Creating Simple Formulas

Now that you've learned to enter data into a spreadsheet, you are ready to manipulate that data. You can do this by using *formulas*, which are cell entries that Quattro Pro uses to perform calculations. You can use formulas to perform simple calculations such as addition and subtraction, or more complicated applications such as complex financial or statistical functions.

Formulas are made up of operators and cell references. Operators are mathematical symbols that show which type of calculation is being performed. For example, + (addition), - (subtraction), * (multiplication), and / (division) are all arithmetic operators. There are several other operators available, but only arithmetic operators are covered in this course. Cell references are those letters and numbers that refer to a cell's location. For example, A4, H78, and Z9 are all cell references because they refer to a cell's address.

In addition, all formulas begin with a plus sign (+). The plus sign indicates to Quattro Pro that the cell data should be interpreted as a formula. Otherwise, Quattro Pro interprets the data as a label and simply inserts exactly what you type into the cell. For example, to create a formula to add the contents of cells C5 through C7, you must type +C5+C6+C7.

There are two ways of entering a formula into your spreadsheet: by typing and by pointing. Both methods are covered in this section.

How Quattro Pro interprets operators depends, in part, on where the operators appear in the formula. Quattro Pro uses standard order of operations to interpret formulas. It evaluates operators enclosed in parentheses first, then multiplication and division operators, and lastly, addition and subtraction operators. For example, the formula +6+8/2 is equal to 10 because Quattro Pro calculates the 8/2 portion of the formula before it interprets the +6 portion. The formula +(6+8)/2 equals 7 because Quattro Pro calculates the 6+8 portion first and then divides that sum by 2.

Creating a Formula by Typing

One way to create a formula is simply by typing it into the cell where you want the results to appear, as illustrated in Figure 2-3. Notice that the same formula that you are typing appears in the input line above your spreadsheet. The input line contains four buttons to assist you while you are inputting your data. These buttons are also shown in Figure 2-3.