USE CALCULATIONS IN A REPORT

For this exercise, you will be using the **Potential Income** report from the **Jobs** database.

When a report is created, it might be desirable or necessary to include summary information or other calculations. Calculated fields are created by using an **unbound text box** (one not associated with any particular field). The formulas that are entered into a calculated text box use standard mathematical operators (+Add, -Subtract, *Multiply, /Divide). All formulas begin with an equal (=) sign and field names are in square ([ ]) brackets. Some examples of calculations are:

☞ To calculate a total price by multiplying the value in the quantity field by the value in the Price field, enter **=[Quantity]*[Price]**.
☞ To calculate a 25 percent discount off the value in a Cost field, enter **=[Cost]*.075**.
☞ To add the total of the values in three fields, enter **[Field1]+[Field2]+[Field3]**.

The summary functions that will probably be used most often are:

☞ **Sum([Field Name])** – This function will find the total of the values in the specified field.
☞ **Count([Field Name])** – Use this function to find the number of items in the specified field.
☞ **Avg([Field Name])** – To determine the average of the specified fields (total of values divided by the count) use this function.
☞ **Max([Field Name])** – To determine the largest value in the specified field, use this function.
☞ **Min([Field Name])** – The smallest value in the specified field can be found by using this function.

Calculate Group Totals

☥ Open the **Potential Income** report from the **Jobs** database.
☥ Right-click on the **subreport** and select **Subreport in New Window**.
☥ The **Subreport** will open in a new window.
☥ Increase the **Height** of the **Employer ID Footer** section until the bottom of the section is at the **0.5-inch mark** on the **Vertical** ruler.
  ✿ Move the mouse pointer over the bottom border of the report until the mouse pointer changes to a double-headed arrow.
  ✿ Drag down to the **0.5-inch mark** on the **Vertical Ruler**.
☥ Click the **Text Box** tool in the **Controls Group** (see illustration below).

☥ Click and drag to place the **Text Box** in the **Employer ID Footer** section.
☥ Move the mouse pointer to the top of the section.
  ✿ Align it vertically with the left edge of the **Placement Fee** text box.
  ✿ Release the mouse pointer button.
☥ A text box with an attached label should appear in the report.
☥ The description "**unbound**" should appear in the text box.

- Click the **Unbound** text box to select it.
- Click the **Report Design Tools: Design Tab**.
- Click the **Property Sheet** button in the **Tools Group**.
- **Text___** should appear as the heading for the **Property Sheet** window.
- Click the **All** tab.
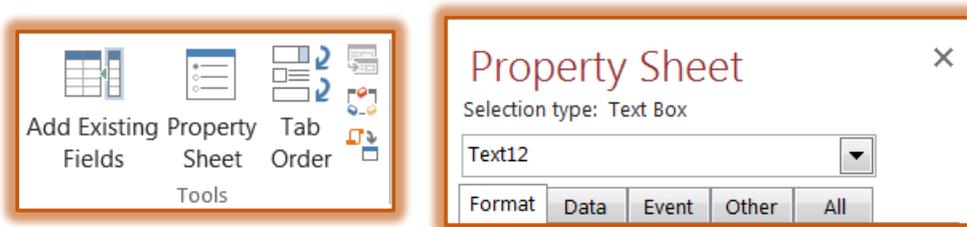
- In the **Control Source** box input, **=Sum([PlacementFee])**.
- Set the **Format** property to **Standard**.
- Create another **text box** and place it two grid lines below the one that you just created.
- In the property sheet for this text box, right-click the **Control Source** box and choose **Zoom**.
- Input **=IIF(Sum(Openings)>=3,Sum(PlacementFee)+200,Sum(PlacementFee)+500).**
  - This is the same calculation that was used in the **Potential Income by Employer** query.
  - The difference is that it includes the **Sum** function.
  - This formula says that
    - If the **Openings** are **greater than or equal to 3**, then add **200** to the **Placement Fee**.
    - If the **Openings** are **less than 3**, then add **500** to the **Placement Fee**.
- Click the **OK** button.
- Set the **Format** property to **Standard**.
- Save the changes to the design of this report.

Resize the Text Boxes and Modify the Label Properties
- Select both text boxes in the **Employer ID Footer** section.
- Position the pointer on the **middle-right sizing handle** of either of the selected controls.
- Drag the **right** borders to the **right** so that they align with the right border of the **Placement Fee** text box in the **Detail** section.
- Use the same procedure to drag the **left** borders of the selected controls to the **right** until they are just to the right of the **3.5-inch mark** on the **Horizontal** ruler.
- Deselect the controls.
- Click the **Top Label** in the **Employer ID** section.
- Set its caption property to **Total**.
- Click the **Bottom Label** in the **Employer ID** section.
- Change the **Caption** to **Employer Potential Income:.**
- Resize and reposition both labels to a position that you think is appropriate.
- Make sure the labels align properly on the right.
- Save the subreport.