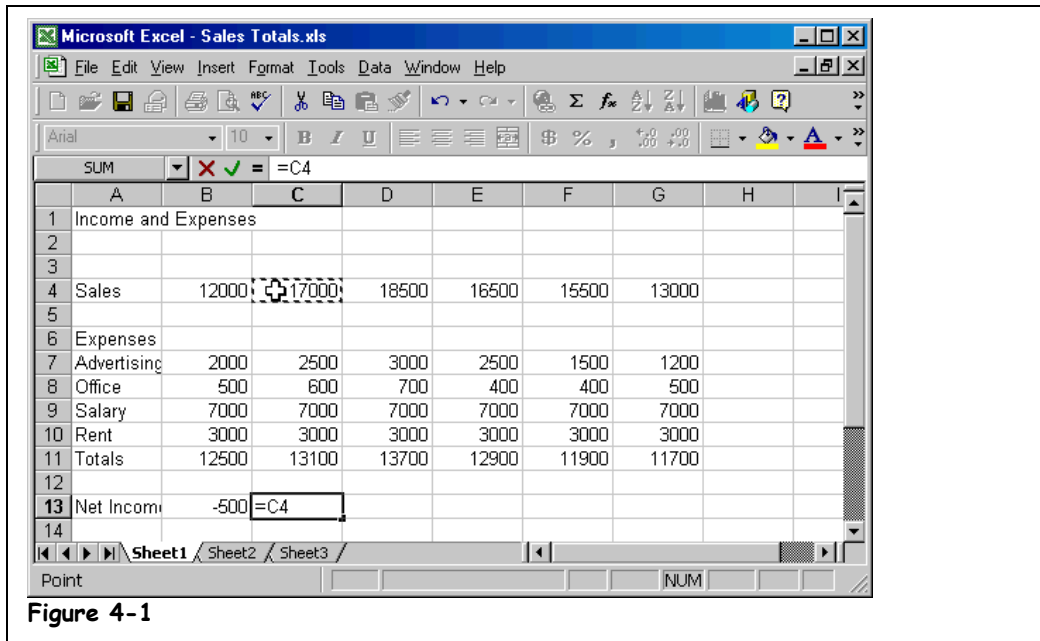


## Lesson 4-1: Entering Formulas

**Figure 4-1**

Entering a formula in Excel to find the Net Income



**Figure 4-1**

### ① ECDL

Skill Set: 4.4.1.1

Req. File: Formula.xls

Before you start the exercise, let's take a brief overview of formulas. A *formula* is a value that performs calculations, such as adding, subtracting, and multiplying. Formulas start with the equal sign (=), which tells Excel you want to perform a calculation. After the equal sign, you must specify two more types of information: the values you want to calculate and the arithmetic operator(s) or function name(s) you want to use to calculate the values. Formulas can contain explicit values, such as the numbers 4 or 5, but more often will reference the values contained in other cells. For example, the formula =A3+A4 would add together whatever values were in the cells A3 and A4. Look at Table 4-1: *Examples of Operators, References, and Formulas* to see a variety of formulas that contain different operators, references, and values.

1. **Start the Microsoft Excel program, navigate to your practice folder, open the **Formula** workbook, and save it as **Sales Totals**.**

If you do not know where your practice files are located, ask your instructor for assistance.

2. **Click cell **A13**, type **Net Income**, and press **<Tab>**.**

This row will contain the net income, which you can find by subtracting the total expense values from the sales value.

3. **Type **=** (the equal sign) in cell **B13**.**

Typing an equal sign at the beginning of a cell entry tells Excel you want to enter a formula rather than a value or label.

4. **Type **B4-B11**.**

This will subtract the value in cell B11 (12,500) from the value in B4 (12,000).

**Remember:** All formulas in Excel must begin with an equal sign (=).

**5. Press <Enter>.**

Excel displays the result of the formula, -500, in cell B13. Notice, however, that the cell's formula still appears in the formula bar. Instead of manually typing cell references, like you did in Step 3, you can specify cell references in a formula by clicking and selecting the cell or cell ranges with the mouse.

**6. Click cell C13.**

This is where you will enter the formula to find the net income for the C column.

**7. Type =.**

Excel is now ready to accept the formula for this cell. Instead of typing in the cell references this time, enter them using the mouse.

**8. Click cell C4.**

A line of marching ants appears around the cell C4, indicating the cell range. Look back at cell C13. Notice Excel inserts the cell reference C4 in the formula. The next step is entering the arithmetic operator in the formula.

**9. Type - (the minus sign or hyphen).**

To complete the formula you must specify the cell reference for the total expenses, C11.

**10. Click cell C11.**

Excel enters the cell reference, C11 in the formula.

**11. Press <Enter> to complete the formula.**

The result of the formula (3900) appears in cell C13.







**12. Close the Sales Totals workbook.**

Use Table 4-1: *Examples of Operators, References, and Formulas* as a reference when you start creating your own formulas. Not only does it contain examples of formulas, but also the most common operators and functions used in formulas.



**Enter button**

**Table 4-1: Examples of Operators, References, and Formulas**

Operator or Function Name	Purpose	Example
=	All formulas must start with an equal sign	
+	Performs addition between values	=4+3
-	Performs subtraction between values	 =A1-B1
*	Performs multiplication between values	 =B1*2
/	Performs division between values	 =A1/C2
SUM	Adds all the numbers in a range	 =SUM(A1:A3)
AVERAGE	Calculates the average of all the numbers in a range	 =AVERAGE(A2,B1,C3)
COUNT	Counts the number of items in a range	 =COUNT(A2:C3)

 **Quick Reference**

**To Enter a Formula:**

1. Click the cell where you want to insert the formula.
2. Press = (the equals sign) to begin any formula.
3. Enter the formula.
4. Press <Enter>.

**To Reference a Cell in a Formula:**

- Type the cell reference—for example A3.

Or...

- Click the cell you want to reference.