

Note: Below we describe how to create the relative frequency histogram with the graph of the density function in Excel 2010. These directions replace those on pages 191 and 192 of the text.

Next we will create the relative frequency histogram. Follow these steps:

1. In the **Insert** ribbon, select the **Column** chart. Select the first type under **2-D column** (do not select any data yet).
2. Right-click on the blank chart and select **Select Data...** Click the **Add** button. For the **Series values** select the range **E5:E14**. Press **OK**.
3. Under **Horizontal (Category) Axis Labels**, press **Edit**. For the **Axis label range**, select the range **C5:C14**. Press **OK** twice.
4. Right-click on one of the bars in the graph and select **Format Data Series**. Set the **Gap Width** to 0%. Change the **Fill** color and **Border Color** to resemble that in Figure 6.36.

To graph $y = (\text{Bin Width}) \cdot f(x)$ on top of the histogram, follow these steps:

1. Right-click on the histogram and select **Select Data...**
2. Under **Legend Entries (Series)**, select **Add**.
3. For the **Series values**, select the range **F5:F14**. Press **OK**.
4. Press **OK** again. (**Note:** Do not change anything under **Horizontal (Category) Axis Labels**).
5. On the chart, right-click on one of the new columns (corresponding to Series 2) and select **Change Chart Series Type...** Choose the type **XY (Scatter)** and select the third sub-type (called **Scatter with Smooth Lines**). Press **OK**.
6. Your chart should resemble Figure 6.40.