500
 7. Cell D9 = 10000
 8. Cell D10 = 9500
 9. Cell D11 = 8000
 10. Cell D12 = 1600
- h. Input the following values in the Sales Volume column
 1. Cell E3 = 20000
 2. Cell E4 = 30000
- i. Highlight the range E3:E4 and use Auto Fill to complete the series through Cell E12. Note, the value in Cell E12 should be 110000.
- j. Input the following values in the Avg Inventory column
 1. Cell G3 = 5000
 2. Cell G4 = 7500

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- k. Highlight the range G3:G4 and use Auto Fill to complete the series through Cell G12. Note, the value in Cell G12 should be 27500.
- l. Insert a new worksheet and move it to the right of worksheet 3 (Sheet3).
- m. Copy the range A2:A12 in worksheet 1 (Sheet1) and Paste it in worksheet 4 (Sheet4) Cell A1.
- n. Copy Cell B2 in worksheet 1 (Sheet1) and Paste it in worksheet 4 (Sheet4) Cell B1.
- o. Enter the following items in worksheet 4 (Sheet4) in column B
 - 1. Cell B2 = Cell Phone Cases
 - 2. Cell B3 = Posters
 - 3. Cell B4 = Sweatshirts
 - 4. Cell B5 = Backpacks
 - 5. Cell B6 = T-Shirts
 - 6. Cell B7 = Calendars
 - 7. Cell B8 = Coffee Mugs
 - 8. Cell B9 = Flags
 - 9. Cell B10 = Hats
 - 10. Cell B11 = Cell Phones
- p. Sort the data in worksheet 4 (Sheet4) in Ascending (lowest to highest value) order based on the values in the Product Code column.

2. Editing

- a. Go to Worksheet 1 (Sheet1).
- b. Delete Column C.
- c. Change the name in Cell F2 to Avg Unit Inventory.
- d. Insert a row above cell A1.
- e. In Cell B1 type Weekly Sales Report.
- f. Move the contents in Cell B1 to Cell C1 by clicking and dragging (Hint: move the cursor over the cell until you see the cross with arrows).
- g. Delete worksheets 2 (Sheet2) and 3 (Sheet3).
- h. Change the name of worksheet 1 (Sheet1) to Merchandise Data.
- i. Change the name of worksheet 4 (Sheet4) to Product Codes.

3. Formulas

- a. Create a formula in Cell E4 that divides the value in Cell D4 by the value in Cell C4.
- b. Copy the formula in Cell E4 and paste it into Cells E5 through E13.
- c. Create a formula in Cell G4 that calculates the Average Days Inventory on Hand. Your formula should calculate an estimated value for sales per day by multiplying the Unit Sales column (C4) by 52 then dividing by 365. The Avg Unit Inventory column (F4) should then be divided by the estimated sales by day. Follow the parenthesis in this example carefully: Avg Unit Inventory / ((Unit Sales * 52)/365).
- d. Copy the formula in Cell G4 and paste it into Cells G5 through G13.

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4. Functions

- a. Using the COUNT function, create a function in Cell A15 that counts the number of products in the column A.
- b. Using the AVERAGE function, create a function in Cell C15 that computes the average Unit Sales in column C.
- c. Using the SUM function, create a function in Cell D15 that totals the Sales Volume in column D.
- d. Using the MIN function, create a function in Cell E15 that finds the lowest Avg Price in column E.
- e. In Cell A17 type Estimated Net Profit.
- f. In Cell D17 type the value 3000000.
- g. In Cell A19 type Future Value in 10 Years.
- h. Using the Future Value function (FV), in cell D19 calculate the future value of the Estimated Net Profit (Cell D17) in 10 years using an interest rate of 6% (assume the company will achieve the same net profit for each of the 10 years). Remember to make you payments negative, i.e. -D17.
- i. Copy Cell D19 and Paste only the Value in cell E19 (Hint: you must use the paste special command).
- j. Using the Goal Seek command, change the value in Cell D17 (Estimated Net Profit) such that the Future Value in Cell D19 is exactly 47,750,000.

5. IF Statements

- a. Create an IF statement in Cell I4 based on the value in Cell G4 (Inventory Days on Hand). If the value in Cell G4 is less than 15, show the word "Reorder", else show the word "OK".
- b. Copy and paste the IF statement in Cell I4 to Cells I5 through I13.

6. Absolute References

- a. Create a formula in H4 that divides the Sales Volume (Cell D4) by the total Sales Volume in Cell D15. Use an absolute reference only on Cell D15 for both the column and row (Hint: absolute references use a \$ sign).
- b. Copy Cell H4 and paste it to Cells H5 through H13.

7. V Look Up

- a. In Cell B4, use the V Look Up function (Vlookup) to identify the product description that is assigned to the product code in Cell A4. Use the data in the Product Codes worksheet when defining the range in the V Look Up function.
The four segments of the V Look Up function are:
 1. Cell which contains the data you have or the data you look for (lookup_value).
 2. The range where both sets of data exist which is usually in another spreadsheet or file. Use the click and drag method. (table_array).
 3. Count the number of columns from left to right in the range you defined in segment 2. Count the first column as 1, and continue counting until you get to the column which has the data you want to pull (col_index_num).
 4. Always the word False. Finds exact matches to the lookup value in segment 1 (range_lookup).
- b. Copy the V Look Up function in Cell B4 and paste it into cells B5 through B13. **Note:** the range in the V Look Up function (part 2 above) MUST use an absolute reference for both the column and row in order to copy and paste correctly.

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7. V Look Up (cont.)

- c. Change the width of column B so all the data fits in the cells.

8. Formatting

- a. Change the font in Cell C1 to 16 points. Also, Bold, Italicize, and Underline the text.
- b. Highlight the range A3:I3. Bold the text, change the shade of the cells to yellow, and add a double line at the bottom of the cells.
- c. Highlight the range A3:I15 and add a single line border around the outside of the range.
- d. Format the numbers in the range D4:D15 to US Currency 0 decimal places.
- e. Format the numbers in ranges C4:C15 and F4:F13 with commas and 0 decimal places.
- f. Format the numbers in range E4:E15 to US Currency using 2 decimal places.
- g. Format the numbers in range G4:G13 to 1 decimal place.
- h. Format the numbers in range H4:H13 with a percent sign and 3 decimal places.
- i. Center the text in range I4:I13 and change the color of the text to blue.
- j. Sort the range A3:I13 in Descending order using the Units Sales column.

9. Charts

- a. Create a column chart using the range B3:C13.
- b. Change the title of the chart to Weekly Sales Report
- c. Label the X axis Product Description.
- d. Label the Y axis Unit Sales.
- e. Choose the “as new sheet” option.

10. Print Set Up

- a. Set each worksheet to print on 1 page, Landscaped.
- b. Choose the “gridlines” option for each worksheet.

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Answer key for the Merchandise Data worksheet showing values and formats

The screenshot displays the following data in the 'Weekly Sales Report' worksheet:

Product Code	Product Description	Unit Sales	Sales Volume	Avg Price	Avg Unit Inventory	Inventory Days on Hand	Percent of Sales	Reorder Flag
7	Coffee Mugs	10,000	\$80,000	\$8.00	20,000	14.0	12.308%	Reorder
6	Flags	9,500	\$90,000	\$9.47	22,500	16.6	13.846%	OK
9	Hats	8,000	\$100,000	\$12.50	25,000	21.9	15.385%	OK
10	Calendars	7,500	\$70,000	\$9.33	17,500	16.4	10.769%	OK
2	Posters	5,000	\$30,000	\$6.00	7,500	10.5	4.615%	Reorder
3	T-Shirts	3,000	\$60,000	\$20.00	15,000	35.1	9.231%	OK
4	Cell Phone Cases	2,500	\$20,000	\$8.00	5,000	14.0	3.077%	Reorder
5	Cell Phones	1,600	\$110,000	\$68.75	27,500	120.6	16.923%	OK
8	Sweatshirts	1,500	\$40,000	\$26.67	10,000	46.8	6.154%	OK
1	Backpacks	1,000	\$50,000	\$50.00	12,500	87.7	7.692%	OK
10		4,960	\$650,000	\$6.00				
Estimated Net Profit			\$3,622,695					
Future Value in 10 Years			\$47,750,000	\$39,542,385				

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Answer key for the Merchandise Data worksheet showing formulas

The screenshot shows a Microsoft Excel window titled "Microsoft Excel - Merchandise Workshop Final WB". The worksheet is named "Weekly Sales Report". The data is organized as follows:

Product Code	Product Description	Unit Sales	Sales Volume	Avg Price	Avg Unit Inventory	Inventory Days on Hand	Percent of Sales	Reorder Flag
7	=VLOOKUP(A4,'Product Codes'!\$A\$2:\$B\$11,2,FALSE)	10000	80000	=D4/C4	20000	=F4/((C4*52)/365)	=D4/\$D\$15	=IF(G4<15,"Reorder","OK")
6	=VLOOKUP(A5,'Product Codes'!\$A\$2:\$B\$11,2,FALSE)	9500	90000	=D5/C5	22500	=F5/((C5*52)/365)	=D5/\$D\$15	=IF(G5<15,"Reorder","OK")
9	=VLOOKUP(A6,'Product Codes'!\$A\$2:\$B\$11,2,FALSE)	8000	100000	=D6/C6	25000	=F6/((C6*52)/365)	=D6/\$D\$15	=IF(G6<15,"Reorder","OK")
10	=VLOOKUP(A7,'Product Codes'!\$A\$2:\$B\$11,2,FALSE)	7500	70000	=D7/C7	17500	=F7/((C7*52)/365)	=D7/\$D\$15	=IF(G7<15,"Reorder","OK")
2	=VLOOKUP(A8,'Product Codes'!\$A\$2:\$B\$11,2,FALSE)	5000	30000	=D8/C8	7500	=F8/((C8*52)/365)	=D8/\$D\$15	=IF(G8<15,"Reorder","OK")
3	=VLOOKUP(A9,'Product Codes'!\$A\$2:\$B\$11,2,FALSE)	3000	60000	=D9/C9	15000	=F9/((C9*52)/365)	=D9/\$D\$15	=IF(G9<15,"Reorder","OK")
4	=VLOOKUP(A10,'Product Codes'!\$A\$2:\$B\$11,2,FALSE)	2500	20000	=D10/C10	5000	=F10/((C10*52)/365)	=D10/\$D\$15	=IF(G10<15,"Reorder","OK")
5	=VLOOKUP(A11,'Product Codes'!\$A\$2:\$B\$11,2,FALSE)	1600	110000	=D11/C11	27500	=F11/((C11*52)/365)	=D11/\$D\$15	=IF(G11<15,"Reorder","OK")
8	=VLOOKUP(A12,'Product Codes'!\$A\$2:\$B\$11,2,FALSE)	1500	40000	=D12/C12	10000	=F12/((C12*52)/365)	=D12/\$D\$15	=IF(G12<15,"Reorder","OK")
1	=VLOOKUP(A13,'Product Codes'!\$A\$2:\$B\$11,2,FALSE)	1000	50000	=D13/C13	12500	=F13/((C13*52)/365)	=D13/\$D\$15	=IF(G13<15,"Reorder","OK")
=COUNT(A4:A13)		=AVERAGE(C4:C13)	=SUM(D4:D13)	=MIN(E4:E13)				
Estimated Net Profit			3622695.00502332					
Future Value in 10 Years			=FV(0.06,10,-D17) 39542384.827					

The bottom of the screenshot shows the Windows taskbar with the Start button, a search bar, and an open application named "Merchandise Wor...". The system clock shows 2:41 PM.

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Answer key for the Product Codes worksheet

The screenshot shows a Microsoft Excel window titled "Microsoft Excel - Merchandise Workshop Final WB". The worksheet is named "Product Codes" and contains the following data:

	A	B	C	D	E	F	G	H	I
1	Product Code	Product Description							
2		1 Backpacks							
3		2 Posters							
4		3 T-Shirts							
5		4 Cell Phone Cases							
6		5 Cell Phones							
7		6 Flags							
8		7 Coffee Mugs							
9		8 Sweatshirts							
10		9 Hats							
11		10 Calendars							
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21									

The Excel interface includes a menu bar (File, Edit, View, Insert, Format, Tools, Data, Window, Help), a toolbar with various icons, and a status bar at the bottom showing "Ready" and the Windows taskbar with the time 2:44 PM.

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Answer key for the Chart

