Your cousin, Rita Dansie, wants to analyze her family's utility expenses for 2012. She wants to save money during months when utility expenses are lower so that her family will have money budgeted for months when the total utility expenses are higher. She gave you her files for the electric, gas, and water bills for the year 2012. You created a worksheet that lists the individual expenses per month, along with yearly totals per utility type and monthly totals. You will create some charts to depict the data. This exercise follows the same set of skills as used in Hands-On Exercises 1 and 2 in the chapter. Refer to Figure 3.52 as you complete this exercise.
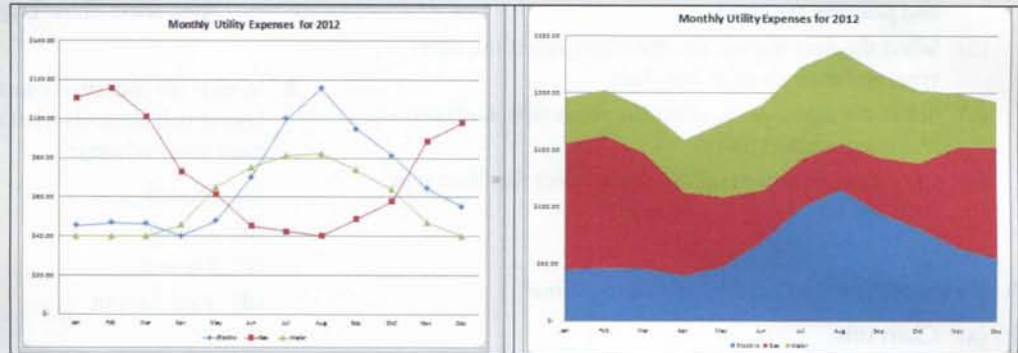

FIGURE 3.52 Dansie Family Utility Expenses ➤

a. Open *e03p1utilities* and save it as **e03p1utilities_LastnameFirstname**.

b. Select the **range A4:E17**, and then click the **Insert tab**.

c. Click **Column** in the Charts group, and then select **Clustered Column**. After creating the chart, you realize you need to adjust the data source because you included the monthly and yearly totals.

d. Click the **Design tab**, if necessary. Click **Select Data** in the Data group to open the Select Data Source dialog box, and then do the following:
   - Click **Monthly Totals** in the **Legend Entries (Series) list**, and then click **Remove**.
   - Click in the **Chart data range box**, and then change *17* to **16** at the end of the range.
   - Click **OK** to finalize removing the monthly and yearly totals from the chart.

e. Position the mouse pointer over the chart area. When you see the Chart Area ScreenTip, drag the chart so that the top-left edge of the chart is in **cell A19**.

f. Click the **Format tab**. Click in the **Shape Width box** in the Size group, type **6**, and then press **Enter**.

g. Click the **Design tab**, and then click **Layout 3** in the Chart Layouts group.

h. Click the **Chart Title placeholder**, type **Monthly Utility Expenses for 2012**, and then press **Enter**.

i. Click the **More button** in the Chart Styles group, and then click **Style 26** (second style, fourth row).

j. Click the clustered column chart, use the **Copy command**, and then paste a copy of the chart in **cell A36**. With the second chart selected, do the following:
   - Click the **Design tab**, click **Change Chart Type** in the Type group, select **Line with Markers** in the *Line* section, and then click **OK**.
   - Click the **More button** in the Chart Styles group, and then click **Style 2** (second style, first row).
   - Copy the selected chart, and then paste it in **cell A52**.

k. Make sure the third chart is selected, and then do the following:
   - Click the **Design tab**, if necessary, click **Change Chart Type** in the Type group, select **Area** on the left side, click **Stacked Area**, and then click **OK**.
   - Click **Move Chart** in the Location group, click **New sheet**, type **Area Chart**, and then click **OK**.

l. Click the **Expenses worksheet tab**, scroll up to see the line chart, and then select the line chart. Click the **Design tab**, if necessary, click **Move Chart** in the Location group, click **New sheet**, type **Line Chart**, and then click **OK**.

You are a teaching assistant for Dr. Monica Unice's introductory psychology class. You have maintained her grade book all semester, entering three test scores for each student and calculating the final average. Dr. Unice wants to see a chart that shows the percentage of students who earn each letter grade. You decide to create a pie chart. She wants to see if a correlation exists between attendance and students' final grades, so you will create a scatter chart.

a. Open *e03m2psych* and save it as **e03m2psych_LastnameFirstname**.

b. Create a pie chart from the Final Grade Distribution data located below the student data, and then move the pie chart to its own sheet named **Grades Pie**.

c. Customize the pie chart with these specifications:
  - **Layout 1 chart layout** with the title **PSY 2030 Final Grade Distribution - Fall 2012**
  - F grade slice exploded
  - **20-pt** size for the data labels, with a center label position, and gradient fill
  - Border: no line

d. Apply these standard fill colors to the respective data points:
  - A: Blue
  - B: Green
  - C: Orange
  - D: Purple
  - F: Red

DISCOVER

e. Create a Scatter with only Markers chart using the attendance record and final averages from the Grades worksheet, and then move the scatter chart to its own sheet. Name the sheet **Attend Grades**.

f. Apply these label settings to the scatter chart:
  - Legend: none
  - Chart title above chart: **Attendance - Final Average Relationship**
  - X-axis title: **Percentage of Attendance**
  - Y-axis rotated title: **Student Final Averages**

g. Use Help to learn how to apply the following axis settings:
  - Y-axis: 40 starting point, 100 maximum score, 10 point increments, and a number format with zero decimal places   *i.e. min* — *value*
  - X-axis: 40 starting point, automatic increments, automatic maximum

h. Add the **Parchment gradient fill** to the plot area.   *Page Layout tab / Margins*

i. Insert a linear trendline.

j. Center the worksheet horizontally between the left and right margins on the Grades worksheet.

k. Insert a footer with your name on the left side, the sheet name code in the center, and the file name code on the right side for all three worksheets.

l. Save and close the workbook, and submit based on your instructor's directions.

You are an assistant manager at Premiere Movie Source, an online company that enables customers to download movies for a fee. You are required to track movie download sales by genre. You gathered the data for September 2012 and organized it in an Excel workbook. You are ready to create charts to help represent the data so that you can make a presentation to your manager later this week.

Change Data Source, Position, and Size

You already created a clustered column chart, but you selected too many cells for the data source. You need to open the workbook and adjust the data source for the chart. In addition, you want to position and size the chart.

a. Open the *e03c1movies* workbook and save it as **e03c1movies_LastnameFirstname**.

b. Remove the Category Totals from the legend, and then adjust the data range to exclude the weekly totals. Also remove the Category Totals.

c. Position and size the chart to fill the **range A18:L37**.

d. Change the row and column orientation so that the weeks appear in the category axis and the genres appear in the legend.

Add Chart Labels

You want to add a chart title and a value axis title and change the legend's position.

a. Add a chart title above the chart.

b. Enter the text **September 2012 Downloads by Genre**.

c. Add a rotated value axis title.

d. Enter the text **Number of Downloads**.

e. Move the legend to the top of the chart, and then drag the bottom of the chart area down to cover row 40.

Format Chart Elements

You are ready to apply the finishing touches to the clustered column chart. You will adjust the font size of the category axis and display additional gridlines to make it easier to identify values for the data series. You will add and adjust data labels to the Drama data series. Finally, you will add a linear trendline to the chart to visualize trends.

a. Format the category axis with 12-pt size.

b. Display major and minor horizontal gridlines.

c. Select the **Drama data series**, and then add data labels in the Outside End position.

d. Add a **Yellow fill color** to the data labels.

e. Add a linear trendline to the Drama data series.

Insert and Format Sparklines

You want to show weekly trends for each genre by inserting sparklines in the column to the right of Category Totals.

a. Insert a **Line sparkline** for the weekly (but not category totals) data for Action & Adventure in **cell G5**.

b. Copy the sparkline down the column.

c. Format the sparklines by applying **Sparkline Style Dark #6**, display the high point, and format the high point marker in **Red**.

Create Another Chart

You want to create a chart that will show the monthly volume of downloads by genre. You decide to create a bar chart with genre labels along the left side of the chart.

a. Select the genres and weekly totals. Create a clustered bar chart.

b. Move the chart to its own sheet, and then name the sheet **Bar Chart**.

c. Change the chart type to a stacked bar chart.

d. Add a chart title above the chart, and then enter **Sept 2012 Total Monthly Downloads by Genre**.

Format the Bar Chart

You want to enhance the appearance of the chart by applying a chart style and adjusting the axis values.

a. Apply the **Style 31 chart style** to the bar chart.

b. Display the value axis in units of thousands.

c. Display the category axis names in reverse order using the Format Axis dialog box.

d. Apply the **Layout 3 layout style** to the chart.

Printing the Charts

You want to print the bar chart on its own page, but you want to print the clustered column chart with the original data. To ensure the worksheet data and chart print on the same page, you need to adjust the page setup options.

a. Create a footer on each worksheet with your name, the sheet name code, and the file name code.

b. Apply landscape orientation for the original worksheet.

c. Set 0.2" left, right, top, and bottom margins for the original worksheet.

d. Select the option that makes the worksheet print on only one page.

e. Print both worksheets.

f. Save and close the workbook, and submit based on your instructor's directions.

The Midwest Regional Dentist Association is planning its annual meeting in Lincoln, Nebraska, this spring. Several members donated items for door prizes at the closing general session. You need to organize the list of donations and format it to highlight particular data for your supervisor, who is on the conference board of directors. This exercise follows the same set of skills as used in Hands-On Exercises 2, 3, and 4 in the chapter. Refer to Figure 4.52 as you complete this exercise.

	A	B	C	D	E	F	G	H	I	J	K
1											
2	19	Tara	Huber	9507 Sandy Elms	Omaha	NE	68102	Laptop Computer	$1,000	Equipment	
3	20	Benjamin	Brown	143 Sunset Avenue	Tucson	AZ	85701	Digital Camera	$400	Equipment	
4	3	Kim	Jansen	6000 North Meridian	Oklahoma City	OK	73102	MP3 Player	$200	Equipment	
5	28	Vickie	Anderson	431 North Mulberry Lane	Greeley	CO	80634	MP3 Player	$145	Equipment	
6	31	Anita	Miller	832 East 3rd Street	Grand Junction	CO	81506	MP3 Player	$145	Equipment	
7	34	Brad	Foust	3434 Reno Street	Dodge City	KS	67801	Digital Camera	$125	Equipment	
8	15	Huong	Ngyun	P.O. Box DEF	Dallas	TX	75201	Gym Membership	$250	Other	
9	29	Ian	Parker	421 North 3rd Street	Lubbock	TX	79401	Gym Membership	$200	Gift Certificate	
10	4	Donna	Reed	P.O. Box ABC	Dumas	TX	79029	Hotel Accomodations	$100	Gift Certificate	
11	8	Catherine	McQuaide	31 Oakmont Circle	Dallas	TX	75201	10 pounds of Fresh Fish	$100	Product	
12	14	Dan	Reed	901 North Street	Austin	TX	78701	Yoga Class	$100	Service	
13	16	Robert	McMahon	912 South Front Street	Lincoln	NE	68504	Web Site Services	$100	Service	
14	23	Jennifer	Ward	377 Hillman Avenue	Houston	TX	77002	1-Year Free Coffee	$100	Product	
15	26	Bobby	Wilcox	3141 Lincoln Drive	Lincoln	NE	68504	Automotive Gift Certificate	$100	Gift Certificate	
16	2	Kelly	Kripton	444 East Walnut Grove	Dodge City	KS	67843	Football Tickets	$75	Product	
17	18	Emiko	Francani	800 North Street	Emporia	KS	66801	Floral Arrangement	$75	Gift Certificate	
18	24	Michael	Anderson	1 Clark Smith Drive	Topeka	KS	66603	Gift Basket	$75	Product	
19	27	Peggy	Jackson	140 Oak Circle	Grand Junction	CO	81503	Restaurant Gift Certificate	$75	Gift Certificate	
20	17	Dennis	Boothe	1100 Choctaw Lane	Alva	OK	73717	YMCA Swimming Lessons	$65	Service	
21	5	Huong	Pham	1401 Washington Circle	Colorado City	CO	81019	Restaurant Gift Certificate	$60	Gift Certificate	
22	1	Shelly	Martin	123 North Street	Amarillo	TX	79101	Massage	$50	Other	
23	6	George	Martin	555 Kaminini Street	Denver	CO	80022	Car Wash Card	$50	Other	
24	7	Marion	McMahon	2216 North Oklahoma Street	Tulsa	OK	74103	Automotive Gift Certificate	$50	Gift Certificate	
25	21	Robert	Hall	P. O. Box 121802	Denver	CO	80127	Grocery Gift Certificate	$50	Gift Certificate	
26	25	Natalie	Barguno	1661 Cardinal Drive	Phoenix	AZ	85003	Toy Store Gift Certificate	$50	Gift Certificate	

FIGU   **4.52** Donation List ➤

a. Open *e04p3donate* and save it as **e04p3donate_LastnameFirstname**.
b. Click the **Design tab**, click **Remove Duplicates** in the Tools group, and then click **OK**. Click **OK** in the message box that tells you that Excel removed three duplicate records.
c. Click **Convert to Range** in the Tools group, and then click **Yes** in the message box.
d. Select the **range A2:J35**, click the **Home tab**, click the **Fill Color arrow** in the Font group, and then select **No Fill** to remove the table fill colors.

e. Select the **range I2:I35**. Click **Conditional Formatting** in the Styles group, point to **Highlight Cells Rules**, and then select **Greater Than**. Type **99** in the Format cells that are GREATER THAN box, and then click **OK**.

f. Select **cells H2:H35**. Create a custom conditional format by doing the following:
   - Click **Conditional Formatting** in the Styles group, and then select **New Rule**.
   - Click **Use a formula to determine which cells to format**.
   - Type **=(J2="Equipment")** in the **Format values where this formula is true box**. The basic condition is testing to see if the contents of cell J2 equal the word *Equipment*. You type *Equipment* in quotation marks since you are comparing text instead of a value.
   - Click **Format**, click the **Fill tab** if necessary, and then click **Red, Accent 2, Lighter 60%** (sixth background color on the second row below the first horizontal line).
   - Click the **Border tab**, click the **Color arrow**, click **Dark Red**, and then click **Outline**.
   - Click **OK** in each dialog box.

g. Click anywhere in the table to deselect the range. Click **Sort & Filter** in the Editing group, and then select **Custom Sort**. The dialog box may contain existing sort conditions for the State and City fields, which you will replace. Set the following sort conditions:
   - Click the **Sort by arrow**, and then select **Item Donated**. Click the **Sort On arrow**, and then select **Cell Color**. Click the **Order arrow**, and then select the **RGB(242, 220, 219)** or **RGB(230, 184, 183) fill color**. The fill color displays for the Order.
   - Click the **Then by arrow**, and then select **Value**. Click the **Order arrow**, and then select **Largest to Smallest**.
   - Click **OK**.