

USING 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 formula will find the total of the values in the specified field.
- ☞ **Count([Field Name])** - Use this formula 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 formula.
- ☞ **Max([Field Name])** - To determine the largest value in the specified field, use this formula.
- ☞ **Min([Field Name])** - The smallest value in the specified field can be found by using this formula.

Calculating Group Totals

- ❖ Open the **Potential Income** report from the **Jobs** database.
- ❖ 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**.
- ❖ Click the **Text Box** tool in the **Toolbox**.
- ❖ 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.
- ❖ **Text Box:Text__** should appear as the heading for the **Properties** box.
- ❖ 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.

Resizing the Text Boxes and Modifying 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 **left** 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**.
- ❖ Change the **Font Size** to **8** and the **Font** to **Times New Roman**.
- ❖ Click the **Bottom Label** in the **Employer ID** section.
- ❖ Change the **Caption** to **Employer Potential Income:**.
- ❖ Change the **Font Size** to **8** and the **Font** to **Times New Roman**.
- ❖ Resize and reposition both labels to a position that you think is appropriate.
- ❖ Make sure the labels align properly on the right.
- ❖ Deselect all labels and text boxes.
- ❖ Save the subreport.