Format button, and then **Column Width,** and type in the width you want. Alternatively, you can click the **Select All** button (the gray box above Row 1 and to the left of Column A) and then drag the boundary. To make the column automatically fit the contents of the selected cell, double-click the boundary to the right of the column.

Formulas

ENTERING FORMULAS

A *formula* is an equation that performs calculations between cells in a worksheet or table. A formula always begins with an equal sign. A simple formula may contain cell references and operators.

To enter a formula:

1. Click the cell in which you want to enter the formula.

2. Type = (an equal sign).

3. Type the formula.

4. Click outside the cell or press **Enter** (see Figure T2.21).

If a formula has more than one operator, Excel will perform mathematical operations in this order:

■ Exponentiation.

■ Multiplication and division.

■ Addition and subtraction.

Adding parentheses around an operation will override this order, forcing Excel to perform calculations within the parentheses first.
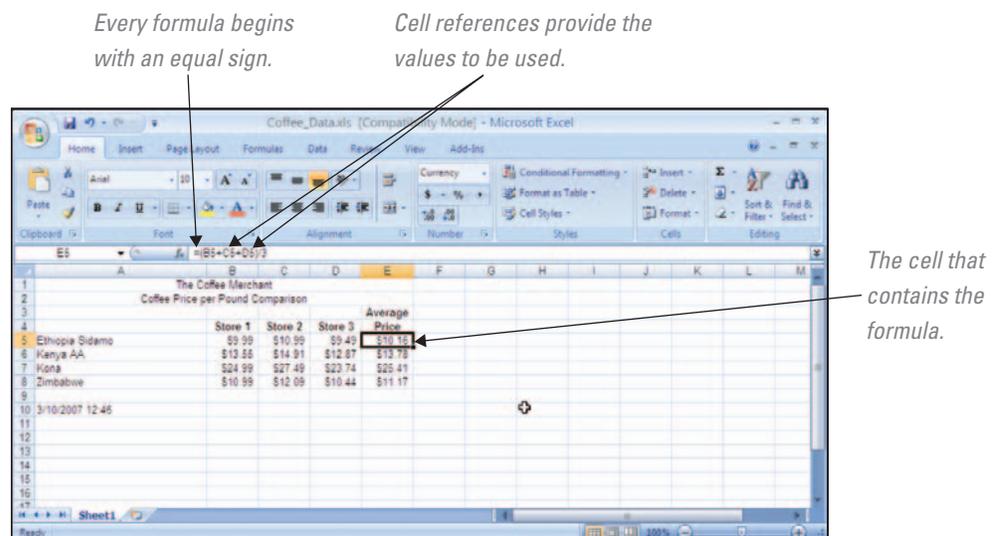
USING THE FORMULA BAR

To enter a formula in the formula bar:

1. Select the cell in which you want to add the formula.

2. In the formula bar, type = (an equal sign).

3. Enter the formula (including any functions, operators, references, and/or constants).

**4.** Click the **Enter Formula** button (see Figure T2.22).

Formulas can be complex equations. Often when you first enter a formula, you will not get the result you intended. This may be because a cell reference has changed, or

Every formula begins with an equal sign.

Cell references provide the values to be used.

The cell that contains the formula.

Click the Enter Formula button when you are done.

Click inside the formula bar to edit the formula.
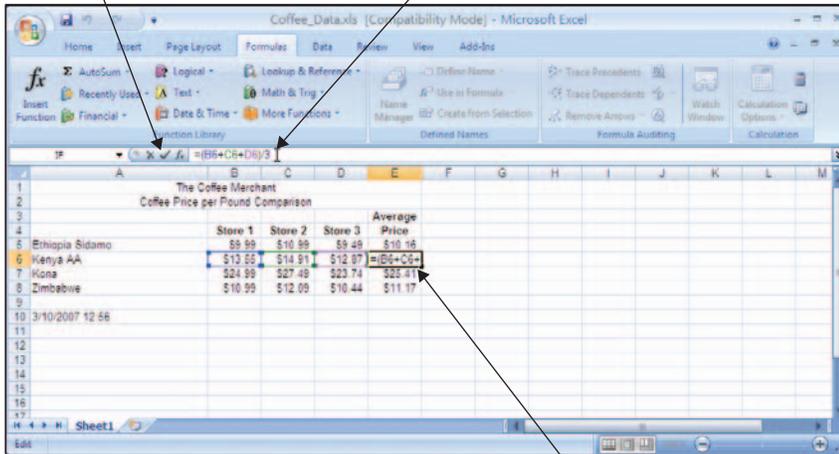
Select the cell with the formula you want to edit.

because the operations are being performed in an undesired order. Use the formula bar when you need to edit a formula.

To edit a formula using the formula bar:

1. Select the cell containing the formula you want to change.

2. Click inside the formula bar.

3. Click and drag to highlight the part of the formula you want to change.

4. Make the changes to the formula.

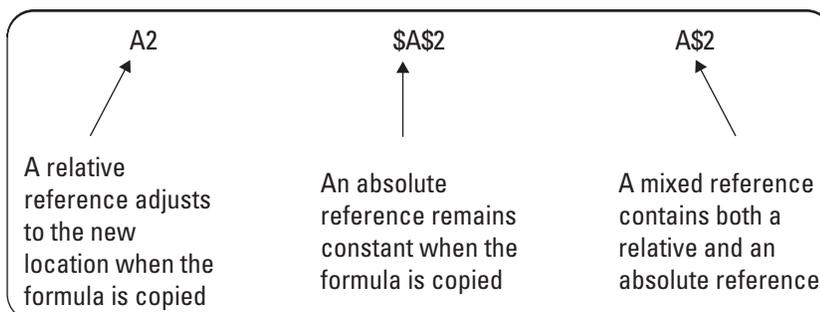**5.** Click the **Enter Formula** button.

USING ABSOLUTE AND RELATIVE REFERENCES

Cell references can be relative, absolute, or mixed. A *relative reference* is a reference that adjusts to the new location in the worksheet when the formula is copied. An *absolute reference* is a reference whose location remains constant when the formula is copied. A *mixed reference* is a reference that contains both a relative and an absolute reference. Figure T2.23 displays an example of each.
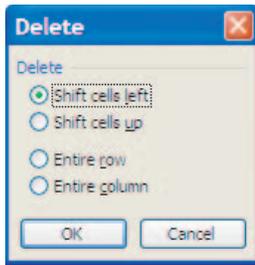
To enter an absolute or relative reference:

1. Select the cell to enter a formula.

2. Type the = (equal sign) and the *name of the cell.*

■ To enter an absolute reference, type a **$,** *the column name,* **another $,** and *the row name* (e.g., A1).

■ To enter a mixed reference, type a *relative reference* and an *absolute reference* in the cell reference (e.g., A$1 or A1$).

By default, formulas use relative references. If you want your formula to have an absolute reference, you must change the reference to absolute.

A2 — A relative reference adjusts to the new location when the formula is copied

A2 — An absolute reference remains constant when the formula is copied

A$2 — A mixed reference contains both a relative and an absolute reference

FIGURE T2.8

Deleting a Cell

To delete a cell:

1. Select the cell or cells that you want to delete.
2. Click the **Home** tab.
3. Click the **Delete Cells** button arrow, and then click **Delete Cells.**
4. Click the **Shift cells left** or **Shift cells up** radio button (see Figure T2.8).
5. Click **OK.**

Pressing the **Delete** key on the keyboard will delete the contents of the cell but not the cell itself.

MERGING AND SPLITTING CELLS

Merging and splitting cells is one way to control the appearance of your worksheet. Titles of worksheets are typically centered across the top of the columns of information. Excel allows you to merge and center cells to create a title that appears centered in one cell across the top of your workbook. Excel also allows you to reverse this action by splitting the cell. Splitting a cell converts a merged cell back to several cells, with the information displayed in the uppermost left cell.

To center and merge cells:

1. Select the cells you want to merge, making sure the text you want centered is in the uppermost left cell.
2. Click the **Home** tab.
3. Click the **Merge & Center** button (see Figure T2.9).
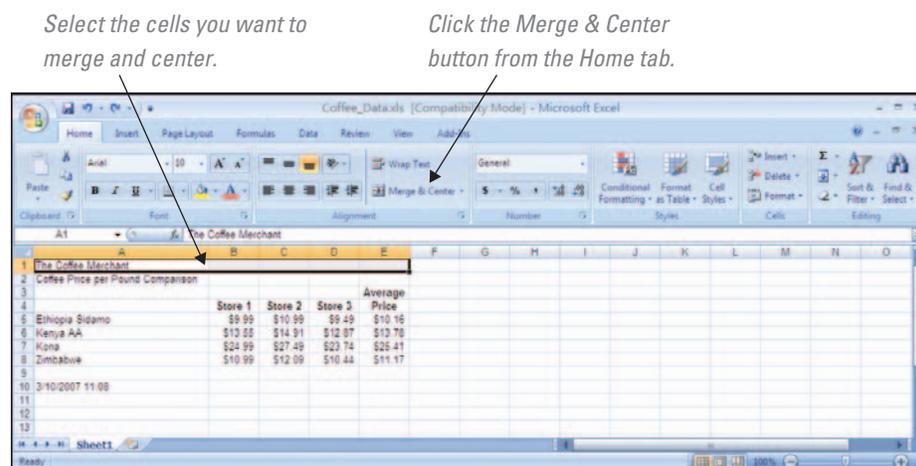
To split merged cells:

1. Select the **merged cell** you want to split into several cells.
2. Click the **Home** tab.
3. Click the **Merge & Center** button arrow, and then click **Unmerge Cells.**
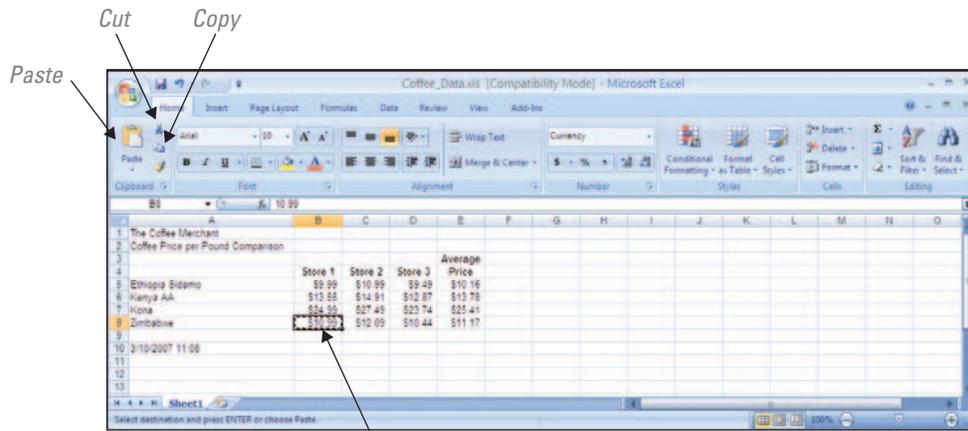
When you select cells to be merged, Excel will center only the data in the uppermost left cell. All other data will be lost.

CUTTING, COPYING, AND PASTING CELLS

The *Cut, Copy, and Paste commands* are used to move data and other items within a workbook and between applications. Data that are cut are removed from the document and placed on the Clipboard for later use. The Copy command places a duplicate

FIGURE T2.9

Merging Cells

Select the cells you want to merge and center.

Click the Merge & Center button from the Home tab.

Cut *Copy*

Paste

A cell that you have copied
appears with a dotted line around it.

of the selected data on the Clipboard without changing the workbook. The Paste command is used to insert items from the Clipboard into a workbook.

To cut or copy data within a workbook:

1. Select the cell or cells you want to cut or copy.
2. Click the **Home** tab.
3. Click the appropriate toolbar button:

   a. **Cut** or
   b. **Copy**
   c. The cell appears with a flashing dotted line around it.

4. Place the cursor where you want to insert data from the Clipboard.
5. Click the **Paste** toolbar button (see Figure T2.10).

When you cut or copy items, they are placed on the Clipboard. The Clipboard can store up to 24 items for use in the current document or any other application. You can view the contents of the Clipboard at any time by selecting **Clipboard** from the **Home** tab. The icons in the Clipboard identify the type of document from which each item originated (Word, Excel, Paint, etc.). A short description of an item will appear when you select it or move the cursor over its icon.

ENTERING TEXT IN CELLS

Without text headers, descriptions, and instructions, your workbook would consist of numbers and formulas without any structure. Adding text headers to your rows and columns creates the structure for you to enter data into your workbook.

To add text to your workbook:

1. Click in the cell in which you want to add text.
2. Type your text.
3. Click outside the cell to have your entry accepted.

APPLYING NUMBER FORMATS

Formatting your numbers changes the appearance of the data in your worksheet, but does not change their value. The formatted number is displayed in the cell, and the actual value is displayed in the formula bar. Excel provides several numeric formats for you to use in your workbook, including Currency, Percentage, Date, Time, and Accounting.