PC-MARKET DISTRIBUTION

SKILLS

- Insert calculated columns in an Excel table
- Use the IF function
- Use structured references to create formulas in Excel tables
- Create nested IFs
- Use the VLOOKUP function to find and exact match

- Use the VLOOKUP function to find an approximate match
- Using the IFERROR function
- Highlight duplicate values
- Summarize data conditionally
- Use the COUNTIF function
- Use the AVERAGEIF function

PROJECT OVERVIEW

- Linda Klaussen works for PC-Market Distribution, a computer supply store. She needs your help with designing an Excel workbook to enter purchase order information. She has already entered the product information on PC-Market's line of modems. She wants you to insert a lookup function to search for data in the product table. The company also offers three shipping options—Standard, Express, and Overnight—that vary in price. She wants the purchase order worksheet to be able to calculate the total cost of the order, including the type of shipping the customer requests.

STUDENT START FILE

NP_Excel2010_T7_CP1a_FirstLastName_1.xlsx (*Note:* Download your personalized start file from www.cengage.com/sam2010)

Instructions (Omit steps 3 and 7)

1. Open the file **NP_Excel2010_T7_CP1a_***FirstLastName***_1.xlsx** and save the file as **NP_Excel2010_T7_CP1a_***FirstLastName***_2.xlsx** before you move to the next step. Verify that your name appears in cell B4 of the Documentation sheet. (*Note*: Do not edit the Documentation sheet. If your name does not appear in cell B4, please download a new copy of the start file from the SAM Web site.)

2. Go to the Purchase Order worksheet. In cell B5, enter the Product ID **1050**. Then use the **VLOOKUP** function in cells C7, C8, and C9 as follows:

   a) In cell C7, create a lookup function to display the product type. **Use VLOOKUP**

b) In cell C8, create a lookup function to display the model name. **Use VLOOKUP**

c) In cell C9, create a lookup function to display the price. **Use VLOOKUP**

(*Note*: Product information is displayed in the ProductPrice table in the Product List worksheet.) **Hint: Use a cell reference instead of the value 1050. Use the table name ProductPrice. Type is in column 2, Model is in column 3, and Price is in column 4. Use an exact match lookup.**

3. ~~If an incorrect Product ID is entered in cell B5, cells C7, C8, and C9 will display the #N/A error value. Use the~~ **IFERROR** ~~function to modify the formula in these cells so that if the ID entered is not found, then the message~~ **Product ID not found** ~~is displayed in the cell.~~

4. Enter the following information in the Purchase Order worksheet:
   a) In the range D40:D42, enter labels **Standard**, **Express**, and **Overnight** (in that order).
   b) In the range E40:E42 enter the costs **$9.50**, **$14.50**, and **$18.50** (in that order).
   c) In cell B15, enter **Express**.

5. In cell C17, use nested **IF** functions to display the shipping costs for the option entered in cell B15.
   a) The first test should determine if the shipping option in cell B15 is blank, and if so, then cell C17 should be blank. (*Hint*: Use **""** [a set of quotation marks] to represent a blank cell value in your function.) **Do not use C17 in the formula!**
   b) Then a nested IF should test if B15 is equal to the shipping option in D40, and if so, then the value in E40 should be used.
   c) Then a nested IF should test if B15 is equal to the shipping option in D41, and if so, then the value in E41 should be used, otherwise the value in E42 should be used.

6. In cell C19, enter a formula to display the total cost of the product (*price times quantity*) plus shipping. In cell B12, enter **4**.

7. ~~In cell C19, use the~~ **IFERROR** ~~function to modify the formula so that if the cell equals an error value, then the message~~ **Check Product ID, Quantity, or Shipping option** ~~is displayed in the cell.~~

8. Go to the Product List worksheet, and then use conditional formatting to highlight all duplicate values in the range **A8:A119** (the ID column) with the formatting you choose. To test that conditional formatting is working, temporarily change the Product ID in cell A119 to **1121**. When the test is complete, return the value in cell A119 to **1122**. You MUST first select the range A8:A119. Then, use Conditional Formatting, Highlight Cell Rules, Duplicate Values, etc.

9. In the Product List worksheet, use conditional formatting to highlight all prices above **300** in the range **D8:D119** (the Price column) with the formatting you choose. You MUST first select the range D8:D119. Then, use Conditional Formatting, Highlight Cell Rules, Greater Than, etc.

10. Go to the Summary worksheet, and then use the **AVERAGEIF** and **COUNTIF** functions in the range B5:C7 to determine the average price and count for each modem type. **Hint: Use a structured reference to refer to the Type field in the ProductPrice table. Use a structured reference to refer to the Price field in the ProductPrice table. Use a cell reference to refer to each Modem Type in the Summary sheet (i.e. use A5, not 56K Desktop).**

SAM PROJECTS 2010 – CENGAGE LEARNING

Save your changes, close the workbook and exit Excel. Follow the directions on the SAM Web site to submit your completed project.

FINAL FIGURES   Purchase Order worksheet

	A	B	C	D	E
1		*PC-Market*			
2					
3		**Modems**			
4		Product ID:			
5		1050			
6					
7		Type:	ISDN/DSL		
8		Model:	Eicon DIVA T/A ISDN Modem U interface external (RJ-45) ISDN modem		
9		Price:	$239.52		
10					
11		Quantity			
12		4			
13					
14		Shipping Options			
15		Express			
16					
17		Shipping Cost	$14.50		
18					
19		Total Cost	972.58		
20					
40				Standard	$ 9.50
41				Express	$ 14.50
42				Overnight	$ 18.50

Summary sheet

Modem Type	Average Price	Count
56K Desktop	$ 61.00	38
ISDN/DSL	$ 319.98	41
Modem Card	$ 122.33	33