

Navigating a Workbook

Every new Excel workbook contains three worksheets. You can use only one worksheet and leave the other sheets blank, or you can use more than one worksheet to help organize your information. You can also add more worksheets if you need more than three. An Excel worksheet consists of a grid of rows and columns. Similar to a Word table, the intersection of a row and column is called a **cell**. Before working on the sales forecast worksheet, you need to start Excel, familiarize yourself with the workbook window, and save a blank workbook.

STEPS


open an existing one

QUICK TIP

You can quickly move the cell pointer to cell A1 by pressing **[Ctrl][Home]**.

QUICK TIP

To navigate quickly to a specific cell, press **[Ctrl][G]** to open the Go To dialog box, type the cell address you want to navigate to in the Reference text box, then click OK.


1. Click the Start button  on the taskbar, click All Programs, click Microsoft Office, then click Microsoft Excel 2010

Excel starts and a blank workbook opens, as shown in Figure G-1. Excel contains elements that are in every Office program, including the Ribbon, the File tab, the Quick Access toolbar, a document window, scroll bars, a status bar, View buttons, and window sizing buttons.

2. View the worksheet window

The cell with the dark border in the upper-left corner of the worksheet is called the **active cell**. The dark border surrounding the active cell is the **cell pointer**. You must click a cell to make it active before entering data. Every cell in a worksheet has a unique **cell address**, which is a specific location of a cell in a worksheet where a column and row intersect. A cell address consists of a column letter followed by a row number (such as B33). When you first start Excel, the active cell in the new workbook (Book1) is cell A1, where column A and row 1 intersect.

3. Click cell C1

Cell C1 becomes the active cell. Clicking a cell selects it and makes it active. Table G-1 lists several methods for selecting cells with the mouse or keyboard. Notice that the column and row headings of the active cell (column C and row 1) appear in a contrasting color. The **name box** shows the address of the selected cell, and the **formula bar**, located just above the column headings, shows the contents of the selected cell (it is currently empty). The mouse pointer changes to  when you move it over any cells in the workbook.

4. Press **[→]**, press **[↓]**, then press **[Tab]**

Cell E2 is now the active cell. You can move to and select a cell by clicking it, by using the arrow keys, or by pressing **[Tab]** (to move one cell to the right), **[Shift][Tab]** (to move one cell to the left), or **[Enter]** (to move one cell down).

5. Click the Sheet2 sheet tab

Sheet2 becomes the active sheet, and cell A1 is the active cell. To work with different sheets in a workbook, you click the sheet tab of the sheet you want to see.

6. Drag the  pointer from cell A1 to cell C5

Cells A1 through C5 are selected, a total of fifteen cells, as shown in Figure G-2. A group of cells that share boundaries and are selected is called a **cell range**. To reference a cell range, use the cell address of the first cell in the range followed by a colon and the cell address of the last cell in the range. The cell range you selected is A1:C5.

7. Select the cell range D8:D14


Cells D8 through D14 (a total of seven cells) are selected.

8. Click the Sheet1 sheet tab, then press **[Ctrl][Home]**

Clicking the sheet tab returns you to Sheet1, and the keyboard shortcut returns the cell pointer to cell A1.

9. Click the Save button  on the Quick Access toolbar, navigate to where you store your Data Files, then save the file as G-Kite Sales Forecast

QUICK TIP

To add a new worksheet, click the Insert Worksheet button  next to the Sheet3 sheet tab.

Entering Labels and Values

Entering data in a worksheet is similar to typing in a Word table. First, click the cell in which you want to enter data, then type the data you want to enter. After typing the data, you must accept the entry by pressing [Enter], [Tab], or an arrow key. Most worksheets contain labels and values. A **label** is text that describes data in a worksheet. **Values** are numeric data that can be used in calculations. You can edit a cell entry by double-clicking the cell to put the cell in Edit mode. In Edit mode, select the part of the cell entry you do not want, then type your corrections. This worksheet needs to provide the names of the kite products, net prices, estimated first year units, and estimated first year sales for each kite. To begin your work on the sales forecast worksheet, you decide to enter the labels and values.

STEPS

QUICK TIP

Pressing [Tab] has the same effect as pressing [→].

1. In cell A1, type Product

As you type, the text appears in cell A1 and in the formula bar, as shown in Figure G-3. The text you typed is a label that describes the first column of data in the worksheet.

2. Press [Tab]

Pressing [Tab] accepts your entry and activates the next cell in the row, cell B1. The name box shows B1 as the active cell. You need to type two more labels.

3. Type Net Price, press [Tab], then type Year 1 Units

Year 1 Units is too long to fit in cell C1; although it extends into cell D1, it is actually contained only in cell C1. If cell D1 contained any data, then only the part of the label that fits in C1 would appear.

4. Press [Enter]

Cell A2 is now the active cell. You need to type a kite product name in this cell.

5. Type Apache Delta, then press [↓]

Cell A3 is now the active cell. Pressing [↓] accepted the cell entry and moved the cell pointer to the cell below.

6. Type Volcano Blaster, press [Enter], type Tornado Twirler, press [Enter], type Whirling Delta, press [Enter], type Rocket Stuntman, press [Enter], type Soaring Eagle, then press [Enter]

You have typed all the product names. Cell A8 is the active cell. You need to make an edit to one of the names.

7. Double-click cell A4

Double-clicking the cell put cell A4 in **Edit mode**. Notice that the insertion point is flashing in cell A4. You can now select part of the cell entry to edit it, just like in Word.

8. Double-click Twirler, type Trickster, then press [Enter]

Cell A4 now contains the label Tornado Trickster.

9. Click cell B2, type 15.75, then press the Enter button ☒ on the formula bar

Unlike pressing [Enter] on the keyboard, clicking the Enter button keeps the cell active. Notice that some of Apache Delta is cut off in cell A2 because cell B2 now contains data.

10. Press [→], type 7500, then press ☒

You entered the value for Year 1 Units for the Apache Delta kite in cell C2.

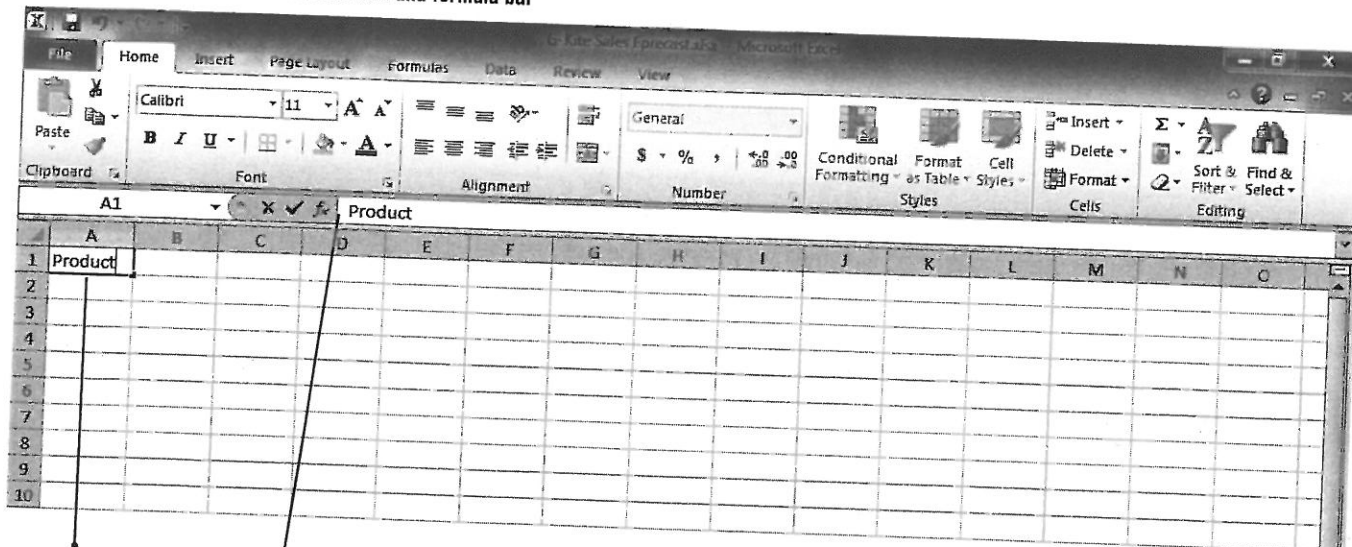
11. Enter the values shown in Figure G-4 for the range B3:C7, then save your changes

QUICK TIP

Pressing [Ctrl][Enter] has the same effect as clicking the Enter button.

Label - left align
Value - right "

FIGURE G-3: Worksheet text in active cell and formula bar



Cell A1 displays
text you typed

Formula bar displays
contents of active cell

Excel 2010

FIGURE G-4: Worksheet after entering labels and values

Labels

	A	B	C	D	E
1	Product	Net Price	Year 1 Units		
2	Apache De	15.75	7500		
3	Volcano B	22.25	10000		
4	Tornado T	22.25	12000		
5	Whirling D	26.75	7500		
6	Rocket Stu	29.75	7500		
7	Soaring Ea	39.25	5000		
8					
9					

Label in C1 spills into cell D1 because D1 is empty

Enter this data as shown

Column A labels are cut off
on right side because
adjacent cells contain data

Working with Columns and Rows

You can adjust the width of a column or the height of a row using the mouse, Ribbon, or shortcut menu. Using the mouse is a quick and easy method when you do not need an exact width or height. You can also insert or delete columns and rows using the Insert and Delete buttons in the Cells group on the Home tab. You need to insert two rows above the labels and enter a worksheet title in the new top row. You also need to adjust the column widths so that the labels will be visible.


STEPS

QUICK TIP


To AutoFit more than one column at a time, drag to select all the column headings of the columns you want to widen, then double-click any column boundary in the selection.

QUICK TIP


To insert a column, click the column heading to the right of where you want the new one, then click Insert in the Cells group.

1. Position the mouse pointer on the column boundary between column heading A and column heading B so that the pointer changes to , as shown in Figure G-5

The boxes containing the letters A and B are **column headings**, and the boxes containing numbers in front of each row are **row headings**.

2. Double-click  between column headings A and B

Double-clicking a column boundary automatically widens or narrows it to fit the longest entry in the column using a feature called **AutoFit**. The kite names in cells A2:A7 are now fully visible.

3. Point to the column boundary between columns C and D, then drag  to the right of the s in "Units" in row 1

Column C is now wider, so that the entire label Year 1 Units now fits in cell C1. When you drag a boundary, a dotted line appears to help you position it right where you want it.

4. Click the row 1 row heading


Row 1 is now selected. Clicking a row heading selects the entire row. You want to insert two rows above row 1.

5. Click the Insert button in the Cells group twice

Two new rows are inserted above the labels row. The cell addresses for the cells containing the labels and values you entered have all changed to reflect their new locations.

6. Click cell A1, type Year 1 Kite Product Sales Forecast, then press [Enter]

The worksheet title now appears in cell A1.

7. Point to the boundary between the row 2 and 3 row headings, then drag  down until the ScreenTip reads Height: 24.00 (32 pixels), as shown in Figure G-6

The height of row 2 changes from 12 to 24 points (32 pixels). The extra space creates a visual separation between the worksheet title and the labels. You can also use the Format button in the Cells group to adjust column width or row height if you know the precise measurement you want.

8. Click cell A2, click the Format button in the Cells group on the Home tab, then click Row Height

The Row Height dialog box opens, as shown in Figure G-7. The Row height text box displays the selected value 24, the height you specified in Step 7.

9. Type 30, click OK, then save your changes

The height of row 2 increases to 30 points (40 pixels) to reflect the change you made.

Using Formulas

To perform a calculation in a worksheet, you enter a formula in a cell. A **formula** is an equation that performs a calculation. Formulas start with an equal sign (=) and can contain numbers, mathematical operators, and cell references. A **cell reference** is a cell address, such as E44, that identifies the location of a value used in a calculation. Table G-1 lists some mathematical operators and sample formulas. If more than one operator is used in a formula, Excel performs the calculations in the order listed in Table G-2, which is a standard order used in math called the **order of precedence**. You can copy and move formulas just like other data in a worksheet. When you copy a formula to a new cell, Excel automatically replaces the original cell references with cell references that are in the same relative position as those in the original formula. This is called **relative cell referencing**. In the kite sales forecast worksheet, you need to create a formula that calculates the year 1 forecast for each product, which is the net price multiplied by the year 1 units. You first create a formula that calculates the year 1 sales for the first product, then copy the formula to other cells.

STEPS

1. Click cell D3, type Year 1 Sales, then press [Enter]

Year 1 Sales is now a label in cell D3, and the active cell is now D4.

2. Type =

The equal sign (=) indicates that you are about to enter a formula in cell D4. Everything you enter in a cell after the equal sign, including any numbers, mathematical operators, cell references, or functions, is included in the formula.

3. Click cell B4



A dotted border appears around cell B4, and B4 now appears in both the formula bar and cell D4.

4. Type * (an asterisk), then click cell C4

See Figure G-8. In Excel, the asterisk symbol is the operator for multiplication. When Excel calculates the formula, it will multiply the value in cell B4 by the value in cell C4. Using cell references ensures that the formula will automatically update if the values in B4 and C4 change.

5. Click the Enter button  on the formula bar

The result of the formula (118125) appears in cell D4. Notice that although the formula's result appears in cell D4, the formula =B4*C4 appears in the formula bar. To save time, you can copy the formula in D4 to cells D5:D9.

6. Point to the small black square in the lower-right corner of cell D5, then when the pointer changes to , drag  down to cell D9

Excel copies the amount formula in cell D4 into cells D5 through D9. Notice that cells D5:D9 display the results of the copied formulas, as shown in Figure G-9. The small black square that you dragged is called the **fill handle**. The icon that appears after you release the mouse button is the Auto Fill Options button, which you can click to choose additional options when copying cells.

7. Click cell D6, then save your changes

The formula bar shows the formula =B6*C6. Notice that the copied formula uses different cell references than those used in the original formula. When Excel copied the formula to cell D6, it adjusted the original cell references relative to the new formula location.

QUICK TIP

You can also enter cell references in a formula by typing them, using either uppercase or lowercase letters.

QUICK TIP

You can also double-click the fill handle to Auto Fill a formula to the adjacent cells below. The formula will be copied down to the last cell that is next to a cell containing data.

QUICK TIP

If you want your worksheet to display formulas instead of their results in cells, click the Formulas tab, then click Show Formulas in the Formula Auditing group.


Auto Recalculation

Screw ups

not calculator's result

not the numbers but where " " are

Using AutoSum

Excel comes with a wide variety of **functions**, which are prewritten formulas designed for particular types of calculations. The most frequently used worksheet function, **SUM**, totals all numbers and cell references included as function arguments. An **argument** is information a function needs to make a calculation, and can consist of values (such as 100 or .02), cell references (such as B3), or range references (such as A9:G16). Functions save time and help ensure accuracy, and they are available for both simple calculations and extremely complex ones. Each Excel function has a name that you usually see in all capital letters, such as AVERAGE or DATE. Because the SUM function is so commonly used, it has its own button on the Home tab also known as, the AutoSum button.  You are now ready to add up the Year 1 Units and Year 1 Sales columns. You decide to use the AutoSum button.

STEPS

QUICK TIP

You can view the sum and average of a selected range on the status bar, as well as the number of cells in the range (indicated by the Count: value).

1. Click cell C10

Cell C10 is now the active cell. You want C10 to display the total year 1 units for all of the kite products, which is the sum of the range C4:C9.

2. Click the AutoSum button in the Editing group on the Home tab

A flashing dotted border appears around the cells in the range C4:C9, as shown in Figure G-10, indicating that these are the cells that Excel assumes you want to add together. The function =SUM(C4:C9) appears in cell C10 and in the formula bar, ready for you to edit or accept. When you use a function, Excel suggests a cell or range to add. With AutoSum, it is usually the group of cells directly above or to the left of the cell containing the function.

3. Click the Enter button on the formula bar

Excel accepts the formula and the result, 49500, appears in cell C10.

4. Click cell D10, click the AutoSum button, then click

When you clicked the AutoSum button, Excel guessed (correctly) that you wanted to calculate the sum of cells D4:D9, the cells directly above cell D10. See Figure G-11.


5. Click cell B4, type 22.25, then click

Changing cell B4 automatically changed the formula results in cell D4 (for the Apache Delta Year 1 Sales) and also for the total sales in cell D10, as shown in Figure G-12, because these formulas use the value in cell B4. You can see what a valuable tool Excel is; changing one value in a cell changes the results in any cell that contains a cell reference to that cell.

6. Save your changes


automatic recalculation

Changing Alignment and Number Format

When you enter data in a cell, Excel automatically left-aligns text and right-aligns values. You can change the alignment to left-, right-, or center-align cell contents using the buttons in the Alignment group on the Home tab. You can also use the Merge and Center button to merge several cells into one cell and center the text in the merged cell. Using the Merge and Center button is helpful for formatting a worksheet title so that it is centered above the worksheet data. You can also change the format of numbers to make your worksheet easier to read using the buttons in the Numbers group. For instance, you can quickly format a value or range as currency or as a date, or format numbers so that they contain commas, decimals, or both. You can also insert rows and columns in your worksheet; when you do so, any cell references are updated to reflect the change.  You decide to apply number formats and adjust alignments to improve the worksheet's appearance. You also need to add a new column that includes the release date for each kite, format the column labels in bold, and merge and center the worksheet title.

STEPS

QUICK TIP

To increase the number of digits following a decimal point, click the Increase Decimal button  in the Number group.

formulas adjust











*(\$ neg.)
##*

QUICK TIP


The Alignment group also has buttons to align text at the top, middle, or bottom of a cell.

QUICK TIP


The Orientation button in the Alignment group lets you align cell contents at any angle you specify.

1. Select the range C4:C10, then click the Comma Style button  in the Number group
The numbers in column C are now formatted with a comma and include two decimal places. The decimal places are not necessary for the unit estimates, since all the values are whole numbers.
2. Click the Decrease Decimal button  in the Number group twice
The numbers in column C now appear without decimals.
3. Select the range B4:B9, press and hold [Ctrl], select the range D4:D10, then click the Accounting Number Format button  in the Number group
Pressing and holding [Ctrl] when you select cells lets you select nonadjacent cell ranges. The Net Price values in column B and Year 1 Sales values in column D are now formatted as currency, as shown in Figure G-13.
4. Click the column C heading, then click the Insert button in the Cells group
A new column is inserted to the left of the Year 1 Units column. You need to enter a label in cell C3.
5. Click cell C3, type Release Date, click the Enter button  on the formula bar, then click the Wrap Text button  in the Alignment group
Clicking the Wrap Text button wrapped the Release Date text to two lines. Now the entire label is visible in cell C3.
6. Click cell C4, type March 1, 2013, then click 
Excel recognized that you typed a date in cell C4 and changed the format to 1-Mar-13. You can use the Number Format list in the Number group to change the date format.
7. Click the Number Format list arrow, as shown in Figure G-14, then click Short Date
The format of the date in cell C4 is now 3/1/2013. You can copy this date to the other cells in column C using the Copy and Paste commands.
8. Click the Copy button  in the Clipboard group, select the range C5:C9, click the Paste button  in the Clipboard group, then press [Esc]
Now all cells in the range C5:C9 display the date 3/1/2013. *multiple paste*
9. Click the row 3 heading, click the Center button  in the Alignment group, then click the Bold button  in the Font group
Each label in row 3 is now center-aligned and bold, and stands out from the data in the worksheet.
10. Select the range A1:E1, click the Merge and Center button in the Alignment group, then save your changes
As shown in Figure G-15, the worksheet title is centered across the five selected cells, which have merged into one cell. Note that the cell address for this cell is still A1.

Enhancing a Worksheet

You can enhance an Excel worksheet to make it look more professional and increase its visual appeal. In Page Layout view, you can add headers and footers containing information that you want to include at the top or bottom of each page. You can also apply a theme, and add shading and borders to set apart titles, labels, and values.  You decide to add a header that contains your name, and a footer that contains the date and file name. You also decide to apply a theme and add borders and shading.


STEPS

1. Click the Page Layout button  on the status bar, then click the Click to add header placeholder in the header area

The worksheet is now in Page Layout view, and the insertion point is above the worksheet title in the middle of the header's three sections.

2. Click the right section of the header area, then type your name

Your name appears in the right section of the header, right-aligned, as shown in Figure G-16. The Header & Footer Tools Design tab is now available on the Ribbon.


3. Click the Header & Footer Tools Design tab if necessary, then click the Go to Footer button  in the Navigation group

4. Click the left section of the footer area, then click the Current Date button in the Header & Footer Elements group

Excel inserts the code "& [Date]" into the left section of the footer area. When you click outside of this section, the actual date will appear here.

5. Click the right section of the footer area, click the File Name button in the Header & Footer Elements group, then click any cell in the worksheet


The filename appears in the right side, and the date is in the left side of the footer area, as shown in Figure G-17.

6. Click the Normal view button  on the status bar, then press [Ctrl][Home]


Cell A1 is now active, and the worksheet appears in Normal view. The vertical dotted line to the right of column H indicates the page break line. This line is helpful to see if your worksheet contains many columns and you need to fit all columns on one page.

7. Click the Page Layout tab, click the Themes button in the Themes group, then click the Concourse theme

The Concourse theme is applied to the worksheet.

8. Click the Home tab, select the range A1:E10, click the Borders list arrow  in the Font group, then click All Borders

Cells A1:E10 now have borders applied to them.

9. Select the range A3:E3, click the Fill Color list arrow  in the Font group, click Light Turquoise, Background 2 (third square in top row), click cell A1, then save your changes

The column labels are now shaded in light blue. Compare your screen to Figure G-18.

QUICK TIP


If your worksheet contains multiple pages, you can click the Page Number button to insert a page number.

QUICK TIP

You can insert a preset header or footer, which contains a selected combination of text and codes, by clicking the Header button or Footer button in the Header & Footer group, then clicking a selection; Excel replaces any existing text with the preset.

grid does not print

Previewing and Printing a Worksheet

When you finish working with a worksheet and have saved your work, you are ready to print it. Just like in Word, you can use the Print tab in Backstage view to preview the printed worksheet and specify settings. You can change the orientation, adjust margins, specify the printer, specify the paper size, and more.  You have finished working with the worksheet, and are ready to preview and print it. (Note: Many schools limit printing in order to conserve paper. If your school restricts printing, skip Step 6.)

STEPS

QUICK TIP



To open the Print tab of Backstage view using the keyboard, press **Ctrl][P]**.

QUICK TIP

To change the margin settings, click Normal Margins in the Settings area, then click a different setting.

QUICK TIP

As an alternative to Print Preview, you can verify the page breaks in your worksheet by clicking the Page Break Preview button on the status bar. You can adjust where page breaks are located by dragging them with your mouse.

1. **Click the File tab, then click Print**
The Print tab opens in Backstage view, and the sales forecast worksheet appears in the Print Preview area, as shown in Figure G-19. Notice that the header and footer text appear at the top and bottom of the page. The worksheet is set to print in **portrait orientation** (where the page is taller than it is wide); you can change this to **landscape orientation** (where the page is wider than it is tall).
2. **Click Portrait Orientation in the Settings area, then click Landscape Orientation**
The Print Preview area shows the worksheet in landscape orientation, as shown in Figure G-20.
3. **Click the Show Margins button  in the lower-right corner of the Print Preview area**
Lines appear on the worksheet indicating the location of the margins at the Normal setting. The margins look fine at the Normal setting, so there is no need to change this setting.
4. **Click the Zoom to Page button  in the lower-right corner of the Print Preview area**
The worksheet appears up close in the Print Preview area, giving you a magnified view of the worksheet data, as shown in Figure G-21.
5. **Verify that your printer is on and connected to your computer, and that the correct printer appears in the Name text box**
6. **If your school allows printing, click the Print button, otherwise skip to Step 7**
The document prints, and the Home tab opens.
7. **Save your changes, click the File tab, then click Exit**
The worksheet is saved, and the worksheet and Excel both close.
8. **Submit your completed worksheet to your instructor**

Select the best answer from the list of choices.

18. The name of the cell located in column F and row 223 is:
- 223F
 - F223
 - F222
 - 22F3
19. Which of the following formulas is NOT correctly written?
- B7+A5=
 - =A5*B7
 - =7+B55
 - =B22*7
20. Cell E7 contains the formula =C7+D7. If you copy the formula in E7 to cell E8, which of the following formulas will E8 contain?
- =C6+D6
 - =D7+D8
 - =C8+D8
 - =C7+C8
21. Which of the following actions does NOT accept a formula after you type it?
- Pressing [Tab]
 - Pressing [Enter]
 - Clicking ☒
 - Pressing [Ctrl][P]
22. For which of the following tasks would you NOT use the fill handle?
- Copying a formula from cell A5 to cell F10
 - Copying a formula from cell A2 to the range A3:A7
 - Copying a label from cell A2 to A3
 - Copying a formula from cell F22 to the range F23:F25

Skills Review

1. Navigate a workbook.

- Start Microsoft Excel.
- Identify the program window elements without referring to the lesson material.
- Click cell H22, then click cell B25.
- Switch to Sheet2, select the range H2:K22.
- Switch to Sheet1, then use the keyboard to place the cell pointer in cell A1.
- Save the workbook as **G-Weekly Sales** in the drive and folder where you store your Data Files.

2. Enter values and labels.

- Starting in cell A1, type the following labels in the range A1:D1:
Bread Type Quantity Sold Unit Price Total Sales
- Enter the following labels for Bread Type in the range A2 through A8: **White, Whole Wheat, Rye, Pumpernickel, Bagels, Muffins, Specialty Breads.**
- Use the table below as a guide to enter the values for Quantity Sold (in the range B2:B8) and the values for Unit Price (in the range C2:C8):

Quantity Sold	Unit Price
1217	2.25
1457	2.95
122	2.95
87	2.95
1356	.75
1785	.95
102	5.95

3. Work with Columns and Rows.

- Increase the size of column A by dragging the appropriate column boundary so that the column is wide enough to fit all the labels in the range A1:A8.
- Increase the width of column B by double-clicking the appropriate column boundary.
- Insert two rows above row 1.

Skills Review (continued)

- d. Enter the label **Uncle Bob's Bread Shop Weekly Sales** in cell A1. Apply bold formatting to cell A1.
 - e. Increase the height of row 2 to 33 pixels using the dragging method. Open the Row Height dialog box to verify that the row height is 33.
 - f. Save your changes.
4. **Use formulas.**
- a. Type a formula in cell D4 that multiplies the value of cell B4 and the value of cell C4, then use a button on the formula bar to accept the entry. When you create the formula, add the cell references to the formula by clicking the cells.
 - b. Type a formula in cell D5 that multiplies the value of cell B5 and the value of cell C5, then use a keyboard command to accept the entry.
 - c. Use the fill handle to copy the formula you entered in cell D5 to the range D6:D10.
 - d. Save your changes.
5. **Use AutoSum.**
- a. Use the AutoSum button to enter a formula in B11 that adds the values in the cell range B4:B10.
 - b. Use the AutoSum button to enter a formula in C11 that adds the values in the cell range C4:C10.
 - c. Use the AutoSum button to enter a formula in D11 that adds the values in the cell range D4:D10.
 - d. Change the Quantity Sold value for Pumpernickel to 99, then view the changes in cells D7 and D11.
 - e. Save your changes.
6. **Change alignment and number format.**
- a. Apply the Comma Style number format to the cell range B4:B11. Use a button to remove the decimals for the selected range.
 - b. Apply the Accounting number format to the cell range C4:D11.
 - c. Insert a column to the left of column D. Enter the label **Close Date** in cell D3. Format this cell so that the label wraps to two lines in the cell.
 - d. Enter the date **May 4, 2013** in cell D4. Use the Number Format list to apply the Short Date format to this cell. Use the fill handle to copy cell D4 to the range D5:D10. Widen column D, if necessary, so that all the dates are visible.
 - e. Center the labels in the cell range A3:E3. Apply bold formatting to cells A3:E3.
 - f. Merge and center cells A1:E1.
 - g. Save your changes.
7. **Enhance a worksheet.**
- a. Change to Page Layout view.
 - b. Type your name in the right section of the header.
 - c. Switch to the footer, then insert the current date in the left section of the footer. Insert a code for the filename in the right section of the footer.
 - d. Move the cell pointer to cell A1, then change the view to Normal view.
 - e. Apply the Angles theme to the worksheet.
 - f. Apply the fill color Orange, Accent 2, Lighter 80% to the labels in row 3 (range A3:E3).
 - g. Apply the All Border border style to the range A1:E11.
 - h. Save your changes.
8. **Preview and print a worksheet.**
- a. Preview the worksheet using the Print tab in Backstage view.
 - b. Change the orientation to Landscape.
 - c. Change the orientation back to Portrait.
 - d. Use a button to view the margin rules on the worksheet.
 - e. Use a button to zoom in on the worksheet.

Skills Review (continued)

- If your school permits printing, verify that the printer settings are correct, then print the worksheet. Compare your completed worksheet to Figure G-23.
- Save your changes, close the workbook, exit Excel, then submit your completed workbook to your instructor.

FIGURE G-23

Your Name

Bread Type	Quantity Sold	Unit Price	Close Date	Total
White	1,217	\$ 2.25	5/4/2013	\$ 2,738.25
Whole Wheat	1,457	\$ 2.95	5/4/2013	\$ 4,298.15
Rye	122	\$ 2.95	5/4/2013	\$ 359.90
Pumpernickel	99	\$ 2.95	5/4/2013	\$ 292.05
Bagels	1,356	\$ 0.75	5/4/2013	\$ 1,017.00
Muffins	1,785	\$ 0.95	5/4/2013	\$ 1,695.75
Specialty Breads	102	\$ 5.95	5/4/2013	\$ 606.90
	6,138	\$ 18.75		\$ 11,008.00

5/10/2013 G-Weekly Sales.xlsx

Independent Challenge 1

You are a sales representative at Green Earth Stationery, Inc., a small environmentally friendly paper products company based in Chicago. Your manager, Anne Badders, has asked you to provide her with a worksheet that shows the top five orders in your region for the month of April. The summary needs to include the order number, account name, order date, order total, and payments received. The worksheet also needs to show the monthly sales total and the outstanding balance due.

- Open a new workbook, then save it as **G-Top Five Orders** in the drive and folder where you store your Data Files.
- Enter the title **Top Five Orders for April, Midwest Region** in cell A1.
- Enter the information shown in the table below, starting in cell A3.

Order Number	Account Name	Date	Total	Paid
4596	Card Giant, Inc.	April 10, 2013	15946	7865
4597	Office Hub	April 17, 2013	7247	0
4987	Stationery, Etc.	April 19, 2013	6534	5024
5094	Paper Mega Store	April 22, 2013	12259	8540
5895	Office Champ	April 30, 2013	4095	4095
- Widen or narrow each column as necessary so that all the labels and data in the range A3:E8 are visible.
- Add the label **Balance Due** in cell F3. Apply bold formatting to the range A3:F3. Widen the column if necessary.
- Enter a formula in cell F4 that subtracts cell E4 from cell D4, then use the fill handle to copy the formula to cells F5:F8.
- Use the AutoSum button to enter a formula in cell D9 that adds the values in the range D4:D8. Then change the amount in cell D6 to 9544.
- Use the fill handle to copy the formula in cell D9 to cells E9 and F9.
- Center-align the order numbers in cells A4:A8, then center-align the labels in row 3.
- Apply the Accounting number format to cells D4:F9.
- Merge and center cells A1:F1. Apply bold formatting to the merged cell. Increase the font size of the title in cell A1 to 14 point. (Hint: Select cell A1, click the Font Size list arrow, then click 14.)
- Change the date format in the range C4:C8 to the Short Date format.
- Apply bold formatting to the totals in row 9.
- Add your name in the right section of the header. Add the filename to the right section of the footer.
- Apply the Solstice theme to the workbook.
- Apply All Borders to the range A3:F9, then apply a Thick Box Border around the range A3:F8.
- Apply a fill color to the range A9:F9, choosing the lightest shade of green (Green, Accent 4, Lighter 80%). Apply this same shading to the range A3:F3.

Independent Challenge 2 (continued)

- j. Merge and center cells A1:F1, so that the worksheet title is centered in the merged cell A1. Then merge and center cells A2:F2, so that the worksheet subtitle is centered in the merged cell A2.
- k. Apply bold formatting to the worksheet title, the labels in row 4, the city labels in A5:A9, and the Totals label and values in row 10.
- l. Apply a theme of your choosing to the workbook. Enhance the worksheet further by applying fill colors and borders where appropriate to make the worksheet visually appealing. Increase column widths as necessary so that all labels and values are visible in each cell.
- m. Insert your name in the left section of the header.
- n. Preview the worksheet in Backstage view. Save your changes, close the workbook, and exit Excel. Submit your completed workbook to your instructor.

Independent Challenge 3

You own a used car business called Joe's Car Shop. You buy preowned vehicles, pay contractors to fix them up, and then resell them for a profit. You decide to create a spreadsheet to track your profits for cars you have sold in the first quarter.

- a. Create a new workbook and save it as **G-Q1 Profits** in the drive and folder where you store your Data Files.
- b. Enter the company name **Joe's Used Autos** in cell A1. Enter **Q1 Profits** in cell A2.
- c. Enter the labels and data shown in the table below, starting in cell A4. Use Accounting number formatting for the cells that contain dollar amounts.

<u>Vehicle</u>	<u>Purchase Price</u>	<u>Cost to Fix</u>	<u>Sale Price</u>	<u>Date Sold</u>
Toyota Corolla	\$750	\$350	\$1,750	January 15, 2013
Nissan Sentra	\$2,025	\$764	\$7,995	February 1, 2013
Ford Taurus	\$2,250	\$578	\$5,995	February 8, 2013
Honda Civic	\$2,015	\$1,095	\$7,775	March 1, 2013
Mazda Protege	\$1,725	\$775	\$7,995	April 1, 2013

- d. Adjust the width of the columns as necessary, so that all the data in each cell in the data area is visible.
- e. Insert a new column to the left of Sale Price. Enter the label **Total Investment** in cell D4. Format the label and adjust the column width so that the label is on one line in the cell.
- f. Enter a formula in cell D5 that sums cells B5 and C5.
- g. Copy the formula in cell D5 to cells D6:D9.
- h. Type the label **Profit** in cell G4. Enter a formula in cell G5 that calculates the total profit for the Toyota Corolla. (Hint: The formula needs to subtract the value in the Total Investment cell from the Sale Price cell.)
- i. Copy the formula in cell G5 to cells G6:G9.
- j. Add the label **Total** to cell A10. Enter a formula in cell B10 that sums cells B5:B9. Use the Copy and Paste commands to copy this formula to cells C10:E10 and to cell G10.
- k. Center-align the labels in row 4, then apply bold formatting to these cells. Apply bold formatting to row 10.
- l. Change the number format of the Date Sold values to the Short Date format.
- m. Format the worksheet by applying a theme, adding borders, and adding fill colors to enhance its appearance. Format the worksheet title in cell A1 so that the font size is larger than that in the rest of the worksheet.

Independent Challenge 3 (continued)

- Add your name to the center section of the header. Add the filename to the right section of the header. Save your changes.
- Preview the worksheet in Backstage view. Change the orientation to Landscape. Save your changes. Figure G-24 shows the completed worksheet with possible formatting options applied.

FIGURE G-24

Your Name

G-Q1 Profits.xlsx

Joe's Used Autos
Q1 Profits

Vehicle	Purchase Price	Cost to Fix	Total Investment	Sale Price	Date Sold	Profit
Toyota Corolla	\$ 750.00	\$ 350.00	\$ 1,100.00	\$ 1,750.00	1/15/2013	\$ 650.00
Nissan Sentra	\$ 2,025.00	\$ 764.00	\$ 2,789.00	\$ 7,995.00	2/1/2013	\$ 5,206.00
Ford Taurus	\$ 2,250.00	\$ 578.00	\$ 2,828.00	\$ 5,995.00	2/8/2013	\$ 3,167.00
Honda Civic	\$ 2,015.00	\$ 1,095.00	\$ 3,110.00	\$ 7,775.00	3/1/2013	\$ 4,665.00
Mazda Protégé	\$ 1,725.00	\$ 775.00	\$ 2,500.00	\$ 7,995.00	4/1/2013	\$ 5,495.00
Total	\$ 8,765.00	\$ 3,562.00	\$ 12,327.00	\$ 31,510.00		\$ 19,183.00

Advanced Challenge Exercise



- Enter the label **Profit as %** in cell H4. Use the Format Painter button to copy the formatting of cell G4 to H4. Widen column H if necessary so that the entire label fits in cell H4.
- Enter a formula in cell H5 that calculates the percent of the profit made. (Hint: Divide cell G5 by cell D5.)
- Copy the formula in cell H4 to cells H5:H10.
- Select cells H4:H10, then click the Percent style button in the Number group on the Home tab.
- Apply the same border style and fill colors that are applied to cells G5:G10 to the cells in range H5:H10. Save your changes.

- Close the workbook, exit Excel, then submit your completed workbook to your instructor.

Real Life Independent Challenge

You just got a new job that pays more than your current position. You have decided to move into a better apartment, without roommates, and you have found a new apartment that looks perfect. However, you are concerned that the new apartment will hurt your ability to save for a house. Not only will the new apartment cost more to rent, but you will need to pay additional money for other living expenses that will be necessary in this new situation. For instance, you currently walk to work, but the new job will require you to lease a car and pay for gas and insurance. You will also have to pay more for utilities and cable TV, since you will not be sharing these expenses anymore. You decide to create a budget spreadsheet that compares your current living expenses to your expected new expenses in the new apartment, and determine what impact this will have on your monthly savings.

- Start Excel, then save a new workbook as **G-Budget Comparison** in the drive and folder where you store your Data Files.
- Enter the title **Budget Comparison** in cell A1.
- Enter the following labels in cells A3:A5:

New Monthly Salary

Current Monthly Salary

Salary Increase

Visual Workshop

Create the worksheet shown in Figure G-25 using the commands, formulas, and formatting skills you learned in this unit. Use formulas in cells D5:D12 to calculate the June total revenue for each cottage. Use formulas in G5:G12 to calculate the July total revenue for each cottage. Use the AutoSum button for the totals shown in row 13. Enter a formula in cell B15 that sums the June and July weeks. Use a formula in cell B17 that sums the total revenue for June and July. Apply the Apothecary theme, and apply the borders and shading shown. Save the workbook as **G-Summer Rental Revenue** in the drive and folder where you store your Data Files, with your name in the center section of the footer. Save and preview the worksheet, then submit it to your instructor.

FIGURE G-25

Castaway Cottage Rentals

June and July Rental Revenue

Cottage Name	June Weekly Rate	June Weeks Rented	June Total Revenue	July Weekly Rate	July Weeks Rented	July Total Revenue
Bird's Nest	\$ 695	2	\$ 1,390	\$ 995	4	\$ 3,980
Cozy Cabana	\$ 795	3	\$ 2,385	\$ 1,095	3	\$ 3,285
Bear Cave	\$ 645	4	\$ 2,580	\$ 945	4	\$ 3,780
Sunset Hideaway	\$ 1,095	2	\$ 2,190	\$ 1,395	3	\$ 4,185
Sunshine Cabin	\$ 1,125	1	\$ 1,125	\$ 1,495	4	\$ 5,980
Blossom Cottage	\$ 725	2	\$ 1,450	\$ 1,025	4	\$ 4,100
Munchkin Castle	\$ 695	3	\$ 2,085	\$ 995	3	\$ 2,985
Captain's Nook	\$ 695	3	\$ 2,085	\$ 1,195	4	\$ 4,780
Totals		20	\$ 15,870		27	\$ 33,075

Total Weeks 49

Total Revenue: \$48,945

Your Name