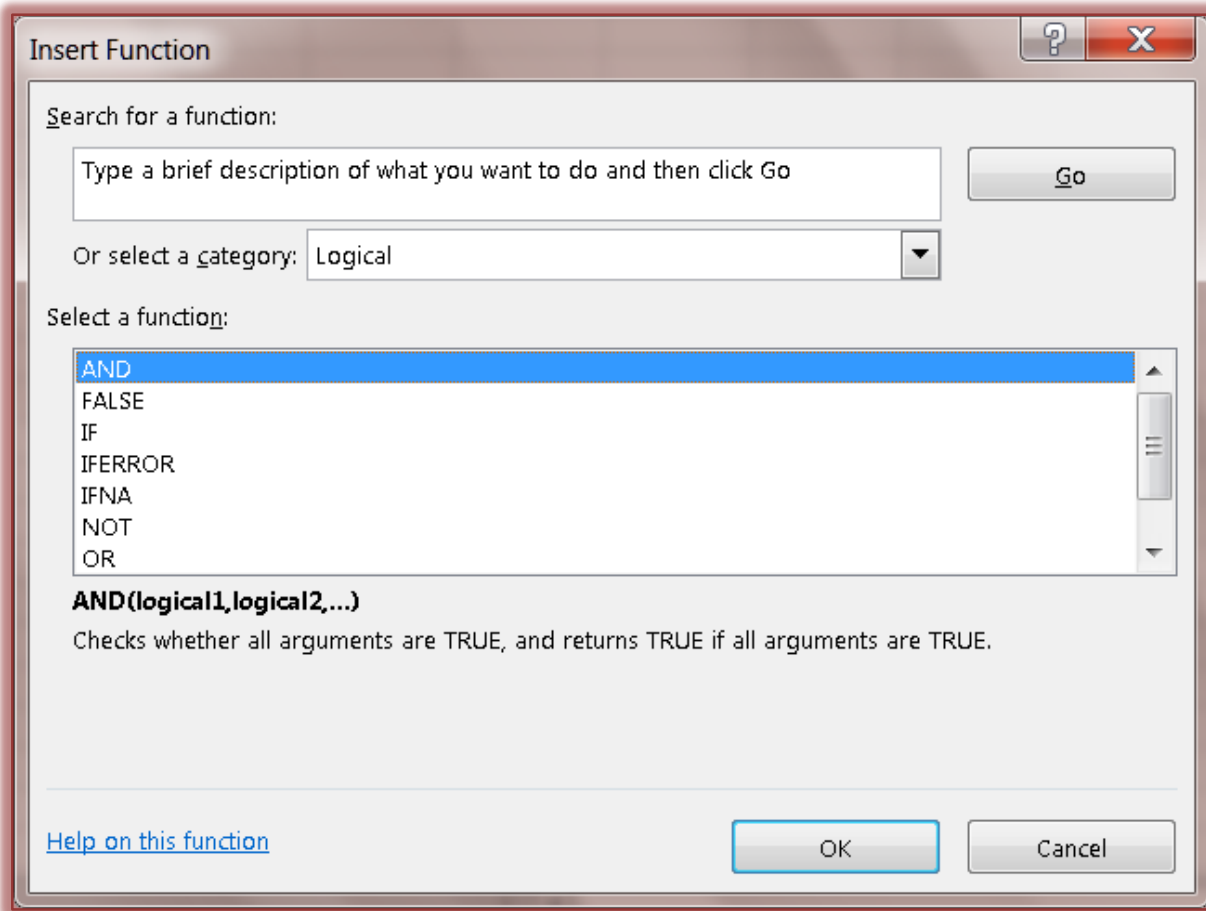


## If Functions

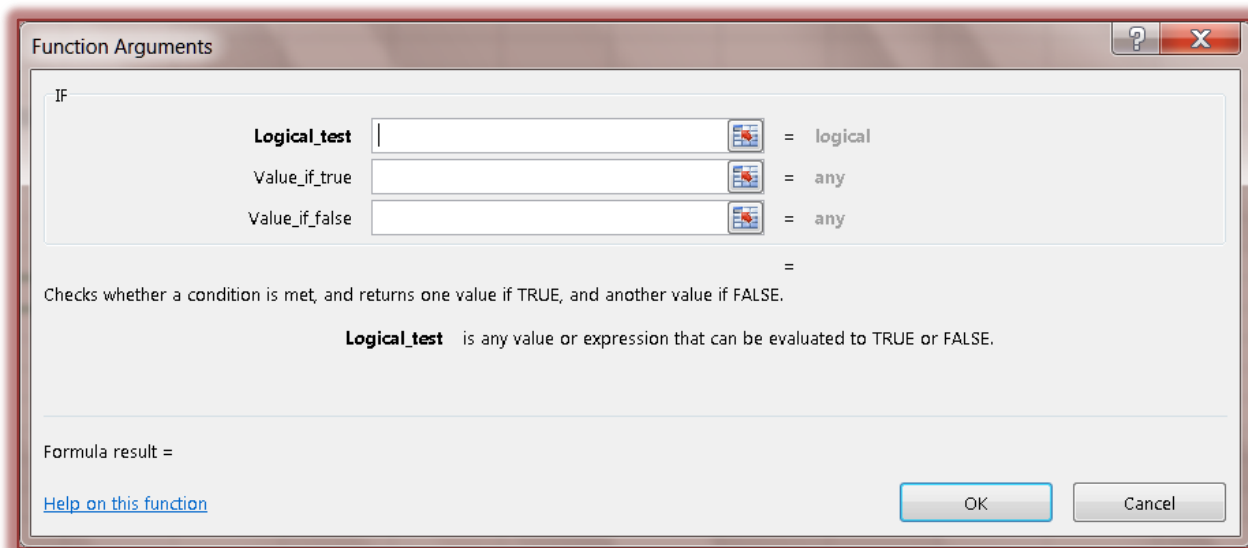
The If Function is used to perform logical tests on data in a worksheet. If the logical test is True, one value will be displayed; if it is False, another value will be displayed. To input an If function, complete the steps below:

### Creating a Simple IF Function

- ✦ Open the document **Formula** from the area where it was stored when it was downloaded from the **Excel Training** Web page.
- ✦ Click in cell **C10**.
- ✦ Click the **Insert Function** button next to the **Formula Bar** (see illustration at right).
- ✦ The **Insert Function** dialog box appears (see illustration below).



- ✦ In the **Or select a Category** list, select **Logical**.
- ✦ In the **Select a Function** box, click **IF**.
- ✦ Click the **OK** button.
- ✦ The second **Function Arguments** dialog box will appear (see illustration on next page).
- ✦ In the **Logical\_test** box, input **D7>50**.
- ✦ In the **Value\_if\_true** box, input **5% discount**.
- ✦ In the **Value\_if\_false** box, input **No discount**. This statement says:
  - ★ If **D7** is greater than **50**, then input the words **5% discount** for the results of the function.
  - ★ If **D7** is not greater than **50**, then input the words **No discount**.

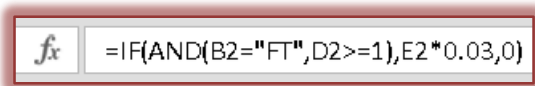


- ✦ The information pertaining to the formula will appear in the dialog box (see illustration above).
- ✦ Click the **Help on this function** link to find out more information about using IF functions.
- ✦ Click **OK** to exit the dialog box.
- ✦ The message **5% discount** should appear in cell **C10**.
- ✦ Click in cell **D4**.
- ✦ Input a different value less than \$30.00 to see what happens with the function results.

### Using the AND Function

The AND function is used to specify more than one criteria that the selected data has to meet in order for the statement to be true. If it doesn't meet both criteria, then the statement is False.

- ✦ Open the **Employee** workbook from the area where it was stored when it was downloaded from the Excel Web page.
- ✦ Click cell **F2** to make it the active cell.
- ✦ Input **=IF(AND(B2="FT",D2>=1),E2\*0.03,0)**.
- ✦ The information in the **Formula Bar** will look like the illustration below.



- ✦ This formula says:
  - ★ If the value in cell **B2** equals **FT** and the value in cell **D2** is greater than or equal to **1**, then multiply the value in cell **E2** by **0.03**.
  - ★ If the values in both **B2** and **D2** do not meet the specified criteria, then input **zero (0)**.
- ✦ Press **Enter** or click the **Enter** button (check mark) on the **Formula Bar** to accept the formula.
- ✦ Copy the formula in cell **F2** to the range **F3:F7**.

### Nesting IF Functions

With Excel, it is possible to place one IF statement into another IF statement. When this type of IF statement is used, the program looks at the first statement. If the first statement doesn't match the criteria, then the program will look at the second statement and return a value meeting the criteria for the second statement. If neither condition is met, then the False value is input.

- ✦ Click cell **G2** to make it the active cell.
- ✦ Type **=IF(C2="F",5000,IF(C2="I",4000,0))**. This formula says:
  - ★ If the value in **C2** is equal to the letter **F**, then input **5000**.
  - ★ If the value in **C2** is equal to the letter **I**, then input **4000**.
  - ★ If the value in **C2** doesn't equal either of these values, then input **zero (0)**.
  - ★ The information in the **Formula Bar** will look like the illustration below.



- ✦ Press the **Enter** key or click the **Enter** button on the **Formula Bar** to accept this formula.
- ✦ Copy the formula in cell **G2** to the range **G3:G7**.