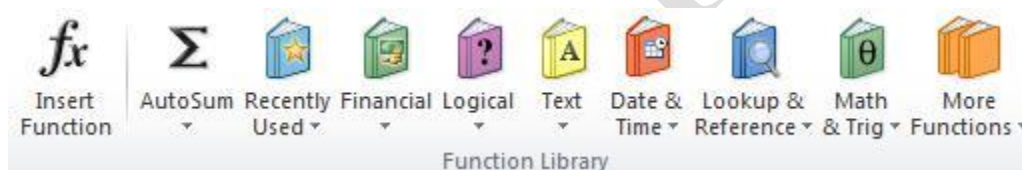# The Formulas Tab

The Formulas tab provides access to Excel's preset functions and formula auditing tools. As you become more familiar with Excel, you will likely start to rely more on formulae to help process your data. To help with this, Excel features a wide variety of formulae, called functions. Chances are the one you need is already part of the library! And if you need to create your own formulae, Excel features a comprehensive set of auditing tools to make sure your formula is as correct as possible.

This lesson will show you where you can access some of these features. Many of the advanced controls described here are beyond the scope of this manual. However, we will explore more about functions later in this course.

The Functions Library

All of the various functions included with Excel can be found here. Construct your own function or choose one from the various categories. Each function you insert will open a dialog box specific to that function and let you define variable values or select data from your worksheet to use with the function.
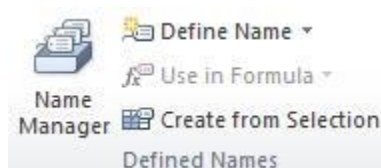

Defined Names Commands

We know that cells are referenced by the column and row headings. Groups of adjacent cells (called cell **ranges**) are referenced like this: A6:B10. This notation refers to 10 cells (2 columns x 5 rows) and is shown in the Name Box.

This reference is fine, but isn't very descriptive. Therefore, you can use **defined names** for cell ranges, making the data much clearer and easier to reference, particularly when working with functions.

The Defined Names group lets you define, use, and manage defined cell ranges.

Formula Auditing Commands

Modern computers are capable of amazing speeds and mathematical feats. But for all intents and purposes, they really only do one thing at a time. However, because they do only one thing at a time, even the most complex function or formula can be performed step by step. This is where the Formula Auditing group comes into play.

These commands let you view the data set(s) used to calculate a function so you can see exactly what was used to come up with a result. You can also make Excel show the formulas entered into cells rather than their computed value, check for bugs and errors in custom formulae, check a formula for correctness, and keep watch over various things as the formula calculates a result.

Calculation Commands

The Calculation group gives you control over when and how Excel calculates formulae in a worksheet. You can also calculate the value of a specific function, or make the worksheet calculate everything at once. These commands are useful if your functions depend on random data or data from an external data source.