

## Case: What SUP, Inc.

After providing you a tour of Excel, Kyle suggests you all practice entering information into Excel using some formulas, functions, and features that are common to almost all accounting applications. He has created a preliminary trial balance for you to work on.

DEMO 2A Entering information into a work

## Entering Information

To complete the trial balance it will be necessary to enter additional text and numbers. The basic data entry container for Excel is a cell. Each cell has an address determined by its location on the worksheet grid. The column number and row number determine the address.

## Entering Data

Kyle explains that, before putting data into a cell, you must first select the cell by clicking on it. As you type, the data is also automatically entered into the formula bar. Text entries into cells are often referred to as labels, whereas numbers or formula entries are referred to as values.

## To open the trial balance file and enter data into the worksheet:

1 Start Excel and then click Open Other Workbooks.
2 Double-click Computer and then double-click Browse. Navigate the Open window to the location of this text's student files. (The location would be the CD provided with the text or from your computer lab's server.)

3 Double-click the file ch2-01, which should be located in a Ch 02 folder. The workbook shown in Figure 2.1 should appear.


Figure 2.1
Partially Completed Trial Balance

4 Click cell B7, type 84245.25, then press the [Enter] key. Note how the number is automatically formatted for you (more on this later). Note also that the active cell is now one row lower, at cell B8.
5 Type $\mathbf{1 2 5 3 5 1 . 4 5}$ in cell B8, and then press the [Enter] key.
6 Click cell C20, type 1527515.65, then press the [Enter] key. Note that the cell value may show several \# signs. If this happens, you will need to resize the column width (more about this later).
7 Click cell A26, type the label Total, then press the [Enter] key. We'll format this cell later.

8 Continue to fill in the remaining empty cells so that your worksheet looks like that shown in Figure 2.2.

Figure 2.2
Almost Completed
Trial Balance


You have thus entered both values and labels into your worksheet. Now you can make changes to the data already entered.

## Changing Column Width and Row Height

Perhaps now is a good time to fix that sales number on the trial balance as Kyle suggests. The problem occurred when a number entered in cell C20 was wider than the column permitted. The result was a cell filled with \# signs. To fix it, Kyle explains, all you have to do is resize column C. However, for uniformity, you should resize not only column C but also column B .

## To change the column width and row height of a worksheet:

1 Place the mouse pointer between column C and column D at the top of the columns so that the mouse pointer cursor changes into a line with two arrows pointing left and right.

2 Double-click the mouse. Then click and hold the mouse button down to reveal the new column width as being Width: 11.38 ( 96 pixels).

3 To resize both column $B$ and $C$ point the mouse pointer to the $B$ of column B and click once. (This selects the entire column B.)
4 Now click and drag from the $B$ of column $B$ to the $C$ of column $C$. (This selects both columns B and C.)

5 With both columns selected, place the mouse pointer between column B and column C at the top of the columns so that the mouse pointer cursor changes into a line with two arrows pointing left and right.
6 Click and drag the column width to the right until the width is 13.00 (109 pixels). Both columns should now be the same width 13.00 (109 pixels).
7 To resize the height of row 4, click between rows 4 and 5 at the far left of the worksheet until the mouse pointer cursor changes into a line with two arrows pointing up and down.
8 While still holding the mouse button down, drag the row height down until the height is 21.00 ( 28 pixels).
"If you are like me," Kyle admits, "you will find yourself making a few mistakes along the way."

## Editing Data

Nathan agrees and wants to know about correcting errors. He claims he's not very good at typing and has made some mistakes when entering previous information. Kyle explains that you can always edit the information entered into a worksheet regardless of whether you've already pressed the Enter key or not.

Excel gives you two ways to edit data. You can either edit the formula bar or edit data directly in the cell. For instance, let's assume the utilities expense number you entered in cell B25 was 45251.09 when it should have been 45251.90. Also assume that the prepaid expenses entered in cell B9 was 15624.26 when it should have been 15625.45 .

## To edit data in the worksheet:

1 Click once in cell $\mathbf{B 2 5}$.
2 Double-click the value you entered into the cell. Note that this opens up the cell for editing.
3 Double-click the value again and the entire value is selected.
4 Type $\mathbf{4 5 2 5 1 . 9 0}$ and the press the [Enter] key.
5 Click once in cell $\mathbf{B 9}$.
6 Double-click the value you entered into the cell. Note that this opens up the cell for editing.
7 Double-click the value again and the entire value is selected.
8 Type $\mathbf{1 5 6 2 5 . 4 5}$ and the press the [Enter] key.
9 Since you actually did enter in the correct values you should undo your changes. Click the Undo button from the Quick Access Toolbar two times.

Meagan says she will probably have to use this procedure often because her keyboarding skills are rather weak. Fortunately, it is easy to use this process for correcting errors and making changes to a worksheet.

## Controlling the Appearance of Data

You ask Kyle why the numbers on the trial balance are formatted with commas, since you didn't type commas when you entered the values. He explains that initially he formatted both columns B and C to be in the "comma" format. Formatting does not change the text or numbers in the cell itself; rather, it changes the way the text or numbers appear in the worksheet. To experiment, he suggests you modify the format of cells B6, C13, B26, and C26 to a "currency" format, since the top and bottom of a column of accounting numbers are usually formatted with the $\$$. He further suggests that you replace the format with a "comma and cents" format using the format painter.

## To apply the currency format to specific cells:

1 Click cell B6, then click the Accounting Number Format tool (it looks like a $\$$ ) on the Number group in the Ribbon. Note how the number still has the comma and cents formatting from before but now contains the $\$$.

2 With cell B6 still selected, click the Format Painter tool (it looks like a paintbrush) on the Clipboard group. Note that cell B6 now has ants dancing around the border of the cell and that the mouse pointer has an added paintbrush. Your screen should look like Figure 2.3.

Figure 2.3
Using the Format Painter Tool


3 Click cell C13. You have now painted the Accounting Number Format to that cell.
4 Click cell C13 and then click the Format Painter tool again.

5 Click in cell B26 and, with the mouse button still down, drag it to the right to include cell C 26 ; then release the mouse button. You have now painted the Accounting Number Format to cells B26 and C26, which will soon contain the total of each column.

Kyle also explains that it is common practice to total the debit and credit columns of a trial balance and include a double underline under such totals. Because you are in the midst of formatting cells, he suggests you format the two "total" cells before you create a formula adding a column of cells.

## To format the "total" cells with a double underline:

1 Click and highlight cells B26 and C26 by clicking first in B26 and then dragging the mouse to C 26 while holding down the mouse button.
2 Place the mouse pointer over the Borders tool located on the Font group-specifically, over the small arrow located on the right of the Borders tool. Click the arrow to reveal several border options as shown in Figure 2.4


Figure 2.4
Selecting a Border

3 Click the Top and Double Bottom Border tool to format the cells.

To finish the trial balance, all you need now is a total for each column.

## Entering Formulas and Using Functions

Formulas in Excel always begin with an equal sign (=). These formulas can use numbers; math symbols to add, subtract, multiply, or divide (,,+- , /); cell references; and/or functions. Nathan asks if Excel has a calculator built in so one could add the column and then put the result in the total cell. Kyle explains that the disadvantage of such an approach is that, if your numbers later change, then you'd have to re-add the column. Meagan asks if the best way to add a column of numbers is therefore to add each cell. Kyle explains you could certainly do that by typing a formula like this: $=\mathrm{B} 6+\mathrm{B} 7+\mathrm{B} 8$ et cetera.

However, Kyle explains that Excel includes some functions that accomplish this task in a more efficient manner. The SUM function, for instance, will sum up specified series of cells.
"Hold on," you say. "Functions sound like programming and I'm just an accounting student who has no desire to learn computer programming."
"Don't panic!" Kyle advises. "Excel's functions are fairly simple. Each function reacts to certain arguments you provide. For instance, the SUM function is written as follows: $=\operatorname{SUM}$ (argument). The argument is a series of cell references you want summed. Let me show you how to add the sum function to your trial balance to add up the debit and credit columns."

## To use the SUM function to add a column of numbers:

1 Click cell B26.
2 Type $=\mathbf{S U M}(\mathbf{B 6}: \mathbf{B 2 5})$, then press [Enter]. The result of that function should be the amount $\$ 2,095,697.75$.
3 Click cell C26.
4 Alternatively, you can enter the argument by clicking and dragging the mouse pointer over the cells to be added. Click the AutoSum button in the Editing group of the Home tab. Your screen should look like Figure 2.5 just before you click the AutoSum button.

5 Dancing ants should now be marching around the cells C15 to C25, as shown in Figure 2.5.


Figure 2.5
Using AutoSum
6 Click the upper right handle and, with the mouse button down, drag the ants up until you reach cell C6.

7 Release the mouse button and press the [Enter] key.
8 Click the File menu and then click Save As. (This is done to keep your original student file available in case you need it again and also to provide a unique name for your file.)
9 Add your name to the file name using the underscore key as you have done previously. In this example, the file will be saved as ch2-01_student_name (again, replace student_name with your name). Be sure to save your file to a location (e.g., a USB drive) from which you can later retrieve it.

Kyle explains that now you've used two different methods of entering a sum function to add up both the debit and credit columns. In both cases, the resulting formula is the same; you've simply used different methods to achieve the same goal. Moreover, if you enter different data in the cells B6 to B25 or C6 to C25, the SUM function will automatically add them up.

## More Extensive Use of Formulas

Nathan comments that he envisions another use of this worksheet software. Weekly he prepares, by hand, a "Badfish SUPs sales" worksheet that identifies how many Badfish SUPs have been sold each week as well as their cost, markup, sales price, discount, and total sales. Kyle suggests that this might be a good opportunity to illustrate a more extensive use of formulas in Excel.

## Entering and Editing Formulas

Formulas in Excel always begin with an equal sign (=). As explained earlier in this chapter, these formulas can use numbers; math symbols to add, subtract, multiply, or divide (,,+- *, /); cell references; and/or functions.

Kyle prepares a worksheet with titles and headings that are similar to Nathan's hand-prepared worksheet. In it he includes the names of the four types of Badfish SUPs sold that week, the cost or price What SUP paid for each SUP, the usual markup on cost used to determine the price, the discount offered that week on each SUP, and the quantity of each SUP sold. Kyle then recommends that you, Nathan, and Meagan use this form to prepare a weekly Badfish SUP Sales worksheet for the week of November 15, 2015.

The price for each SUP is based on the SUP cost and markup percentage. For example, if a SUP costs $\$ 100$ and the markup is 50 percent, then What SUP sells the SUP for $\$ 150$ (the $\$ 100$ cost plus a markup of 50 percent $\times$ $\$ 100$, or $\$ 50$ ).

The total column is the product of the price less discount times the number of SUPs sold. For example, if the price (as previously determined) was $\$ 150$ but that week it was discounted 10 percent, then the net price would be $\$ 135$ (the selling price of $\$ 150$ minus the $\$ 15$ discount). If five SUPs were sold, the total would then be $\$ 675(5 \times \$ 135)$.

Kyle offers to walk you through the creation of formulas, the use of references, and (later) manipulating the data.

## To enter and edit formulas for the Weekly Badfish SUP Sales worksheet:

1 Open ch2-02 to reveal a file that should look like Figure 2.6.


Figure 2.6
Badfish SUP Sales

2 Click in cell D6, where you will place the formula to calculate price.
3 Remember, the formula for determining price is cost plus markup; hence you must enter a formula that computes the markup and then adds it to the cost. Type the formula $=\mathbf{B 6}+(\mathbf{B 6 *} \mathbf{C 6})$ into cell D6 and then press [Enter]. Note that B6 is the location of the cost and C6 is the location of the markup percentage. Note also that the cell has been preformatted so that two decimal places are always shown.
4 Click in cell G6, where you will place the formula to calculate the total sales of the River Surfer $6^{\prime} 11^{\prime \prime}$.

5 Recall that the formula for determining total sales is price less discount times the number sold; hence, you need to enter a formula that computes the net price and then multiplies it by the number sold. Type the formula $=(\mathbf{D 6}-(\mathbf{D 6} * \mathbf{E 6})) *$ F6 into cell G6, then press [Enter]. Note that D6 is the location of the price, E6 is the location of the discount percentage, and F6 is the location of the number sold. Note also that the cell has been preformatted so that two decimal places are always shown. Figure 2.7 shows the worksheet just before you press [Enter].

| 4 | A | B | C | D | E | F | G | H |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 1 | What SUP, Inc. |  |  |  |  |  |  |  |
| 2 | Badfish SUP Sales |  |  | T |  |  |  |  |
| 3 | Week of November 15, |  |  |  |  | 8 | 1 |  |
| 4 |  |  |  |  |  |  |  |  |
| 5 | Product | Cost | Markup | Price | Discount | Quantity | Total |  |
| 6 | River Surfer 6'11' | 450.00 | 100\% | 900.00 | 10\% | 7 | =(D6-(D6 ${ }^{*}$ | )*F6 |
| 7 | River Surfer 81 | 520.00 | 100\% |  | 9\% | 3 |  |  |
| 8 | River Surfer $9^{\prime \prime}$ | 600.00 | 100\% |  | 8\% | 8 |  |  |
| 9 | MCIT Inflatable $10^{\prime} 6^{\prime \prime}$ | 700.00 | 80\% |  | 15\% | 15 |  |  |
| 10 | Total |  |  |  |  |  |  |  |

Figure 2.7
Entering a Formula
6 Keep this file open.
"Hold on a minute," Meagan says. "All of those parentheses are confusing me."
Kyle explains that the formula required those parentheses to specify the order of calculation. The formula (D6-(D6*E6))*F6 requires the innermost (here, bold) set of parentheses to be calculated first. This is the calculation of the discount (the price times the discount percentage). The outermost set of parentheses in the formula (D6-(D6*E6))*F6 is acted on next. This is the calculation of the discounted price (price less discount). Finally, the formula multiplies the newly calculated discounted price by the number sold to yield the total.
"Do we now have to type additional formulas for the other Badfish SUP?" you ask.
"Thank goodness, no," Kyle replies. "Excel has an AutoFill feature that saves you the time and effort of reentering similar formulas."

## Manipulating Data and Structuring Worksheets

The AutoFill feature is handy whenever you need formulas or data replicated down or across a worksheet. Kyle mentions that understanding this feature requires that you also understand the concept of relative and absolute references.

## Using AutoFill

In the Weekly Badfish SUP Sales worksheet, you created formulas to calculate price and total sales for the River Surfer $6^{\prime} 11^{\prime \prime}$ SUP. Now you want to use a similar formula to calculate the price and total sales for the other Badfish SUP. Kyle suggests you try the AutoFill feature yourself.

## To use the AutoFill feature:

1 Click in cell D6 on the Weekly Badfish SUP Sales worksheet.
2 Note that, when selected, the cell is outlined and a small square appears in the lower right corner of the cell. Click and hold the mouse button down so the mouse pointer is over that square. Then drag the frame down to cell $\mathbf{D} 9$ and release the mouse button See Figure 2.8.


Figure 2.8
Filling a Formula Down a Column
3 Click in cell G6.
4 Click and hold the mouse button down so that the mouse pointer is over the square in the lower right corner of the cell. Drag the frame down to cell G9 and then release the mouse button. Your revised worksheet should look like Figure 2.9.


Figure 2.9
Watch Sales with Price and Total Values

5 Keep this file open.
"I see," you say. "By using the AutoFill feature we've copied the same formula down the worksheet."
"Not exactly," Kyle responds. "In fact, you've copied a similar formula down the worksheet, but it's not the same."

Kyle suggests that this is a good time to explain the worksheet concept of relative and absolute references.

## Using Relative and Absolute References

The formula placed in cells D7, D8, and D9 after using the AutoFill feature is similar but not exactly like the formula you wrote in cell D6. If you look at the resulting formula created in cell D7 and compare it to the formula in cell D6, you will see relative referencing at work. Cell D6 contains the formula $B 6+(B 6 * C 6)$. Cell $D 7$ contains the formula $B 7+(B 7 * C 7)$. In other words, using AutoFill changed the formula by increasing the row reference by 1 , from row 6 to row 7. This will continue to occur as AutoFill moves down relative to the original formula. Once again, looking at cell D8, you see the formula $\mathrm{B} 8+(\mathrm{B} 8 * \mathrm{C} 8)$ and at cell D9 the formula B9+(B9*C9).
"Do you always want AutoFill to change the references?" Nathan asks.
"Not necessarily," Kyle answers.
Kyle points out that relative referencing works well in this particular worksheet. An alternative scenario that would not use relative referencing is one where the discount is some specific percentage for all sales. If you locate that percentage in one cell, then relative referencing would not create proper formulas. He suggests you create a cell that specifies a discount percentage for that week, clear the discount part of the worksheet, and rewrite the total formula.

## To use absolute references in the worksheet:

1 Before making the following changes, click the File menu and button, then Save As to save the Excel file.

2 Name the file ch2-02_student_name (replacing student_name with your name as before), then click Save. You will now make changes to the file to illustrate absolute references.
3 Type Discount \% in cell A13. This is a label for the value you will place in cell B13. Press [Tab] to move to the next cell.
4 Type $\mathbf{1 0 \%}$ in cell B13, then press [Enter].
5 Select cells E6 through E9 by clicking in cell E6 and then, while holding down the Shift key, clicking cell E9. (This selects the five contiguous cells.) Alternatively, you could click in cell E6 and, while holding the mouse button down, drag the mouse pointer down to cell E9.
6 Right-click the selected cells to reveal the Shortcut menu, then click Clear Contents as shown in Figure 2.10. This removes values and text previously shown at E6 through E9.


7 Click cell E6.
8 Type a new formula $=\mathbf{B 1 3}$ in cell E6 and then press [Enter]. This results in replacing the cell reference E6 with the cell reference B13.
9 Using AutoFill, like you did before, replicate the formula in cell E6 down to E9. This, however, causes a problem due to relative referencing: the formula in E7 now contains a reference to B14 instead of the discount specified in B13. What we should have done is changed the B13 reference from a relative reference to an absolute reference.
10 Change the formula at E 6 to $=\mathbf{\$ B} \$ \mathbf{1 3}$ by placing a $\$$ in front of the B and the 13 . The addition of the $\$$ freezes the reference to an absolute cell, regardless of where the cell may be copied to or automatically filled using AutoFill. After you have edited the formula, press [Enter].

11 Using AutoFill, replicate the modified formula in cell E6 down through cell E9. Your worksheet should now look like Figure 2.11.

Figure 2.10
Right-Click Menu

Figure 2.11
Using Absolute


12 Keep this file open.
"So what happens if I change the discount from 10 percent to 13 percent?" Nathan asks. Kyle demonstrates that the new formula creates new totals as a different discount percentage is entered into cell B13. He suggests you try some alternative percentages to see the effects on the total column. When you are finished experimenting, return the discount to 10 percent.

## Inserting and Deleting Columns and Rows

Nathan wants to know how to add a row if a different SUP is sold. He would also like to insert a new column, which would display the discounted price.

## To insert columns and rows on a worksheet:

1 Click the $\mathbf{8}$ in row 8 to select the entire row.
2 Right-click the $\mathbf{8}$ in row 8 to reveal the Shortcut menu, then click Insert to add a new row. Figure 2.12 shows the window right before you click Insert.


3 After you click Insert, add the following SUP sales information to the new row 8: product, River Surfer $\mathbf{8}^{\prime} \mathbf{6}^{\prime \prime}$; cost, $\mathbf{5 6 0}$; markup, $\mathbf{1 0 0 \%}$; quantity, 4.
4 Use AutoFill to fill down the proper formulas for cells D8, E8, and G8.
5 Click the $\mathbf{F}$ in column F to select the entire column.
6 Right-click the Fin column F to reveal the Shortcut menu, then click Insert to insert a new column.
Trouble? Excel has an Undo command, which allows you to reverse any number of actions you have executed on a worksheet. If you accidentally delete the wrong column or too many columns, click the Undo button on the Quick Access toolbar.

7 Type Net Price in cell F5, then press [Enter].
8 Type =D6-(D6*E6) into cell F6, then press [Enter]
9 Format cell F6 in a comma style format.
10 Use AutoFill to fill down the formula in F6 through F10.
11 Click cell H11 and then click the AutoSum tool from the Editing group, then press [Enter]. Note how Excel's AutoSum feature automatically selects cells adjacent to cell H11 that it thinks contain data you want to sum. This is a handy feature, but it doesn't always select the cell you want to sum. In this case it worked great!
12 To polish off your worksheet, click cell H11 again and format it with a Top and Double Bottom Border by using the Borders tool from the Font group.
13 Click cell A14. Format the cell to make the label bold by clicking the Bold tool from the Font group. Your completed worksheet should look like Figure 2.13.

Figure 2.12
Inserting a Row

Figure 2.13
Final Badfish SUP Sales Worksheet

| 4 | A | B | C | D | E | F | G | H |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 1 | What SUP, Inc. |  |  |  |  |  |  |  |
| 2 | Badfish SUP Sales |  |  |  |  |  |  |  |
| 3 | Week of November 15, |  |  |  |  | 13 | ) |  |
| 4 |  |  |  |  |  |  |  |  |
| 5 | Product | Cost | Markup | Price | Discount | Net Price | Quantity | Total |
| 6 | River Surfer 6'11" | 450.00 | 100\% | 900.00 | 10\% | 810.00 | 7 | 5,670.00 |
| 7 | River Surfer $8^{\prime}$ | 520.00 | 100\% | 1,040.00 | 10\% | 936.00 | 3 | 2,808.00 |
| 8 | River Surfer $8^{\prime} 6^{\prime \prime}$ | 560.00 | 100\% | 1,120.00 | 10\% | 1,008.00 | 4 | 4,032.00 |
| 9 | River Surfer $9^{1}$ | 600.00 | 100\% | 1,200.00 | 10\% | 1,080.00 | 8 | 8,640,00 |
| 10 | MCIT Inflatable 10'6' | 700.00 | 80\% | 1,260.00 | 10\% | 1,134.00 | 15 | 17,010,00 |
| 11 | Total |  |  |  |  |  |  | 38,160.00 |
| 12 |  |  |  |  |  |  |  |  |
| 13 |  |  |  |  |  |  |  |  |
| 14 | Discount \% | 10\% |  |  |  |  |  |  |

14 Click the File menu and then click Save to save your work.
15 Keep this file open.

## Working with Multiple Worksheets

Meagan is pleased with the results of the completed Weekly Badfish SUP Sales worksheet, but now she would like the sales to be summarized in 4 -week increments. Kyle replies that the best way to handle this would be to use multiple worksheets. You can create a worksheet for every week and a summary sheet for every 4 -week period.

At the bottom of the worksheet in Figure 2.13, you can see the Sheet1 label. Kyle suggests you first re-label Sheet1 as November 15, indicating the start of the week. Then he suggests you copy the November 15 worksheet and create a November 1 worksheet, then again for November 8, and again for November 22.

## To work with multiple worksheets:

1 Double-click the tab Sheet1, change the name of the worksheet to November 15, and then press the [Enter] key.
2 Right-click the newly labeled tab November 15 to reveal the Shortcut menu, then click Move or Copy.
3 Check the Create a copy checkbox and then click OK in the Move or Copy window. A new worksheet labeled November 15 (2) appears in the workbook.

4 Double-click the tab November 15 (2), change the name of the worksheet to November 8, and then press the [Enter] key. You now have two identical worksheets.
5 Repeat this process two more times to create a total of four worksheets, the last two labeled November 1 and November 22. Click and hold the tabs and then drag them left or right to place them in order. To see all the worksheets, you may have to shrink the scroll box on the bottom of the worksheet.
6 Place the mouse pointer just to the left of the arrow on the horizontal scroll box. Click and drag the mouse pointer to the right until all four weekly worksheet tabs are visible.
7 Change the title of each worksheet to reflect the new dates by editing cell A3. Click cell A3 on the worksheet November 1 and change the date to read November 1. Continue the same process for the last two worksheets. Remember: to change active worksheets, click the title of each worksheet on the bottom tabs.
8 Change the number of Badfish SUP sold for the week of November 1 (located in cells G6 to G10) to $\mathbf{3 , 2 , 7 , 1 , 4}$ respectively. Also change the discount percentage of cell B14 to $\mathbf{0 \%}$.
9 Change the number of Badfish SUP sold for the week of November 8 (located in cells G6 to G10) to $\mathbf{4 , 1 , 8 , 2 , 5}$ respectively. Also change the discount percentage of cell B14 to $\mathbf{5 \%}$.
10 Change the number of Badfish SUP sold for the week of November 22 (located in cells G6 to G10) to $\mathbf{3 , 6 , 7 , 4 , 8}$ respectively. Also change the discount percentage of cell B14 to $\mathbf{1 5 \%}$.
11 You now have four worksheets with different sales information for each period. The November 22 worksheet on your screen should look like Figure 2.14.


Figure 2.14
Final Badfish SUP Sales Worksheet

12 Save the updated worksheet.
13 Keep this file open.

Finally, a Summary worksheet can be created that summarizes sales from each week. Kyle suggests you set up a new Summary worksheet using the copy and paste features of Excel.

## To set up a summary worksheet:

1 Right-click the tab November 1, and then click Insert, and then double-click Worksheet and press [Enter].
2 Change the name of the new worksheet to Summary.
3 Click the November 1 worksheet tab.
4 Select cells A1 to A3, right-click the mouse to activate the Shortcut menu, and click Copy to copy the worksheet title.
5 Click the Summary worksheet tab, click in cell A1, right-click the mouse button, and click Paste to paste the worksheet title. If the picture is captured as well, click to select it and then press [Delete].
6 Click cell A3 and type Summary.
7 Resize the height of row 4 to $\mathbf{4 7}$ pixels.
8 Click the November 1 worksheet tab.
9 Select cells A5 to A11, right-click the mouse to activate the Shortcut menu and click Copy to copy the product title and names.
10 Click the Summary worksheet tab, click in cell A5, right-click the mouse button, and click Paste to paste the product title and names.
11 Resize column A to fit the product title and names ( 250 pixels).
12 In cells B5 to F5 type the various weekly dates: Nov 1, Nov 8, Nov 15, Nov 22, and Total respectively.
13 Format cells B5 to F5 using the Bold, Center, and Bottom Border tools on the Format toolbar. The resulting worksheet should look like Figure 2.15.

| 4 | A | B | c | D | E | F |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 1 | What SUP, Inc. |  |  |  |  |  |
| 2 | Badfish SUP Sales |  |  |  |  |  |
| 3 | Summary |  |  |  |  |  |
| 4 |  |  |  |  |  |  |
| 5 | Product | 1-Nov | 8-Nov | 15-Nov | 22-Nov | Total |
| 6 | River Surfer 6'11" |  |  |  |  |  |
| 7 | River Surfer $8^{1}$ |  |  |  |  |  |
| 8 | River Surfer $8^{\prime} 6{ }^{\prime \prime}$ |  |  |  |  |  |
| 9 | River Surfer $9{ }^{1}$ |  |  |  |  |  |
| 10 | MCIT Inflatable $10^{\prime} 6^{\prime \prime}$ |  |  |  |  |  |
| 11 | Total |  |  |  |  |  |

14 Keep this file open.

Figure 2.15
Creating a Summary Worksheet

The Summary worksheet you've set up is now ready for weekly data. Rather than typing the totals from each product for each week, Excel enables you to link the Summary worksheet with the weekly worksheets.

## To link the Summary worksheet to weekly worksheets:

1 Click in cell $\mathbf{B 6}$ of the Summary worksheet.
2 Type = into cell B6.
3 Before pressing Enter, activate the November 1 worksheet and click in cell H6; then press [Enter]. This automatically enters the reference 'November 1 '! H 6 into the Summary worksheet cell B6.
4 Use AutoFill to replicate the formula now entered in the Summary worksheet cell B6 down the worksheet to cell B10.
5 Click in cell C6 of the Summary worksheet.
6 Type = into cell C6.
7 Before pressing Enter, activate the November 8 worksheet and click in cell H6; then press [Enter]. This automatically enters the reference 'November 8 '!H6 into the Summary worksheet cell C6.
8 Use AutoFill to replicate the formula now entered in the Summary worksheet cell C6 down the worksheet to cell C10.

9 Repeat this same process for November 15 and November 22.
10 Use the SUM function to total sales by product in cells F6 through F10 on the Summary worksheet.
11 Use the SUM function to total weekly sales in cells B11 through F11.
12 Format cells B11 to F11 with a Top and Double Bottom Border.

13 Increase the size of any column to remove the \# signs found in cells.
14 Reduce the size of the horizontal scroll box to reveal all worksheet tabs in your Badfish SUP Sales workbook. The completed summary worksheet should look like Figure 2.16.
Figure 2.16
Completed Summary

| 4 | A | B | C | D | E | F |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 1 | What SUP, Inc. |  |  |  |  |  |
| 2 | Badfish SUP Sales |  |  |  |  |  |
| 3 | Sumtmary |  |  |  |  |  |
| 4 |  |  |  |  |  |  |
| 5 | Product | 1-Nov | 8-Nov | 15-Nov | 22-Nov | Total |
| 6 | River Surfer 6'11" | 2,700.00 | 3,420.00 | 5,670.00 | 2,295.00 | 14,085.00 |
| 7 | River Surfer $8{ }^{\prime}$ | 2,080.00 | 988.00 | 2,808.00 | 5,304.00 | 11,180.00 |
| 8 | River Surfer $8^{\prime} 6^{\prime \prime}$ | 7,840.00 | 8,512.00 | 4,032.00 | 6,664.00 | 27,048.00 |
| 9 | River Surfer $9^{\prime}$ | 1,200.00 | 2,280.00 | 8,640.00 | 4,080.00 | 16,200.00 |
| 10 | MCIT Inflatable $10^{\prime} 6^{\prime \prime}$ | 5,040.00 | 5,985.00 | 17,010.00 | 8,568.00 | 36,603.00 |
| 11 | Total | 18,860.00 | 21,185.00 | 38,160.00 | 26,911.00 | 105,116.00 |
|  | Summary November 1 | November 8 | vember 15 | ber 22 | : 1 |  |

15 Save your work.
16 Keep this file open.

## Using Headers and Footers

Often you will create multiple versions of a worksheet and, when they are printed, you won't know which version is which. Thus, it's important to include a date and time stamp on each worksheet. Kyle indicates that Excel has a builtin function that will not only date and time-stamp your work but also indicate the file name on each worksheet when printed. Both of these functions can be placed in either the header or footer of a worksheet.

## To use headers and footers in a worksheet:

1 Click the View tab on the Ribbon, then click Page Layout from the Workbook Views group.

2 Click the text Click to add header, and then type $\boldsymbol{\&}$ [Tab] (this will insert the sheet name as the header when the worksheet is printed).
3 Press [Tab] to move to the right section of the header.

4 Type $\boldsymbol{\&}[$ Date $]$ into the right header text box. (This will print the system date in the upper right corner of each worksheet; the system date is the current date you are printing your worksheet.)
5 Press [Tab]. Your screen should look like Figure 2.17 except for the current date, which will instead be the system date at the time you complete this work.


Figure 2.17
Adding a Header to Your Worksheet
6 Scroll to the bottom of your worksheet.
7 Click in the center footer text box, and then type $\mathcal{\&}[$ File $]$ into the footer. This \&[File] will print the worksheet file name in the footer of each worksheet.
8 Press [Tab] and note the file name (ch2-02_student_name) in the Footer preview box.
9 Click outside the footer in any cell and then click Normal from the Workbook Views group on the View tab of the Ribbon.
10 Keep this file open.

## Printing

Printing often requires three steps: previewing the print job, editing the page setup, and then finally printing the worksheet. Kyle suggests that, to save paper, these three steps should always be performed.

## Using Print Preview and Page Setup

Previewing the print job will save you lots of paper and headaches, Kyle explains. A print preview is available from the File menu. In addition to previewing the print job, the Print window also gives you the option of zooming in on the print job, modifying margins, viewing page breaks, and printing the job.

Page Setup establishes the worksheet's page orientation and scaling, margin specifications, headers and footers (which we just addressed), and "sheet" provisions that include print area and print titles.

The Page section is the first tab, located on the far left of the Page Setup window. Here you can specify the page orientation (Portrait or Landscape). Kyle prefers the terms vertical and horizontal, which more accurately communicate the direction the worksheet will be printed on a standard $81 / 2^{\prime \prime}$ by $11^{\prime \prime}$ piece of paper. If the worksheet is too big to print on just one sheet, the user can scale the printing by a percentage of its normal size or to fit on a specific number of pages.

The Margin section is the second tab. Here you can modify the header and footer depth as well as the top, bottom, right, and left margins. In addition, you can specify that the worksheet be centered on the page either horizontally, vertically, both, or neither.

The Sheet section allows you to restrict printing to a certain segment of the worksheet and to repeat titles at the top or left of the worksheet if your printing runs more than a single page. While editing worksheets, Kyle likes to print his work in process and take it on the road, where he doesn't have a computer. In this case, he prints the gridlines and row and column headings so he can write additional formulas by hand.

Kyle decides to modify the page setup for the Summary worksheet by specifying a portrait orientation, centering the worksheet horizontally, and with gridlines and row and column headings.

## To preview a print job and edit the page setup of a worksheet:

1 Click the File menu and then click Print.
2 Select Landscape orientation option if it is not already selected (See Figure 2.18.).


Figure 2.18
Print Options
3 Click Page Setup from the bottom of the screen and then click the Margins tab and then click the Horizontally checkbox on the Center on page section.
4 Click the Sheet tab and click the Gridlines and Row and column headings checkboxes.

5 Click the Header/Footer tab; note that your previous modifications to the header and footer (during the page layout) have been preserved here.

6 Click OK.
7 Click the Zoom to Page icon located in the lower right hand corner of the screen to magnify the pending print job, then use the scroll bars to move around your view of the print job. You screen should look like Figure 2.19.


Figure 2.19
Print Preview with Magnification
8 Keep this file open.

## Printing a Worksheet

As already mentioned, you can print from the Print Preview window or print directly from the worksheet. Kyle once again suggests that you always preview your work before printing and thus that you get into the habit of printing from the Print Preview window.

The Print Preview window allows you to select a printer (assuming more than one printer is connected to your computer or network). In addition, you can specify the print range (which pages to print), what you wish to print (the entire workbook, the active sheet(s), or a specific selection you've already highlighted on the worksheet), and/or how many copies you want printed.

Meagan suggests you print one copy of the entire workbook with the gridlines and row and column headings specified previously as well as one copy of the summary worksheet without gridlines and row and column headings.

## To print the workbook:

1 Click the Zoom to Page icon again to reduce the print preview window.
2 Select a printer from the Printer drop-down list and then select Print Entire Workbook from the Settings drop-down list.
3 Click Print. This should print five pages.
Trouble? You may have to modify which printer to print to in lab situations. Please see the lab consultant or your instructor for instructions.

4 Save your work.

Nathan notices that, when the workbook was printed in total, only the Summary worksheet had a header and footer. Kyle explains that this happened because you had set up the header and footer for the Summary worksheet only; thus, headers and footers for the remaining worksheets should not be expected. Nathan also noticed that some worksheets printed in portrait view, and he suspects that this is due to not setting all worksheet to landscape as well.

## Printing and Viewing Formulas

"Is there any way to look at a worksheet and see all the formulas in the worksheet without clicking on each cell?" Nathan asks.
"Yes," Kyle replies. "You can not only view the underlying formulas, but often you'll want to print them for later analysis."

Kyle offers to demonstrate this Excel feature and advises that, whenever you print a worksheet with formulas, you be sure to include gridlines and row and column headings for easy reference. He suggests you print the formulas found on the November 1 sheet.

## To view and print formulas in a worksheet:

1 Click the return arrow (the arrow with a circle around it at the upper left-hand corner of the Print window) and then click the November 1 worksheet.

2 While holding the Ctrl key down, press the ['] key (located just above the Tab key). This reveals all cells as formulas, a feature known as the Formula view. Observe that the columns become larger when you press these keys.
3 While holding the Ctrl key down, press the ['] key again and the worksheet reverts back to values (known as the Value view). Simultaneously, the columns return to their original, smaller size.
4 Switch to the Formula view once again. (While holding the Ctrl key down, press the ['] key.)
5 Resize each column so that all formulas are viewable. (This will require some columns to be widened and others to be narrowed.)
6 Click the File menu and then click Print. Note that printing this worksheet requires two pages, as indicated in the lower left corner of the Print Preview window.
7 Under Settings, select Print Active Sheets and then change to Landscape Orientation.
8 Select Fit Sheet on One Page from the last drop-down list which should currently say No Scaling.
9 Click Page Setup and then click the Sheet tab and check the Gridlines and Row and column headings checkboxes so that the worksheet, when printed, can help you decipher the formulas.

10 Click OK in the Page Setup window (note that printing now requires only one page, as specified in the lower part of the window). Your print Preview screen should look like Figure 2.20.


11 Click Print in the Print Preview window.
12 Click OK in the Print window.
13 While holding the Ctrl key down, press the ['] key and so return to Value view.

14 Resize all columns so that all values are shown.
15 Close the worksheet and save your changes.

Kyle explains that printing the Formula view is an effective way of examining your worksheet logic and correcting any errors. It also allows you to view the formula logic when a computer is not available.
"That's a lot to grasp in one sitting," you complain.
"Oh there's a lot more to come, but let's take a break and start again tomorrow," Kyle says.

## End Note

The three of you are somewhat overwhelmed by the capabilities of Excel but are pleased with what you've accomplished. You've learned some basics about Excel's help system, how to work with files, and how to enter information into a worksheet, use formulas, manipulate data, structure a worksheet, and print worksheets in both Value and Formula views.

In the next chapter, you will learn how to use Excel to create financial statements.

## Chapter 2 Questions

1 Explain how information is entered into an Excel worksheet.
2 Identify the difference between labels and values.
3 What does it mean when a cell or cells in a worksheet include a series of \# signs?


4 Explain the process for changing column width or row height.
5 How do you control the appearance of data in a worksheet?
6 What does the Format Painter tool do?
7 How are formulas written in Excel?
8 Explain the arguments used in the SUM function.
9 Explain the importance of parentheses in formulas.
10 How does the AutoFill feature of Excel help the worksheet user?
11 Why would you want to use absolute references instead of relative references?

12 How do you change a relative reference to an absolute reference?
13 Describe the procedure used to insert a column or row into a worksheet.
14 How do you change the name of a sheet in a workbook?
15 What is the recommended procedure for printing a workbook or worksheet?

## Chapter 2 Assignments

1 Create a trial balance for What SUP as of March 31, 2016
You are to create a trial balance in a format identical to that created in this chapter. Include a debit and credit column, totals for each column, and appropriate labels and formatting. Start with blank spreadsheet and once you have created the spreadsheet save the file as ch2-03_student_ name (replacing student_name with your name). An alphabetical listing of account information as of March 31, 2016, follows.

| Accounts payable | $75,182.10$ |
| :--- | :--- |
| Accounts receivable | $90,432.41$ |
| Accumulated depreciation: Building | $65,000.00$ |
| Accumulated depreciation: Equipment | $11,000.00$ |
| Advertising expense | $14,265.74$ |


| Building | $300,000.00$ |
| :--- | ---: |
| Cash | $32,511.34$ |
| Common stock | $10,000.00$ |
| Cost of goods sold | $341,876.41$ |
| Depreciation expense | $8,000.00$ |
| Equipment | $72,000.00$ |
| Inventory | $118,348.94$ |
| Land | $125,000.00$ |
| Long-term debt | $420,000.00$ |
| Other expense | $1,500.00$ |
| Payroll expense | $69,421.72$ |
| Prepaid expenses | $13,842.11$ |
| Retained earnings | $192,697.36$ |
| Sales revenue | $434,925.13$ |
| Supplies | $8,434.19$ |
| Utilities expense | $13,171.73$ |

a. Print the completed worksheet in Value view, with your name and date printed in the lower left footer and file name in the lower right footer.
b. Print the completed worksheet in Formula view, retaining gridlines and row and column headings, with your name and date printed in the lower left footer and file name in the lower right footer.

## 2 Modify What SUP Sales Worksheet

Using the student file Ch2-04.xlsx, add appropriate formulas to the existing Fanatic SUP Sales worksheet to calculate price, total sales for each ring for the week, and total sales for all Fanatic SUP. Complete this worksheet in a manner consistent with the Weekly Badfish SUP Sales worksheet completed in this chapter. Prior to entering your formulas, the worksheet should look like Figure 2.21. Save the file as ch2-04_student_ name (replacing student_name with your name).

Figure 2.21
Partially Completed Diamond Ring Sales Worksheet
a. Print the completed worksheet in Value view, with gridlines and row and column headings and with your name and date printed in the lower left footer and file name in the lower right footer.
b. Print the completed worksheet in Formula view, retaining gridlines and row and column headings, with your name and date printed in the lower left footer and file name in the lower right footer.

## Chapter 2 Case Problem 1: KELLY'S BOUTIQUE

Kelly's Boutique, located in Pewaukee, Wisconsin, sells a unique combination of books and women's shoes. Customers love to peruse her book inventory while trying on the latest in shoe fashions, often buying both books and shoes even though they came in to buy only one type of merchandise. Casey, Kelly's youngest son, a college student studying accounting, is home for the holidays and can't wait to help his mom come in from the dark ages and use computers in her business. Throughout this text Casey will make every attempt to bring his mom up to speed by teaching her the use of Excel and Access as they apply to her accounting and business needs.

To begin, Casey suggests that Kelly use a worksheet to make a list of her book inventory. She doesn't maintain a large inventory, but she does carry books that she thinks moms in the community might be interested in reading or buying as gifts for their children or friends.

Start with worksheet ch2-05. Format this worksheet using bold and italics formatting for the titles and bold and border formatting for the column names. Add formulas for column E to compute the sales price as list price less the discount specified. Add the following two books and related information to the list. (Be sure the list maintains its alphabetic organization by inserting rows in the correct place.)

| Dept | Product | Author | List Price |
| :--- | :--- | :---: | :---: |
| Children | Make Way for Ducklings | McClosky | 17.99 |
| Adult | Snow Falling on Cedars | Guterson | 21.95 |

Insert a new column D with the title "On Hand" in bold, centered, and center justified. Change the formatting of the column to no decimals. Add the following on hand values to column D .

| Product | Author | On Hand |
| :--- | :--- | :---: |
| Angela's Ashes | McCourt | 5 |
| Betsy - Tacy | Lovelace | 2 |
| Blueberries for Sal | McCloskey | 2 |
| Caddie Woodlawn | Brink | 1 |
| Deep End of the Ocean | Mitchard | 4 |
| Divine Secrets of the YaYa Sisterhood | Wells | 3 |
| Green Eggs and Ham | Seuss | 1 |
| Harry Potter and the Chamber of Secrets | Rowling | 4 |
| Harry Potter and the Prisoner of Azkaban | Rowling | 3 |
| Harry Potter and the Sorcerer's Stone | Rowling | 2 |


| Product | Author | On Hand |
| :--- | :--- | :---: |
| Hop on Pop | Seuss | 1 |
| Horse Whisperer | Evans | 2 |
| Lentil | McCloskey | 2 |
| Make Way for Ducklings | McCloskey | 2 |
| Memoirs of a Geisha | Golden | 4 |
| Message in a Bottle | Sparks | 2 |
| One Morning in Maine | McCloskey | 1 |
| Snow Falling on Cedars | Guterson | 2 |
| The Cat in the Hat | Seuss | 1 |
| The Notebook | Sparks | 3 |

Add a "Total" label in cell B27 and a SUM function in cell D27 to add up the quantity of books on hand. Change the name of Sheet 1 to " $15 \%$ Discount." Create a copy of this worksheet and place it before Sheet2. Change the name of the newly created worksheet to " $20 \%$ Discount." Change the discount in cell F1 of this worksheet to $20 \%$. Save the file as ch2-05_student_name (replacing student_name with your name).
a. Print the completed $15 \%$ Discount worksheet in Value view, with your name and date printed in the lower left footer and file name in the lower right footer.
b. Print the completed $20 \%$ Discount worksheet in Value view, with your name and date printed in the lower left footer and file name in the lower right footer.
c. Print the completed $15 \%$ Discount worksheet in Formula view, with gridlines and row and column headings, landscape orientation, scaling to fit to 1 page wide by 1 page tall, and with your name and date printed in the lower left footer and file name in the lower right footer.
d. Print the completed $20 \%$ Discount worksheet in Formula view, with gridlines and row and column headings, landscape orientation, scaling to fit to 1 page wide by 1 page tall, and with your name and date printed in the lower left footer and file name in the lower right footer.

## Chapter 2 Case Problem 2: WINE DEPOT

The Wine Depot, located in Santa Barbara, California, imports and sells highquality wine from around the world. Owner Barbara Fairfield is curious to see how Excel might help her manage the business and account for its inventory. Her husband, Bud, is the accountant in the family but hasn't had much experience with Excel. He's hired you to help him construct several worksheets to help the business better understand the financial and managerial aspects of the company.

To begin, you decide to create a worksheet of some of Barbara's wine inventory. Start with worksheet ch2-06. Format the company name and worksheet title bold and italics. Format the title of each column of data bold with a bottom border. Format all values for the column Price as Accounting Number Format.

Add two column labels, Quantity and Value, to the right of the existing data and then insert quantity amounts as shown below [Note: SKU (Stock Keeping Unit) is a unique identifier for each of the distinct products and services that can be ordered from a supplier.]:

| SKU | Quantity |
| :--- | :---: |
| 17521 | 4 |
| 16716 | 10 |
| 16528 | 12 |
| 16739 | 5 |
| 15347 | 7 |
| 17539 | 3 |
| 11599 | 1 |
| 14539 | 5 |
| 17840 | 12 |
| 13883 | 12 |
| 15966 | 24 |
| 17454 | 24 |
| 17024 | 10 |
| 16554 | 8 |
| 17425 | 7 |
| 17549 | 3 |
| 17578 | 2 |
| 17275 | 1 |

Insert a formula to calculate value as quantity times price in cell I9, then filldown this formula for all cells in the table. Insert a text label "Total" in cell H28 and a formula to calculate the total value in cell I28. Insert two additional rows after row 27. Add two American Syrah wines in those two rows: Carhatt, $\$ 34$ ( 750 ml , year 2000, SKU 16769), quantity 10; and Cafaro, $\$ 35$ ( 750 ml , year 2000, SKU 16874), quantity 15. Delete the row containing the American Merlot from Wildhorse. Change the formatting of the Price and Value columns to include no decimals. After using Excel's Help function to learn how to sort items in a worksheet, sort the information on your worksheet by location and then by type, in ascending order. Change the name of Sheet1 to "Pricing." Create a copy of this worksheet and place it before Sheet2, then change the name of this sheet to "Cost." Add a label at cell C 4 of the Cost sheet called Cost \% in Bold, Italics. Type $60 \%$ as the cost percentage in cell D4 of the Cost sheet. Change the name of the column "Value" to "Cost." Create a new formula in cell I9 to calculate cost as Price times Cost $\%$ times Quantity. (Be sure to use absolute or relative references where appropriate.) Fill the formula in cell I9 down to all items. Save the file as ch2-06_student_name (replacing student_name with your name).
a. Print the completed Pricing worksheet in Value view, with portrait orientation, scaling to fit to 1 page wide by 1 page tall, and with your name and date printed in the lower left footer and file name in the lower right footer.
b. Print the completed Cost worksheet in Value view, with portrait orientation, scaling to fit to 1 page wide by 1 page tall, and with your name and date printed in the lower left footer and file name in the lower right footer.
c. Print the completed Pricing worksheet in Formula view, with gridlines and row and column headings, portrait orientation, scaling to fit to 1 page wide by 1 page tall, and with your name and date printed in the lower left footer and file name in the lower right footer.
d. Print the completed Cost worksheet in Formula view, with gridlines and row and column headings, portrait orientation, scaling to fit to 1 page wide by 1 page tall, and with your name and date printed in the lower left footer and file name in the lower right footer.

## Chapter 2 Case Problem 3: SNICK'S BOARD SHOP

Snick's Board Shop is located in La Jolla, California, and specializes in complete and longboard skateboards and equipment. Owner Casey "Snick" Miller is curious to see how Excel might help him manage the business and account for its inventory. His girlfriend Caitlin handles the financial aspects of the business but hasn't had much experience with Excel. They have hired you to help him construct several worksheets to help the business better understand the financial and managerial aspects of the company.

To begin, you decide to create a worksheet of Snick's inventory. Start with worksheet ch2-07 and make the following changes:

1 Format the company name and worksheet title bold and italics.
2 Format the title of each column (located in row 5) bold with a bottom border.

3 Format all values for the column Price as Accounting Number Format.
4 Resize column C to 250 pixels and column D to 925 pixels.
5 Use Excel's Help feature to learn how to wrap text in a cell. Format all cells containing data in column C and D to wrap text.

6 Add one column (titled Quantity) to the right of column Product \# and then type 10 as the quantity for all items. Add an additional column (titled Retail Value) to the right of column Quantity. Format both column titles as all other column titles.

7 Insert a formula to calculate the retail value as quantity times price in cell I6, then fill down this formula for all cells in the table.

8 Insert a text label "Total" in cell H19 and a formula to calculate the total retail value of all products in cell I19.

9 Format cell I19 with a top and bottom double border.
10 Insert two additional rows after row 9.

11 Add two products in rows 10 and 11 as follows.

| Category | Ramp | Ramp |
| :---: | :---: | :---: |
| Manufacturer | Element | Mojo |
| Product Name | Element Launch Ramp | Mojo Wedge Ramp |
| Description | Blast over any and everything in your path. $16^{\prime \prime}$ tall $\times 46^{\prime \prime}$ long $\times 19$ $3 / 4^{\prime \prime}$ wide. Folds to $23^{\prime \prime}$ long $\times 19$ $3 / 4^{\prime \prime}$ wide $\times 6^{\prime \prime}$ high. Steel kick plate for smooth transition. Rubber capped feet to avoid slippage. Durable, weatherproof, and powdercoated. Made from partially recycled materials. 2 reflective Element logo stickers for night visibility. Connects easily to other Element Drop Spot obstacles. Imported. | Skate the unskateable or simply pop your tricks higher and further. 11" tall. Imported. |
| Price | 179.99 | 179.99 |
| Style | Black/Red | Black/Blue |
| Product \# | 65-01837 | 65-00011 |
| Quantity | 5 | 8 |

12 Change the name of Sheet1 to "Retail Value."
13 Create a copy of this worksheet and place it before Sheet2, then change the name of this sheet to "Cost."

14 Add a label at cell F2 of the Cost sheet called Cost \% in Bold, Italics.
15 Type $45 \%$ as the cost percentage in cell G2 of the Cost sheet. Change the name of the column "Retail Value" to "Cost." Center the Cost title.

16 Create a new formula in cell I6 to calculate cost as Price times Cost \% times Quantity. (Be sure to use absolute or relative references where appropriate.) Fill the formula in cell I6 down to all items.

17 Save the file as ch2-07_student_name (replacing student_name with your name).

18 Print the completed Pricing worksheet in Value view, with landscape orientation, scaling to fit to 1 page wide by 1 page tall, and with your name and date printed in the lower left footer and file name in the lower right footer.

19 Print the completed Cost worksheet in Value view, with landscape orientation, scaling to fit to 1 page wide by 1 page tall, and with your name and date printed in the lower left footer and file name in the lower right footer.

20 Print the completed Pricing worksheet in Formula view, with gridlines and row and column headings, landscape orientation, scaling to fit to

1 page wide by 1 page tall, and with your name and date printed in the lower left footer and file name in the lower right footer. Resize column D to 330 pixels and all other cells so that formulas are viewable. Don't save these changes.

21 Print the completed Cost worksheet in Formula view, with gridlines and row and column headings, landscape orientation, scaling to fit to 1 page wide by 1 page tall, and with your name and date printed in the lower left footer and file name in the lower right footer. Resize column D to 330 pixels and all other cells so that formulas are viewable. Don't save these changes.

## Chapter 2 Case Problem 4: ROSEY'S ROSES

Rosey's Roses is located in Savannah, Georgia, and specializes in the sale of roses. You, as the manager of the business, are curious to see how Excel might help you manage the business and account for its inventory. To that end, you have hired a local college student to construct several worksheets to help the business better understand the financial and managerial aspects of the company.

To begin, the two of you decide to create a worksheet of Rosey's inventory. Start with worksheet ch2-08 and make the following changes:

1 Format the company name and worksheet title bold and italics.
2 Move the company name and worksheet title from column C to column A .
3 Format the title of each column (located in row 4) bold with a bottom border.

4 Add a column (titled Quantity) to the right of column Description.
5 Format the Quantity title aligned centered, bold with a bottom border.
6 Format the values under the Quantity title as comma style with no decimals.
7 Resize column C to 95 pixels.
8 Add an additional column (titled Cost/Unit) to the right of column Quantity.
9 Format the Cost/Unit title aligned centered, bold with a bottom border.
10 Format the values under the Cost/Unit title as currency.
11 Resize column D to 115 pixels.
12 Add an additional column (titled Cost) to the right of column Cost/Unit.
13 Format the Cost title aligned centered, bold with a bottom border.

14 Format the values under the Cost title as currency.
15 Resize column E to 115 pixels.
16 Enter the following values for Quantity and Cost/unit

| Type | Description | Quantity | Cost/Unit |
| :--- | :--- | :---: | :---: |
| Shrub | Abraham Darby \#5 | 25 | $\$ 39.99$ |
| Shrub | Be My Baby \#5 | 30 | $\$ 18.99$ |
| Shrub | Deja Blu \#5 | 18 | $\$ 25.99$ |
| Shrub | Koko Loko \#7 | 17 | $\$ 17.99$ |
| Shrub | Peach Drift \#10 | 33 | $\$ 12.99$ |
| Shrub | Red Drift \#10 | 15 | $\$ 6.99$ |
| Shrub | Sedona \#5 | 3 | $\$ 14.99$ |
| Shrub | Sweet Intoxication \#5 | 17 | $\$ 9.99$ |
| Climber | Climbing Orange Crush \#7 | 16 | $\$ 32.99$ |
| Climber | Don Juan Climber \#5 | 25 | $\$ 37.99$ |
| Tree | Barbara Streisand 36in Tree | 50 | $\$ 52.99$ |
| Tree | Firefighter 36in Tree | 14 | $\$ 55.99$ |
| Tree | Trumpeter 36in Tree | 4 | $\$ 65.99$ |

17 Insert a formula to calculate the cost as quantity times cost/unit in cell E5.
18 Format this cell aligned right.
19 Fill down this formula for all cells in the table.
20 Insert a row below the last shrub listed.
21 Add one additional item into your newly added row with a type "Shrub," description "Wing Ding \#5," quantity " 30 ," and cost/unit "11.99."

22 Type Total in cell A20.
23 Insert a formula to calculate the total cost of all roses into cell E20.
24 Format cell E20 to align right with a top and double bottom border.
25 Save the file as ch2-08_student_name (replacing student_name with your name).

26 Print the completed worksheet in Value view, with portrait orientation with your name and date printed in the lower left footer and file name in the lower right footer.

