This project relates to **Front Range Action Sports**, which is one of the country's largest retailers of sports gear and outdoor recreation merchandise. The company has large retail stores in Colorado, Washington, Oregon, California, and New Mexico, in addition to a growing online business. Major merchandise categories include fishing, camping, rock climbing, winter sports, action sports, water sports, team sports, racquet sports, fitness, golf, apparel, and footwear.

In this project, you will apply the skills you practiced from the Objectives in Excel Chapters 1 through 3. You will develop a workbook for Frank Osei, the Vice President of Finance, that contains year-end sales and inventory summary information. In the first two worksheets, you will summarize and chart net sales. In the next three worksheets, you will detail the ending inventory of the two largest company-owned production facilities in Seattle and Denver. Mr. Osei is particularly interested in data regarding the new line of ski equipment stocked at these two locations. In the last worksheet, you will summarize and chart annual expenses. Your completed worksheets will look similar to Figure 1.1.

### Project Files

For Project BRC1, you will need the following files:
- eBRC1_Annual_Report
- eBRC1_Skiing

You will save your workbook as:
- Lastname_Firstname_BRC1_Annual_Report

### Project Results

![Figure 1.1](image_url)
Front Range Action Sports

1. Start Excel. From the student files that accompany this textbook, locate and open **eBRC1_Annual_Report**. In the location where you are storing your projects, create a new folder named **Front Range Action Sports** or navigate to this folder if you have already created it. Save the new workbook as **Lastname_Firstname_BRC1_Annual_Report**.

   a. Familiarize yourself with the workbook by clicking each sheet tab, and then display the **Net Sales** worksheet. Click cell **B3**, and then use the fill handle to enter **Quarter 2**, **Quarter 3**, and **Quarter 4** in the range **C3:E3**. In the range **C4:E8**, enter the sales data for **Quarter 2**, **Quarter 3**, and **Quarter 4** shown in **Table 1** at the bottom of the page.

   b. Adjust the width of columns **B:F** to **125** pixels. Adjust the width of columns **G:H** to **100** pixels. In cell **F3**, type **Total** and then in the range **F4:F8**, calculate the annual total sales for each state. In the range **B9:F9**, calculate totals. In cell **G3**, type **Percent of Net Sales** and apply **Wrap Text** formatting to this cell. In cell **H3**, type **Trend** Using absolute cell references as necessary, in cell **G4**, construct a formula to calculate the percent that the **Colorado Total** is of the **Total Sales**. Fill the formula down through the range **G5:G8**. Center the results and then format the percentages with **Percent Style** and **two decimal places**.

   c. Apply **Accounting Number Format** with **no decimal places** to the nonadjacent ranges **B4:F4** and **B9:F9**. Apply **Comma Style** with **no decimal places** to the range **B5:F8**. **Merge & Center** the two worksheet titles across columns **A:H**, and then to cell **A1**, apply the **Title style** and to cell **A2**, the **Heading 1 style**. Apply the **Total style** to the range **B9:F9** and apply the **Heading 4 style** to the range **B3:H3**. **Center** the column headings in **B3:H3** both horizontally and vertically.

   d. In the range **H4:H8**, insert **Line** sparklines to represent the trend of each state across the four quarters. Add **Markers** and apply **Sparkline Style Accent 2 (no dark or light)**.

   e. Select the range **A3:E8**, and then insert a **3-D Clustered Column** chart. Align the upper left corner of the chart inside the upper left corner of cell **A11**, and then size the chart so that its lower right corner is slightly inside cell **H24**. Apply chart **Style 26** and chart **Layout 1**. Replace the chart title text with **Quarterly Net Sales by State**. Insert the file name in the **left section** of the footer, set the orientation to **Landscape**, and center the worksheet horizontally. Return to **Normal view**.

2. To show the percent that each state contributes to the total sales, select the nonadjacent ranges that represent the state names and state totals. Insert a **Pie in 3-D chart** and move the chart to a **New sheet**. Name the sheet **Net Sales by State** and then move the sheet so that it is the second sheet in the workbook.

   a. Insert a **Chart Title** above the chart with the text **Annual Net Sales by State** Change the chart title **Font Size** to **36**. Remove the **Legend** from the chart, and then add **Data Labels** that display only the **Category Name** and **Percentage** positioned in the **Center**. Change the data labels **Font Size** to **14**, and then apply **Bold** and **Italic**. Change the **Font Color** to **White, Background 1**.

   b. Select the entire pie, display the **Shape Effects gallery**, point to **Bevel**, and then at the bottom of the gallery, click **3-D Options**. Change the **Top** and **Bottom** options to the first **Bevel** type—**Circle**. Set all of the **Width** and **Height** boxes to **512** and then change the **Material** to the third **Standard** type—**Plastic**.

   c. Format the **Chart Area** by applying a **Convex Bevel** and a **Solid fill—Dark Green, Accent 4, Lighter 60%**. Insert a **Custom Footer** with the **File Name** in the **left section**, and then save the workbook.

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**Table 1**

<table>
<thead>
<tr>
<th></th>
<th>Quarter 1</th>
<th>Quarter 2</th>
<th>Quarter 3</th>
<th>Quarter 4</th>
</tr>
</thead>
<tbody>
<tr>
<td>Colorado</td>
<td>48123789</td>
<td>42468256</td>
<td>45196819</td>
<td>49452695</td>
</tr>
<tr>
<td>New Mexico</td>
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<td>21985365</td>
<td>19872698</td>
<td>22252487</td>
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<tr>
<td>Oregon</td>
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<td>34689526</td>
<td>37986369</td>
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</tr>
<tr>
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<td>58123789</td>
<td>64468256</td>
<td>65195681</td>
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</tr>
<tr>
<td>Washington</td>
<td>42143258</td>
<td>46590456</td>
<td>44974332</td>
<td>50546222</td>
</tr>
</tbody>
</table>

(Business Running Case: Front Range Action Sports continues on the next page)
Display the **Seattle Inventory** worksheet, and then in cell B4, construct a formula to calculate the **Total Items in Stock** by summing the **Quantity in Stock** column. Format the result with **Comma Style** and **no decimal places**.

a. In cell B5, construct a formula to calculate the average of the **Retail Price** column. In the range B6:B8, construct similar formulas to calculate the median, lowest, and highest retail prices. Format the results in B5:B8 with **Accounting Number Format**. In cell B10, use the **COUNTIF** function to count the number of **Skiing** items that the Seattle location stocks.

b. In cell G14, enter an IF function to determine the items that must be ordered. If the **Quantity in Stock** is less than 50 then **Value_if_true** is **Order** Otherwise the **Value_if_false** is **OK** Fill the formula down through cell G87. Apply **Conditional Formatting** to the **Stock Level** column so that cells that contain the text **Order** are formatted with **Bold Italic** and with a **Font Color** of **Dark Blue, Accent 3**. Apply **Light Blue Gradient Fill Data Bars** to the **Quantity in Stock** column.

c. Create a table with headers using the range A13:G87. Apply **Table Style Light 9**. Sort the table from smallest to largest on the **Retail Price** column, and then filter the table on the **Sport** column to display the **Skiing** types. Display a **Total Row** in the table and then in cell A88, **Sum** the **Quantity in Stock** for the **Skiing** items. Type the result in cell B11. Remove the total row from the table, clear the **Sport** filter so that all of the data displays, and then convert the table to a range.

d. Change the **Print Titles** option so that **row 13** prints at the top of each page. Insert the file name in the **left section** of the footer, set the orientation to **Landscape**, and center the worksheet horizontally. Return to **Normal** view.

e. Display the **Inventory Summary** sheet. In cell B5, enter a formula that references cell B4 in the **Seattle Inventory** sheet so that the Seattle **Total Items in Stock** displays in B5. Create similar formulas to enter the **Average Price**, **Median Price**, **Lowest Price**, and **Highest Price** in the range B6:B9. Enter similar formulas in the range C5:C9 so that the **Denver** totals display. Be sure the range B6:C9 is formatted with **Accounting Number Format**. Insert the file name in the **left section** of the footer, set the orientation to **Portrait**, and center the worksheet horizontally. Return to **Normal** view. **Save** the workbook.

Display the **Denver Inventory** worksheet, and then in cell B4, construct a formula to calculate the **Total Items in Stock** by summing the **Quantity in Stock** column. Format the result with **Comma Style** and **no decimal places**.

a. In the range B5:B8, use the appropriate statistical functions to calculate the price data. Format the results with **Accounting Number Format**. In cell B10, use the **COUNTIF** function to count the number of **Skiing** items that the Denver location stocks.

b. In cell G14, enter an IF function to determine the items that must be ordered. If the **Quantity in Stock** is less than 50 **Value_if_true** is **Order** Otherwise the **Value_if_false** is **OK**. Fill the formula down through cell G87. Apply **Conditional Formatting** to the **Stock Level** column so that cells that contain the text **Order** are formatted with **Bold Italic** and with a **Font Color** of **Dark Blue, Accent 3**. Apply **Light Blue Gradient Fill Data Bars** to the **Quantity in Stock** column.

c. Create a table with headers using the range A13:G87. Apply **Table Style Light 9**. Sort the table from smallest to largest on the **Retail Price** column, and then filter the table on the **Sport** column to display the **Skiing** types. Display a **Total Row** in the table and then in cell A88, **Sum** the **Quantity in Stock** for the **Skiing** items. Type the result in cell B11. Remove the total row from the table, clear the **Sport** filter so that all of the data displays, and then convert the table to a range.

d. Change the **Print Titles** option so that **row 13** prints at the top of each page. Insert the file name in the **left section** of the footer, set the orientation to **Landscape**, and center the worksheet horizontally. Return to **Normal** view.

e. Display the **Inventory Summary** sheet. In cell B5, enter a formula that references cell B4 in the **Seattle Inventory** sheet so that the Seattle **Total Items in Stock** displays in B5. Create similar formulas to enter the **Average Price**, **Median Price**, **Lowest Price**, and **Highest Price** in the range B6:B9. Enter similar formulas in the range C5:C9 so that the **Denver** totals display. Be sure the range B6:C9 is formatted with **Accounting Number Format**. Insert the file name in the **left section** of the footer, set the orientation to **Portrait**, and center the worksheet horizontally. Return to **Normal** view. **Save** the workbook.

Display the **Annual Expenses** worksheet. Construct formulas to calculate the **Totals by Quarter** in the range B10:E10 and the **Annual Totals** in the range F5:F10.

a. Using absolute cell references as necessary, in cell G5, construct a formula to calculate the % of **Total** by dividing the **Sales Expense Annual Total** by the **Annual Totals by Quarter**. Apply **Percent Style**, fill the formula down through the range G6:G9, and **Center** the percentages.
b. Apply appropriate financial formatting to the data using no decimal places, and apply the **Total** cell style to the **Totals by Quarter**. **Center** the column headings and apply the **Heading 4** cell style.

c. **Merge & Center** the worksheet title and subtitle across columns A:G, and then move to cell A1, apply the **Title** style and to cell A2, apply the **Heading 1** style. To the range A1:A2, apply a **Fill Color** using **Dark Blue, Accent 3, Lighter 60%**.

d. Using the data in the nonadjacent ranges B4:E4 and B10:E10, insert a **Line with Markers** chart. Position the upper left corner of the chart slightly inside cell B12 and resize the chart so that the lower right corner is inside cell F25. Remove the **Legend** and then add a **Chart Title** above the chart with the text **2012 Direct Expenses**.

e. Applying chart **Style 13**, and then format the **Chart Area** with the picture **eBRC1_Skiing** from your student files. Format the **Plot Area** by changing the **Fill option** to **No fill**. Edit the **Vertical (Value) Axis** so that the **Minimum** is 8000000 and the **Major unit** is 1000000.

6 Use **Format Painter** to copy the formatting from cell A2 to A27. In cell B32, enter a formula that references the value in cell F10.

**End** You have completed Business Running Case 1