

# Excel Financial Work Shop

Complete each task in order and save your work frequently

## **1. Create a spread sheet**

- 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 Row Descriptions
  1. B2 = Gross Sales
  2. B3 = Returns
  3. B4 = Net Sales
  4. B5 = Growth Over 2006
  5. B6 = Cost of Goods Sold
  6. B7 = SG&A
  7. B8 = Total Expenses
  8. B9 = Net Profit
  9. B10 = Net Profit Prcnt of Net Sales
  10. **B12** = Profit Indicator
  11. **B14** = Future Value at 8% Interest
- d. Highlight the range B2 : B14 and Format the Cell Alignment to Wrap Text.
- e. Increase the width of column B so the text wraps to only two lines.
- f. Input the following values
  1. Cell A1 = Item Code
  2. Cell C1 = 2006
  3. Cell D1 = 2007
- g. Highlight the range C1 : D1 and use Auto Fill to complete the series through Cell L1. Note, the value in Cell L1 should be 2015.
- h. Input the following values
  1. Cell C2 = 1050000
  2. Cell D2 = 2050000
- i. Highlight the range C2 : D2 and use Auto Fill to complete the series through Cell L2. Note, the value in Cell L2 should be 10050000.
- j. In Cell C3 input the value 50000. Copy Cell C3 and paste it into Cells D3 through L3.
- k. Input the following values
  1. Cell C6 = 500000
  2. Cell D6 = 1250000
- l. Highlight the range C6 : D6 and use Auto Fill to complete the series through Cell L6. Note, the value in Cell L6 should be 7250000.

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- m. Input the following values
  - 1. Cell C7 = 250000
  - 2. Cell D7 = 500000
- n. Highlight the range C7 : D7 and use Auto Fill to complete the series through Cell L7. Note, the value in Cell L7 should be 2500000.
- o. Insert a new worksheet and move it to the right of worksheet 3 (Sheet3).
- p. Copy the range B2 : B10 in worksheet 1 (Sheet1) and Paste it in worksheet 4 (Sheet4) Cell A2.
- q. In Cell A1 Worksheet 4 (Sheet4), type the words Financial Item and Bold the text.
- r. Increase the width of column A Worksheet 4 so the text wraps to only two lines.
- s. Copy Cell A1 in worksheet 1 (Sheet1) and Paste it in worksheet 4 (Sheet4) Cell B1. Bold the text and widen the column so the text fits in the cell.
- t. Enter the following items in worksheet 4 (Sheet4)
  - 1. Cell B2 = 5
  - 2. Cell B3 = 9
  - 3. Cell B4 = 2
  - 4. Cell B5 = 6
  - 5. Cell B6 = 1
  - 6. Cell B7 = 3
  - 7. Cell B8 = 7
  - 8. Cell B9 = 4
  - 9. Cell B10 = 8
- u. Highlight the range A1 : B10 in worksheet 4 (Sheet4). Sort the range in Ascending order (lowest to highest value) based on the Financial Item column (column A).

### 2. Editing

- a. Go to Worksheet 1 (Sheet1) and insert a column to the left of column C.
- b. Insert 2 rows above cell A1.
- c. In Cell E1 type Financial Projections.
- d. Move the contents in Cell E1 to Cell F1 by clicking and dragging (Hint: move the cursor over the cell until you see the cross with arrows).
- e. Delete worksheets 2 (Sheet2) and 3 (Sheet3).
- f. Change the name of worksheet 1 (Sheet1) to Financial Data.
- g. Change the name of worksheet 4 (Sheet4) to Item Codes.

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### 3. Formulas

- a. Create a formula in Cell D6 that calculates the Net Sales by subtracting the Returns in Cell D5 from the Gross Sales in Cell D4 (Gross Sales – Returns).
- b. Copy the formula in Cell D6 and paste it into Cells E6 through M6.
- c. Create a formula in Cell D10 that calculates the Total Expenses by adding the Cost of Goods Sold and SG&A.
- d. Copy the formula in Cell D10 and paste it into Cells E10 through M10.
- e. Create a formula in Cell D11 that calculates the Net Profit. Subtract the Total Expenses in Cell D10 from the Net Sales in Cell D6 (Net Sales – Total Expenses).
- f. Copy the formula in Cell D11 and paste it into Cells E11 through M11.
- g. Create a formula in Cell D12 that calculates the Net Profit Percent of Net Sales. Divide the Net Profit in Cell D11 by the Net Sales in Cell D6.
- h. Copy the formula in Cell D12 and paste it into Cells E12 through M12.

### 4. Functions

- a. Using the COUNT function, create a function in Cell N3 that counts the number of years in row 3 (D3 : M3).
- b. Using the AVERAGE function, create a function in Cell N6 that computes the average Net Sales in Row 6.
- c. Using the SUM function, create a function in Cell N11 that totals the Net Profit in row 11.
- d. Using the MEDIAN function, create a function in Cell N8 that finds the median or middle value in the Cost of Goods sold row.
- e. Using the Future Value function (FV), in cell D16 calculate the future value of the Net Profit in Cell D11 in 10 years using an interest rate of 8%. Since the company achieves the same Net Profit for each of the 10 years, use Cell D11 for the pmts section of the function. Remember to make you payments negative, i.e. –D11.

### 5. IF Statements

- a. Create an IF statement in Cell D14 based on the Net Profit Percent of Net Sales. If the value in Cell D12 is greater than .05, show the word “Strong”, else show the word “Low”.
- b. Copy and paste the IF statement in Cell D14 to Cells E14 through M14.

### 6. Absolute References

- a. Create a formula in Cell E7 that divides the Net Sales in Cell E6 by the Net Sales value in Cell D6. Use an absolute reference only on Cell D6 for both the column and row (Hint: absolute references use a \$ sign).
- b. Copy Cell E7 and paste it to Cells F7 through M7.

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### 7. V Look Up

- a. In Cell A4, use the VLOOKUP function to identify the Item Code that is assigned to the financial item in Cell B4. Use the data in the Item Codes worksheet when defining the range in the V Look Up function.
- b. Copy the V Look Up function in Cell A4 and paste it into cells A5 through A12. **Note:** the range in the V Look Up function MUST use an absolute reference for both the column and row in order to copy and paste correctly.

### 8. Formatting

- a. Change the font in Cell F1 to 16 points. Also, Bold, Italicize, and Underline the text.
- b. Highlight the range D3 : M3. Bold the text, change the shade of the cells to Lt Green, Center the text in the cells, and add a double line at the bottom of the cells.
- c. Highlight the range B3 : M12 and add a bold line border around the outside of the range.
- d. Format the numbers in ranges D4 : M6 to U.S. Currency 0 decimal places.
- e. Format the numbers in range D8 : M11 to U.S. Currency 0 decimal places.
- f. Format the numbers in range E7 : M7 to 1 decimal place.
- g. Format the numbers in range D12 : M12 with a percent sign and 3 decimal places.
- h. Center the text in range D14 : M14, change the color to Orange, and Bold.

### 9. Charts

- a. Create a Pie chart using the range B3 : M4.
- b. Change the title of the chart to **Sales by Year**, then click on the Data Labels tab (two tabs the right of Titles) and click the box next to the word Value.
- c. 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 Financial Data worksheet showing values and formats

The screenshot displays the Microsoft Excel interface with the following data in the 'Financial Data' worksheet:

Item Code	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	
5 Gross Sales	\$1,050,000	\$2,050,000	\$3,050,000	\$4,050,000	\$5,050,000	\$6,050,000	\$7,050,000	\$8,050,000	\$9,050,000	\$10,050,000	
9 Returns	\$50,000	\$50,000	\$50,000	\$50,000	\$50,000	\$50,000	\$50,000	\$50,000	\$50,000	\$50,000	
2 Net Sales	\$1,000,000	\$2,000,000	\$3,000,000	\$4,000,000	\$5,000,000	\$6,000,000	\$7,000,000	\$8,000,000	\$9,000,000	\$10,000,000	5500000
6 Growth Over 2006		2.0	3.0	4.0	5.0	6.0	7.0	8.0	9.0	10.0	
1 Cost of Goods Sold	\$500,000	\$1,250,000	\$2,000,000	\$2,750,000	\$3,500,000	\$4,250,000	\$5,000,000	\$5,750,000	\$6,500,000	\$7,250,000	3875000
3 SG&A	\$250,000	\$500,000	\$750,000	\$1,000,000	\$1,250,000	\$1,500,000	\$1,750,000	\$2,000,000	\$2,250,000	\$2,500,000	
7 Total Expenses	\$750,000	\$1,750,000	\$2,750,000	\$3,750,000	\$4,750,000	\$5,750,000	\$6,750,000	\$7,750,000	\$8,750,000	\$9,750,000	
4 Net Profit	\$250,000	\$250,000	\$250,000	\$250,000	\$250,000	\$250,000	\$250,000	\$250,000	\$250,000	\$250,000	2500000
8 Net Profit Prnt of Net Sales	25.000%	12.500%	8.333%	6.250%	5.000%	4.167%	3.571%	3.125%	2.778%	2.500%	
Profit Indicator	Strong	Strong	Strong	Strong	Low	Low	Low	Low	Low	Low	
Future Value at 8% Interest	\$3,621,640.62										

# Excel Financial Work Shop

## Answer key for the Financial Data worksheet showing formulas Part 1

The screenshot shows the Microsoft Excel interface with the following data and formulas in the 'Financial Data' worksheet:

	A	B	C	D	E	F	G	H	I	
1						<b>Financial Projections</b>				
2										
3	Item Code			2006	2007	2008	2009	2010	2011	20
4	=VLOOKUP(B4,Item Codes!\$A\$2:\$B\$10,2,FALSE)	Gross Sales		1050000	2050000	3050000	4050000	5050000	6050000	70
5	=VLOOKUP(B5,Item Codes!\$A\$2:\$B\$10,2,FALSE)	Returns		50000	50000	50000	50000	50000	50000	50
6	=VLOOKUP(B6,Item Codes!\$A\$2:\$B\$10,2,FALSE)	Net Sales		=D4-D5	=E4-E5	=F4-F5	=G4-G5	=H4-H5	=I4-I5	=J
7	=VLOOKUP(B7,Item Codes!\$A\$2:\$B\$10,2,FALSE)	Growth Over 2006			=E6/\$D\$6	=F6/\$D\$6	=G6/\$D\$6	=H6/\$D\$6	=I6/\$D\$6	=J
8	=VLOOKUP(B8,Item Codes!\$A\$2:\$B\$10,2,FALSE)	Cost of Goods Sold		500000	1250000	2000000	2750000	3500000	4250000	50
9	=VLOOKUP(B9,Item Codes!\$A\$2:\$B\$10,2,FALSE)	SG&A		250000	500000	750000	1000000	1250000	1500000	17
10	=VLOOKUP(B10,Item Codes!\$A\$2:\$B\$10,2,FALSE)	Total Expenses		=D8+D9	=E8+E9	=F8+F9	=G8+G9	=H8+H9	=I8+I9	=J
11	=VLOOKUP(B11,Item Codes!\$A\$2:\$B\$10,2,FALSE)	Net Profit		=D6-D10	=E6-E10	=F6-F10	=G6-G10	=H6-H10	=I6-I10	=J
12	=VLOOKUP(B12,Item Codes!\$A\$2:\$B\$10,2,FALSE)	Net Profit Prct of Net Sales		=D11/D6	=E11/E6	=F11/F6	=G11/G6	=H11/H6	=I11/I6	=J
13										
14		Profit Indicator		=IF(D12>0.05,"Strong","Low")						
15										
16		Future Value at 8% Interest		=FV(0.08,10,-D11)						
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# Excel Financial Work Shop

## Answer key for the Financial Data worksheet showing formulas Part 2

The screenshot displays the Microsoft Excel interface for a worksheet titled "Financial Data". The worksheet contains a table of financial projections from 2008 to 2015. The data is organized into columns for years and rows for various financial metrics. Formulas are used to calculate counts, averages, medians, and sums for specific data ranges.

	F	G	H	I	J	K	L	M	N	O	P
1	<b><i>Financial Projections</i></b>										
2											
3	2008	2009	2010	2011	2012	2013	2014	2015	=COUNT(D3:M3)		
4	3050000	4050000	5050000	6050000	7050000	8050000	9050000	10050000			
5	50000	50000	50000	50000	50000	50000	50000	50000			
6	=F4-F5	=G4-G5	=H4-H5	=I4-I5	=J4-J5	=K4-K5	=L4-L5	=M4-M5	=AVERAGE(D6:M6)		
7	=F6/\$D\$6	=G6/\$D\$6	=H6/\$D\$6	=I6/\$D\$6	=J6/\$D\$6	=K6/\$D\$6	=L6/\$D\$6	=M6/\$D\$6			
8	2000000	2750000	3500000	4250000	5000000	5750000	6500000	7250000	=MEDIAN(D8:M8)		
9	750000	1000000	1250000	1500000	1750000	2000000	2250000	2500000			
10	=F8+F9	=G8+G9	=H8+H9	=I8+I9	=J8+J9	=K8+K9	=L8+L9	=M8+M9			
11	=F6-F10	=G6-G10	=H6-H10	=I6-I10	=J6-J10	=K6-K10	=L6-L10	=M6-M10	=SUM(D11:M11)		
12	=F11/F6	=G11/G6	=H11/H6	=I11/I6	=J11/J6	=K11/K6	=L11/L6	=M11/M6			
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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 Start button and system clock (9:10 PM).

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## Answer key for the Item Codes worksheet

The screenshot shows a Microsoft Excel window titled "Microsoft Excel - Financial Workshop". The menu bar includes File, Edit, View, Insert, Format, Tools, Data, Window, and Help. The toolbar shows various icons for file operations and editing. The active worksheet is "Item Codes" (part of a workbook named "Financial Data"). The data is organized as follows:

	A	B	C	D	E	F	G	H	I	J	K	L
1	<b>Financial Item</b>	<b>Item Code</b>										
	Cost of Goods											
2	Sold	1										
3	Gross Sales	5										
4	Net Profit	4										
	Net Profit Prcnt of											
5	Net Sales	8										
6	Net Sales	2										
7	Growth Over 2006	6										
8	Returns	9										
9	SG&A	3										
10	Total Expenses	7										
11												
12												
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The status bar at the bottom shows "Ready" and the Windows taskbar with the start button, system tray, and the time 9:13 PM.

# Excel Financial Work Shop

## Answer key for the Chart

