

### Performance Objectives

Upon successful completion of Chapter 6, you will be able to:

- 1 Create a report using the Report button
- 2 Modify the record source
- 3 Select, edit, size, move, and delete control objects
- 4 Sort records
- 5 Find data
- 6 Display and customize a report in Print Preview
- 7 Delete a report
- 8 Format a report
- 9 Apply conditional formatting to data in a report
- 10 Group and sort records in a report
- 11 Insert a calculation in a report
- 12 Create a report using the Report Wizard
- 13 Create mailing labels using the Label Wizard

#### Precheck

Check your current skills to help focus your study.

In this chapter, you will learn how to prepare reports from data in a table or query using the Report button in the Reports group on the Create tab and using the Report Wizard. You will also learn how to manage control objects, format, and insert a calculation in a report and create mailing labels using the Label Wizard.

#### Data Files

Before beginning chapter work, copy the AL1C6 folder to your storage medium and then make AL1C6 the active folder.



#### SNAP

If you are a SNAP user, launch the Precheck and Tutorials from your Assignments page.

## Project 1 Create and Customize Reports Using Tables and Queries 5 Parts

You will create reports with the Report button using tables and queries. You will change the report views; select, move, and size control objects; sort records; customize reports; apply conditional formatting; group and sort fields; and insert a calculation in a report.

Preview Finished Project

### Tutorial

#### Creating a Report

##### Quick Steps

##### Create a Report

1. Click table or query in Navigation pane.
2. Click Create tab.
3. Click Report button.



Report

**Hint** Create a report to control what data appears on the page when printed.

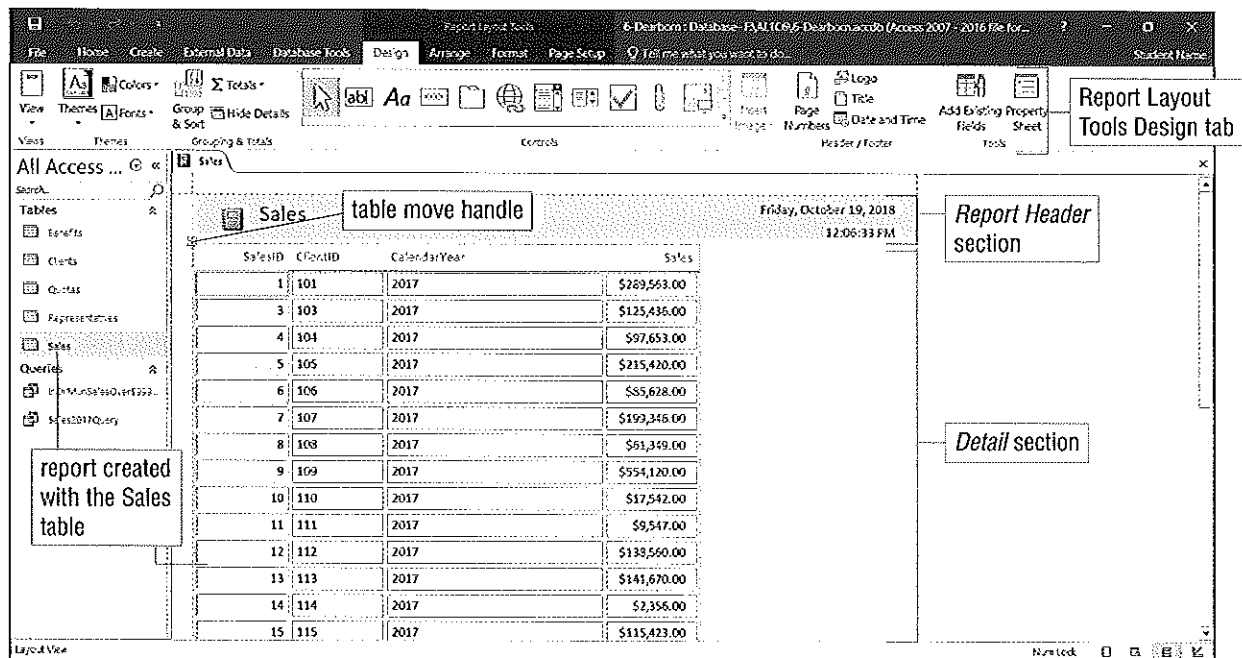
## Creating a Report

Create a report in a database to control what data appears on the page when printed and how the data is formatted. Reports generally answer specific questions (queries). For example, a report could answer the question *What customers have submitted claims?* or *What products do we currently have on order?* The record source for a report can be a table or query. Create a report with the Report button in the Reports group or use the Report Wizard that provides steps for creating a report.

### Creating a Report with the Report Button

To create a report with the Report button, click a table or query in the Navigation pane, click the Create tab, and then click the Report button in the Reports group. This displays the report in columnar style in Layout view with the Report Layout Tools Design tab active, as shown in Figure 6.1. Access creates the report using all of the fields in the table or query.

Figure 6.1 Report Created with Sales Table



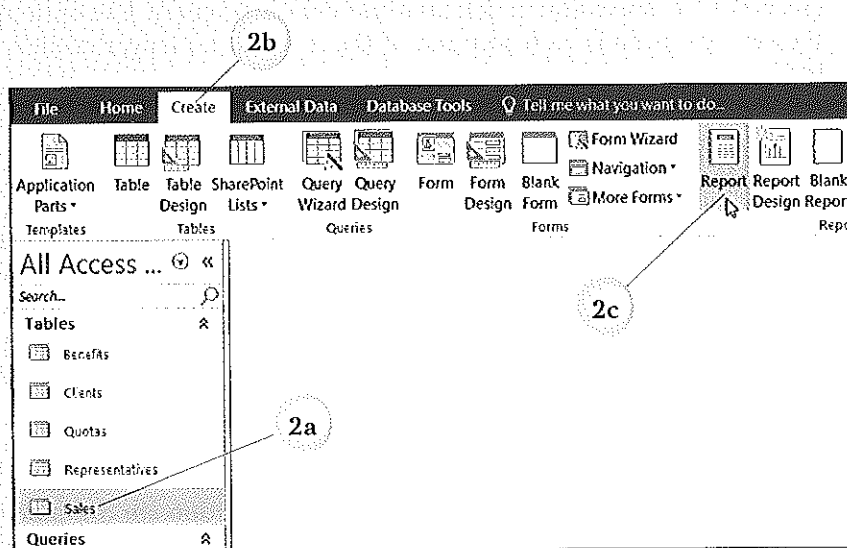
## Modifying the Record Source

The record source for a report is the table or query used to create the report. If changes are made to the record source, such as adding or deleting records, those changes are reflected in the report. For example, in Project 1a, a report will be created based on the Sales table. A record will be added to the Sales table (the record source for the report) and the added record will display in the Sales report.

### Project 1a Creating a Report with the Report Button

Part 1 of 5

1. Open 6-Dearborn.accdb from the AL1C6 folder on your storage medium and enable the content.
2. Create a report based on the Sales table by completing the following steps:
  - a. Click *Sales* in the Tables group in the Navigation pane.
  - b. Click the Create tab.
  - c. Click the Report button in the Reports group.



- d. Save the report by clicking the Save button on the Quick Access Toolbar and then clicking OK at the Save As dialog box. (This saves the report with the default name *Sales*.)
  - e. Close the Sales report.
3. Add a record to the Sales table by completing the following steps:
    - a. Double-click *Sales* in the Tables group in the Navigation pane. (Make sure you open the Sales table and not the Sales report.)
    - b. Click the New button in the Records group on the Home tab.
    - c. Press the Tab key to accept the default number in the *SalesID* field.
    - d. Type 127 in the *ClientID* field and then press the Tab key.
    - e. Type 2018 in the *CalendarYear* field and then press the Tab key.
    - f. Type 176420 in the *Sales* field.
    - g. Close the Sales table.
  4. Open the Sales report and then scroll down to the bottom. Notice that the new record you added to the Sales table displays in the report.
  5. Close the Sales report.

6. Use the *Sales2017Query* query to create a report by completing the following steps:
  - a. Click *Sales2017Query* in the Queries group in the Navigation pane.
  - b. Click the Create tab.
  - c. Click the Report button in the Reports group.
7. Access automatically inserted a total amount for the *Sales* column of the report. Delete this amount by scrolling down to the bottom of the report, clicking the total amount at the bottom of the *Sales* column, and then pressing the Delete key. (This deletes the total amount but not the underline above the amount.)
8. Save the report by clicking the Save button on the Quick Access Toolbar, typing *2017Sales* in the *Report Name* text box in the Save As dialog box, and then clicking OK.

#### Check Your Work

## Modifying a Report

Make modifications to a report as needed to address specific needs. For example, select, size, move, edit, or delete control objects in a report; sort records in ascending or descending order, and find data in a report. Use options in Print Preview to customize a report and, if the report is no longer needed, delete the report.

### Tutorial

#### Managing Control Objects in a Report

### Managing Control Objects

A report, like a form, is comprised of control objects, such as logos, titles, labels, and text boxes. Select a control object in a report by clicking the object and the object displays with an orange border. Click in a cell in the report and Access selects all of the objects in the column except the column heading. Select adjacent control objects by pressing and holding down the Shift key and then clicking objects or select nonadjacent control objects by pressing and holding down the Ctrl key and then clicking objects.

Like a form, a report contains a *Header* section and a *Detail* section. Select all of the control objects in the report in both the *Header* and *Detail* sections by pressing Ctrl + A. Control objects in the *Detail* section are contained in a report table. To select the control objects in the report table, click in any cell in the report and then click the table move handle. The table move handle is a small square with a four-headed arrow inside that displays in the upper left corner of the table (see Figure 6.1). Move the table and all of the control objects within the table by dragging the table move handle using the mouse.

Change the size of control objects by dragging the border of a selected control object or with the *Width* and *Height* property boxes in the Property Sheet task pane with the Data tab selected. To change the size of a control object by dragging, select the object (displays with an orange border) and then, using the mouse, drag a left or right border to increase or decrease the width or drag a top or bottom border to increase or decrease the height of the control object. When dragging the border of a control object, a line and character count displays at the left side of the Status bar. Use the line and character count numbers to adjust the width and/or height of the object by a precise line and character count number.

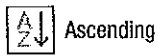
The width and height of a control object or column of control objects can be adjusted with the *Width* and *Height* property boxes in the Property Sheet task pane. Display this task pane by clicking the Property Sheet button in the Tools group. In the Property Sheet task pane, click the Data tab, select the current

measurement in the *Width* or *Height* property box, type the new measurement, and then press the Enter key.

A selected control object can be moved by positioning the mouse pointer in the object until the pointer displays with a four-headed arrow attached. Click and hold down the left mouse button, drag to the new location, and then release the mouse button. To move a column of selected control objects, position the mouse pointer in the column heading until the pointer displays with a four-headed arrow attached and then click and drag to the new location. While dragging a control object(s), a pink insert indicator bar displays indicating where the control object(s) will be positioned when the mouse button is released.

Some control objects in a report, such as a column heading or title, are label control objects. Edit a label control by double-clicking in the label control object and then making the specific changes. For example, to rename a label control, double-click in the label control and then type the new name.

## Sorting Records



Ascending



Descending

### Quick Steps

#### Sort Records

1. Click in field containing data.
2. Click Ascending button or Descending button.



Find

Sort data in a report by clicking in the field containing the data to be sorted and then clicking the Ascending button or the Descending button in the Sort & Filter group on the Home tab. Click the Ascending button to sort text in alphabetic order from A to Z, numbers from lowest to highest, and dates from earliest to latest. Click the Descending button to sort text in alphabetic order from Z to A, numbers from highest to lowest, and dates from latest to earliest.

## Finding Data in a Report

Find specific data in a report with options at the Find dialog box. Display this dialog box by clicking the Find button in the Find group on the Home tab. At the Find dialog box, enter the search data in the *Find What* text box.

The *Match* option at the Find dialog box is set at *Whole Field* by default. At this setting, the data entered must match the entire entry in a field. To search for partial data in a field, change the *Match* option to *Any Part of Field* or *Start of Field*. If the text entered in the *Find What* text box needs to match the case in a field entry, click the *Match Case* check box to insert a check mark.

Access searches the entire report by default. This can be changed to *Up* to tell Access to search from the currently active field to the beginning of the report or *Down* to search from the currently active field to the end of the report. Click the Find Next button to find data that matches the data in the *Find What* text box.

### Tutorial

#### Customizing a Report in Print Preview



Print Preview

## Displaying and Customizing a Report in Print Preview

When a report is created, the report displays in the work area in Layout view. In addition to Layout view, three other views are available: Report, Print Preview, and Design. Use Print Preview to display the report as it will appear when printed. To change to Print Preview, click the Print Preview button in the view area at the right side of the Status bar. Another method for displaying the report in Print Preview is to click the View button arrow in the Views group on the Home tab or Report Layout Tools Design tab and then click *Print Preview* at the drop-down list.

In Print Preview, send the report to the printer by clicking the Print button on the Print Preview tab. Use options in the Page Size group to change the page size and margins. To print only the report data and not the column headings,

report title, shading, and gridlines, insert a check mark in the *Print Data Only* check box. Use options in the Page Layout group to specify the page orientation, specify the number and size of columns, and display the Page Setup dialog box. Click the Page Setup button and the Page Setup dialog box displays with options for customizing margins, orientation, size, and columns. The Zoom group contains options and buttons for specifying a zoom percentage and for displaying one, two, or multiples pages of the report.

## Deleting a Report

### Quick Steps

#### Delete a Report

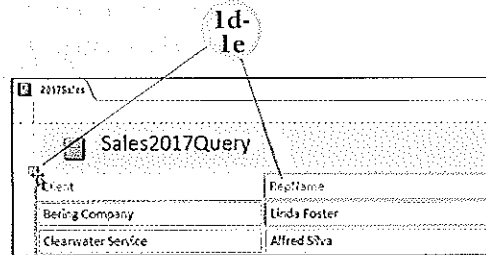
1. Click report name in Navigation pane.
  2. Click Delete button on Home tab.
  3. Click Yes.
- OR
1. Right-click report name in Navigation pane.
  2. Click *Delete*.
  3. Click Yes.

If a report is no longer needed in a database, delete the report. Delete a report by clicking the report name in the Navigation pane, clicking the Delete button in the Records group on the Home tab, and then clicking the Yes button at the confirmation message. Another method is to right-click the report in the Navigation pane, click *Delete* at the shortcut menu, and then click the Yes at the message. If a report is being deleted from the computer's hard drive, the confirmation message will not display. This is because Access automatically sends the deleted report to the Recycle Bin, where it can be retrieved at a later time, if necessary.

## Project 1b Adjusting Control Objects, Renaming Labels, Finding and Sorting Data, Displaying a Report in Print Preview, and Deleting a Report

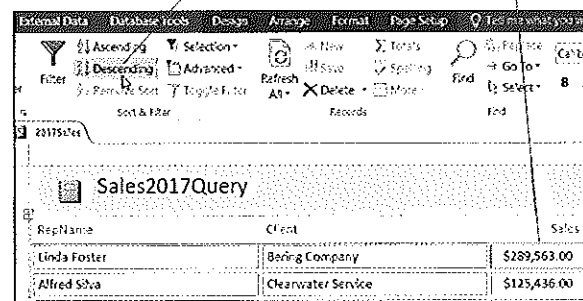
Part 2 of 5

1. With the 2017Sales report open, reverse the order of the *RepName* and *Client* columns by completing the following steps:
  - a. Make sure the report displays in Layout view.
  - b. Click the *RepName* column heading.
  - c. Press and hold down the Shift key, click in the first control object below the *RepName* column heading (the control object containing *Linda Foster*), and then release the Shift key.
  - d. Position the mouse pointer inside the *RepName* column heading until the pointer displays with a four-headed arrow attached.
  - e. Click and hold down the left mouse button, drag to the left until the vertical pink insert indicator bar displays to the left of the *Client* column, and then release the mouse button.



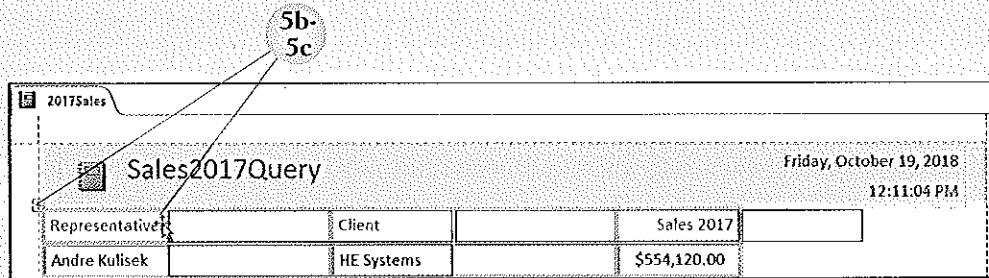
| Client             | RepName      |
|--------------------|--------------|
| Bering Company     | Linda Foster |
| Clearwater Service | Alfred Silva |

2. Sort the data in the *Sales* column in descending order by completing the following steps:
  - a. Click the Home tab.
  - b. Click in any field in the *Sales* column.
  - c. Click the Descending button in the Sort & Filter group.
3. Rename the *RepName* label control as *Representative* by double-clicking in the label control object containing the text *RepName*, selecting *RepName*, and then typing *Representative*.

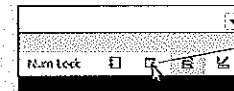


| RepName      | Client             | Sales        |
|--------------|--------------------|--------------|
| Linda Foster | Bering Company     | \$289,563.00 |
| Alfred Silva | Clearwater Service | \$125,436.00 |

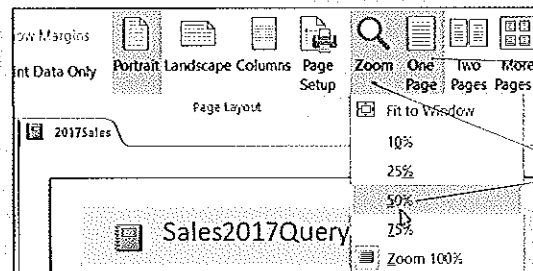
4. Double-click in the *Sales* label control and then rename it *Sales 2017*.
5. Move the report table by completing the following steps:
  - a. Click in a cell in the report.
  - b. Position the mouse pointer on the table move handle (a small square with a four-headed arrow inside that displays in the upper left corner of the table).
  - c. Click and hold down the left mouse button, drag the report table to the right until it is centered between the left and right sides of the *Detail* section, and then release the mouse button. (When you drag with the mouse, you will see only outlines of some of the control objects.)



6. Display the report in Print Preview by clicking the Print Preview button in the view area at the right side of the Status bar.



7. Click the One Page button (already active) in the Zoom group to display the entire page.
8. Click the Zoom button arrow in the Zoom group and then click 50% at the drop-down list.
9. Click the One Page button in the Zoom group.
10. Print the report by clicking the Print button on the Print Preview tab and then clicking OK at the Print dialog box.



11. Close Print Preview by clicking the Close Print Preview button at the right side of the Print Preview tab.
12. Save and then close the 2017Sales report.
13. Create a report with the Representatives table by completing the following steps:
  - a. Click *Representatives* in the Tables group in the Navigation pane.
  - b. Click the Create tab.
  - c. Click the Report button in the Reports group.
14. Adjust the width of the second column by completing the following steps:
  - a. Click in the *RepName* column heading.
  - b. Drag the right border of the selected column heading to the left until *Lines: 1 Characters: 16* displays at the left side of the Status bar, and then release the mouse button.
15. Complete steps similar to those in Step 14 to decrease the width of the third column (*Telephone*) to *Lines: 1 Characters: 12* and the fourth column (*Email*) to *Lines: 1 Characters: 13*.

16. Adjust the width of the *QuotaID* column and the width and height of the title control object by completing the following steps:
  - a. Click in the *QuotaID* column heading.
  - b. Click the Property Sheet button in the Tools group and, if necessary, click the Format tab.
  - c. Select the current measurement in the *Width* property box, type 0.8, and then press the Enter key.
  - d. Click *Representatives* in the title control object.
  - e. Select the current measurement in the *Width* property box, type 2, and then press the Enter key.
  - f. With the current measurement selected in the *Height* property box, type 0.6.
  - g. Close the Property Sheet task pane by clicking the Close button in the upper right corner of the task pane.

17. Search for fields containing a quota of 2 by completing the following steps:
  - a. Click in the *RepID* column heading.
  - b. Click the Home tab and then click the Find button in the Find group.
  - c. At the Find dialog box, type 2 in the *Find What* text box.
  - d. Make sure the *Match* option is set to *Whole Field*.

(If not, click the *Match* option box arrow and then click *Whole Field* at the drop-down list.)

- e. Click the Find Next button.

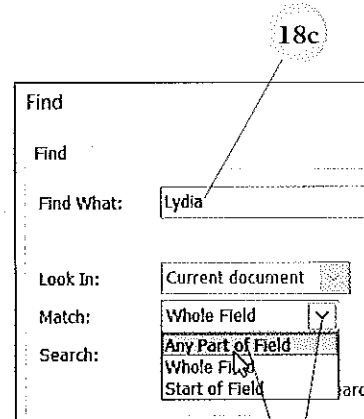
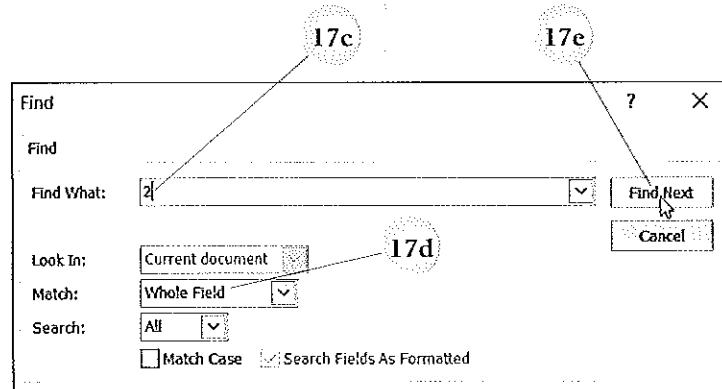
- f. Continue clicking the Find Next button until a message displays stating that Access has finished searching the records. Click OK at the message.

- g. Click the Cancel button to close the Find dialog box.

18. Suppose you want to find information on a representative and you remember the first name but not the last name. Search for a field containing the first name *Lydia* by completing the following steps:

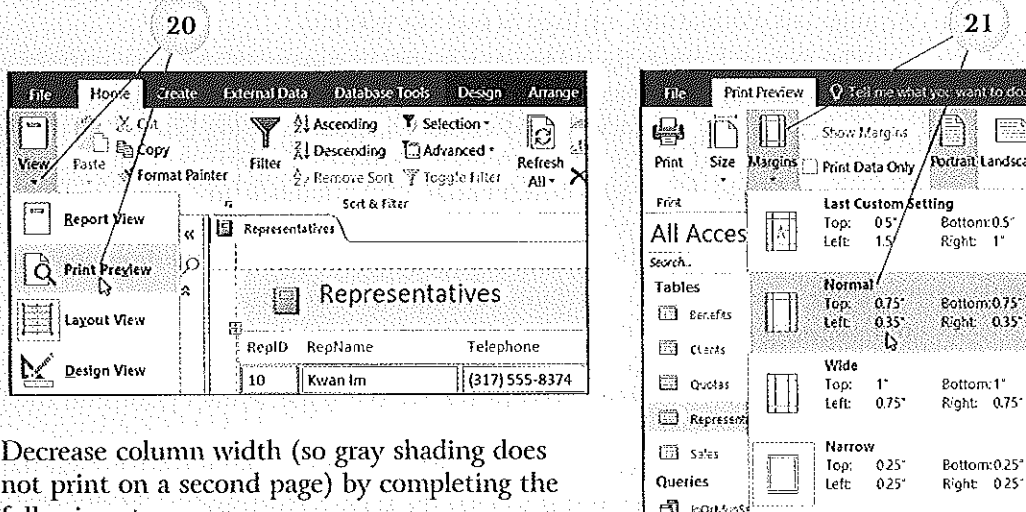
- a. Click in the *RepID* column heading.
- b. Click the Find button in the Find group.
- c. At the Find dialog box, type *Lydia* in the *Find What* text box.
- d. Click the *Match* option box arrow and then click *Any Part of Field* at the drop-down list.
- e. Click the Find Next button. (Access will find and select the representative name *Lydia Alvarado*.)
- f. Click the Cancel button to close the Find dialog box.

19. Click the control object at the bottom of the *RepID* column containing the number 17 and then press the Delete key. (This does not delete the underline above the amount.)

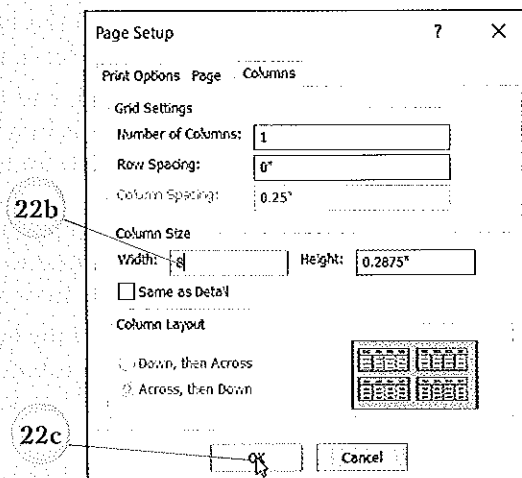




20. Switch to Print Preview by clicking the View button arrow in the Views group on the Home tab and then clicking *Print Preview* at the drop-down list.
21. Click the Margins button in the Page Size group and then click *Normal* at the drop-down list.



22. Decrease column width (so gray shading does not print on a second page) by completing the following steps:
  - a. Click the Columns button in the Page Layout group on the Print Preview tab.
  - b. Select the current measurement in the *Width* measurement box in the *Column Size* section of the dialog box and then type 8.
  - c. Click OK to close the dialog box.



23. Print the report by clicking the Print button at the left side of the Print Preview tab and then clicking OK at the Print dialog box.
24. Close Print Preview by clicking the Close Print Preview button.
25. Save the report with the name *Representatives*.
26. Close the Representatives report.
27. Delete the Sales report by right-clicking *Sales* in the Reports group in the Navigation pane, clicking *Delete* at the shortcut menu, and then clicking Yes at the confirmation message.

**Check Your Work**

## Tutorial

### Formatting a Report

## Formatting a Report

Customize a report in much the same manner as customizing a form. When a report is created, the report displays in Layout view and the Report Layout Tools Design tab is active. Customize control objects in the *Detail* section and the *Header* section with buttons on the Report Layout Tools ribbon with the Design tab, Arrange tab, Format tab, or Page Setup tab selected.

The Report Layout Tools Design tab contains many of the same options as the Form Layout Tools Design tab. Use options on this tab to apply a theme, insert controls, insert header or footer data, and add existing fields. Use the Totals button in the Grouping & Totals group to perform calculations, such as finding the sum, average, maximum, or minimum of the numbers in a column. To use the Totals button, click in the column heading of the column containing the data to be totaled, click the Totals button, and then click a function at the drop-down list.



Totals

**Hint** The themes available in Access are the same as the themes available in Word, Excel, and PowerPoint.

Click the Report Layout Tools Arrange tab and options display for inserting and selecting rows, splitting cells horizontally and vertically, moving data up or down, controlling margins, and changing the padding between cells. The options on the Report Layout Tools Arrange tab are the same as the options on the Form Layout Tools Arrange tab.

Select and format data in a report with options on the Report Layout Tools Format tab. The options on this tab are the same as the options on the Form Layout Tools Format tab. Use options to apply formatting to a report or specific objects in a report. To apply formatting to a specific object, click the object in the report or click the Object button arrow in the Selection group on the Report Layout Tools Format tab and then click the object at the drop-down list. To format all objects in the report, click the Select All button in the Selection group. This selects all objects in the report, including objects in the *Header* section. To select all of the objects in the report table, click the table move handle.

Use buttons in the Font, Number, Background, and Control Formatting groups to apply formatting to a cell or selected cells in a report. Use buttons in the Font group to change the font, apply a different font size, apply text effects (such as bold and underline), and change the alignment of data in objects. Insert a background image in the report using the Background button and apply formatting to cells with buttons in the Control Formatting group. Depending on what is selected in the report, some of the buttons may not be active.



Background

Click the Report Layout Tools Page Setup tab and the buttons that display are also available in Print Preview. For example, the tab contains buttons for changing the page size and page layout of the report and displaying the Page Setup dialog box.

## Tutorial

### Applying Conditional Formatting to a Report

## Applying Conditional Formatting to a Report

Apply conditional formatting to a report in the same manner as applying conditional formatting to a form (covered in Chapter 5). Click the Conditional Formatting button in the Control Formatting group on the Report Layout Tools Format tab and the Conditional Formatting Rules Manager dialog box displays. Click the New Rule button and then use options in the New Formatting Rule dialog box to specify the conditional formatting.



Conditional Formatting

1. With 6-Dearborn.accdb open, open the 2017Sales report.

2. Display the report in Layout view.

3. Click the Themes button in the Themes group on the Report Layout Tools Design tab and then click *Ion* at the drop-down gallery.

4. Click the Title button in the Header/Footer group (which selects the current title), type 2017 Sales, and then press the Enter key.

5. Insert a row of empty cells in the report by completing the following steps:  
 a. Click in the *Representative* cell.  
 b. Click the Report Layout Tools Arrange tab.  
 c. Click the Insert Above button in the Rows & Columns group.

6. Merge the cells in the new row by completing the following steps:

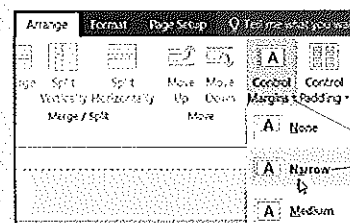
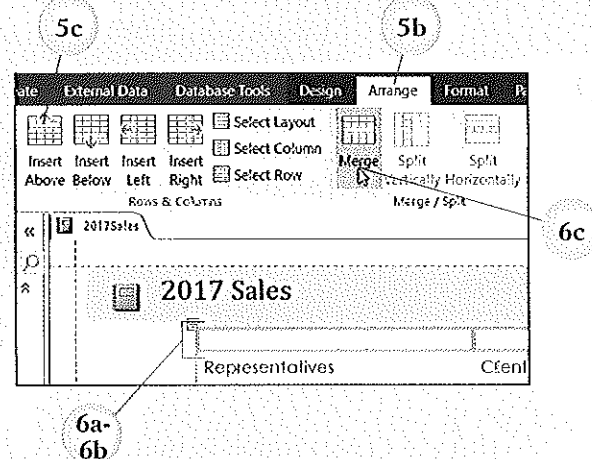
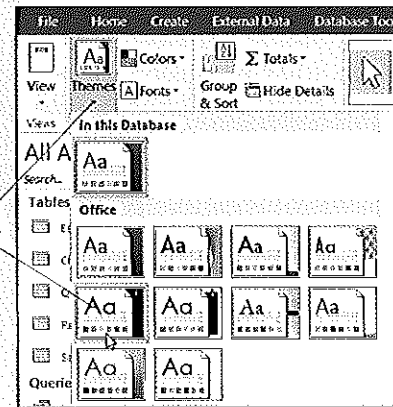
- Click in the empty cell immediately above the *Representative* cell.
- Press and hold down the Shift key, click immediately above the *Sales 2017* cell, and then release the Shift key. (This selects three cells.)
- Click the Merge button in the Merge/Split group.
- Type Dearborn 2017 Sales in the new cell.

7. Split a cell by completing the following steps:

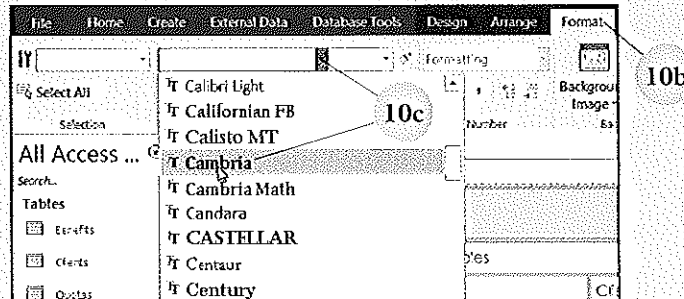
- Click in the *2017 Sales* title in the Header section.
- Split the cell containing the title by clicking the Split Horizontally button in the Merge/Split group.
- Click in the empty cell immediately right of the cell containing the title *Sales 2017* and then press the Delete key. (Deleting the empty cell causes the date and time to move to the left in the Header section.)

8. Change the report table margins and padding by completing the following steps:

- Click in any cell in the *Detail* section and then click the table move handle in the upper left corner of the *Dearborn 2017 Sales* cell. (This selects all of the control objects in the report table in the *Detail* section.)
- Click the Control Margins button in the Position group and then click *Narrow* at the drop-down list.
- Click the Control Padding button in the Position group and then click *Medium* at the drop-down list.

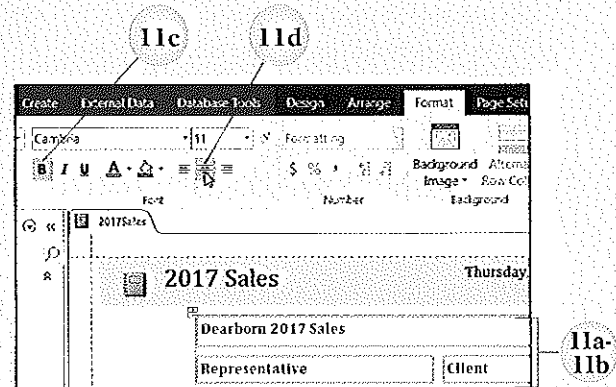


9. Click in the *Dearborn 2017 Sales* cell and then drag down the bottom border so all of the text in the cell is visible.
10. Change the font for all of the data in the report by completing the following steps:
  - a. Press Ctrl + A to select all control objects in the report. (An orange border displays around selected objects.)
  - b. Click the Report Layout Tools Format tab.
  - c. Click the *Font* option box arrow in the Font group and then click *Cambria* at the drop-down list. (You may need to scroll down the list to display *Cambria*.)

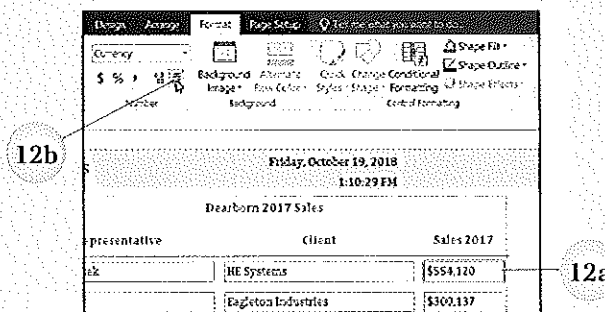


11. Apply bold formatting and change the alignment of the column headings by completing the following steps:

- a. Click *Dearborn 2017 Sales* to select the control object.
- b. Press and hold down the Shift key, click *Sales 2017*, and then release the Shift key. (This selects four cells.)
- c. Click the Bold button in the Font group.
- d. Click the Center button in the Font group.



12. Format and apply conditional formatting to the amounts by completing the following steps:
  - a. Click the first field value below the *Sales 2017* column heading. (This selects all of the amounts in the column.)
  - b. Click the Decrease Decimals button in the Number group two times.



- c. Click the Conditional Formatting button in the Control Formatting group.
- d. At the Conditional Formatting Rules Manager dialog box, click the New Rule button.

e. At the New Formatting Rule dialog box, click the option box arrow for the second option box in the *Edit the rule description* section and then click *greater than* at the drop-down list.

f. Click in the text box immediately right of the option box containing *greater than* and then type 199999.

g. Click the Background color button arrow and then click the *Green 2* color option (seventh column, third row).

h. Click OK.

i. At the Conditional Formatting Rules Manager dialog box, click the New Rule button.

j. At the New Formatting Rule dialog box, click the option box arrow for the second option box in the *Edit the rule description* section and then click *less than* at the drop-down list.

k. Click in the text box immediately right of the option box containing *less than* and then type 200000.

l. Click the Background color button arrow and then click the *Maroon 2* color option (sixth column, third row).

m. Click OK to close the New Formatting Rule dialog box.

n. Click OK to close the Conditional Formatting Rules Manager dialog box.

13. Sum the totals in the *Sales 2017* column by completing the following steps:

a. Click in the *Sales 2017* column heading.

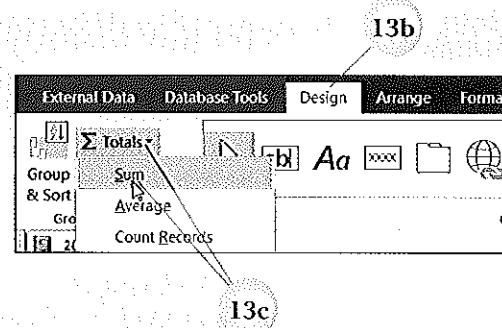
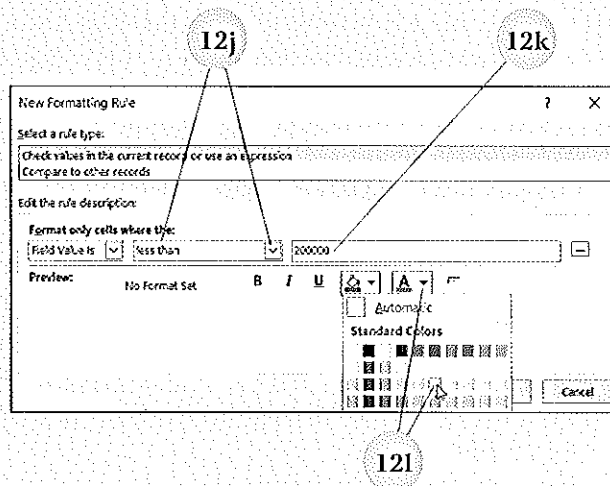
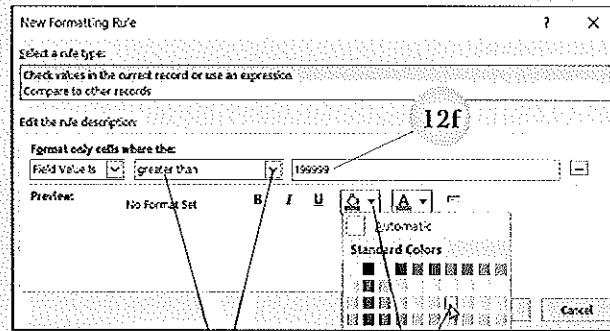
b. Click the Report Layout Tools Design tab.

c. Click the Totals button in the Grouping & Totals group and then click *Sum* at the drop-down list.

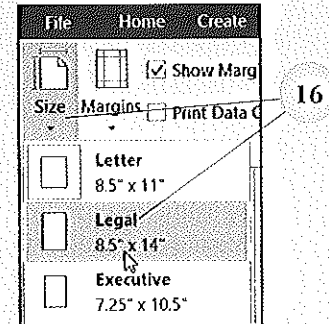
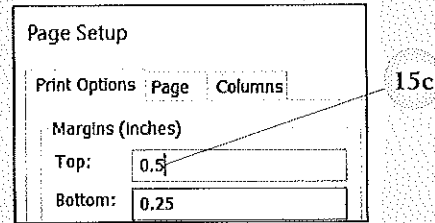
14. Click in the *Sales 2017* sum amount (at the bottom of the *Sales 2017* column) and then drag down the bottom border so the entire amount is visible in the cell.

15. Change the top margin by completing the following steps:

a. Click in the *Representative* column heading and then click the Report Layout Tools Page Setup tab.



- b. Click the Page Setup button in the Page Layout group.
  - c. At the Page Setup dialog box with the Print Options tab selected, select the current measurement in the *Top* measurement box and then type 0.5.
  - d. Click OK to close the Page Setup dialog box.
16. Change the page size by clicking the Size button in the Page Size group and then clicking *Legal* at the drop-down list.
17. Display the report in Print Preview by clicking the File tab, clicking the *Print* option, and then clicking the *Print Preview* option.
18. Click the One Page button in the Zoom group and notice that the entire report will print on one legal-sized page.
19. Click the Close Print Preview button to return to the report.
20. Change the page size by clicking the Page Layout Tools Page Setup tab, clicking the Size button in the Page Size group, and then clicking *Letter* at the drop-down list.
21. Insert and then remove a background image by completing the following steps:
- a. Click the Report Layout Tools Format tab.
  - b. Click the Background Image button in the Background group and then click *Browse* at the drop-down list.
  - c. At the Insert Picture dialog box, navigate to the ALIC6 folder on your storage medium and then double-click *Mountain.jpg*.
  - d. Scroll through the report and notice how the image displays in the report.
  - e. Click the Undo button on the Quick Access Toolbar to remove the background image. (You may need to click the Undo button more than once.)
22. Print the report by clicking the File tab, clicking the *Print* option, and then clicking the *Quick Print* option.
23. Save and then close the report.



**Check Your Work**

## Tutorial

### Grouping and Sorting Records in a Report



Group & Sort



Add a group

### Quick Steps

#### Group and Sort Records

1. Open report in Layout view.
2. Click Group & Sort button.
3. Click Add a group button.
4. Click group field.

## Grouping and Sorting Records in a Report

A report presents database information in a printed form and generally displays data that answers a specific question. To make the data in a report easy to understand, divide the data into groups. For example, data can be divided in a report by regions, sales, dates, or any other division that helps clarify the data for the reader. Access contains a group and sort feature for dividing data into groups and sorting the data.

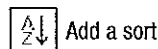
Click the Group & Sort button in the Grouping & Totals group on the Report Layout Tools Design tab and the Group, Sort, and Total pane displays at the bottom of the work area, as shown in Figure 6.2. Click the Add a group button in the Group, Sort, and Total pane and Access adds a new grouping level row to the pane, along with a list of available fields. Click the field by which data is to be grouped in the report and Access adds the grouping level in the report. With options in the grouping level row, change the group, specify the sort order, and expand the row to display additional options.

**Figure 6.2** Group, Sort, and Total Pane

| ClientID | RepID | Client               | StreetAddress            | City         | State | ZipCode |
|----------|-------|----------------------|--------------------------|--------------|-------|---------|
| 101      | 23    | Bering Company       | 4521 East Sixth Street   | Muncie       | IN    | 47310   |
| 102      | 10    | Fairhaven Developers | 574 East Raymond Street  | Indianapolis | IN    | 46219   |
| 103      | 13    | Clearwater Service   | 10385 North Gavin Street | Muncie       | IN    | 47308   |
| 104      | 17    | Landower Company     | 1299 Arlington Avenue    | Indianapolis | IN    | 46236   |
| 105      | 15    | Horford Systems      | 9654 Jackson Street      | Indianapolis | IN    | 46247   |
| 106      | 19    | Providence, Inc.     | 12490 141st Street       | Muncie       | IN    | 47306   |
| 107      | 12    | Gottagher Systems    | 3885 Moore Avenue        | Indianapolis | IN    | 47229   |
| 108      | 26    | Karr's Supplies      | 12003 East 16th Street   | Fishers      | IN    | 46038   |

Group records by a specific field by clicking this button and then clicking the field.

Sort records by a specific field by clicking this button and then clicking the field.



**Hint** Grouping allows you to separate groups of records visually.

When a grouping level is specified, Access automatically sorts that level in ascending order (from A to Z or lowest to highest). Additional data can be sorted within the report by clicking the Add a sort button in the Group, Sort, and Total pane. This inserts a sorting row in the pane below the grouping level row, along with a list of available fields. At this list, click the field by which to sort. For example, in Project 1d, one of the reports will be grouped by city (which will display in ascending order) and then the client names will display in alphabetic order within the city.

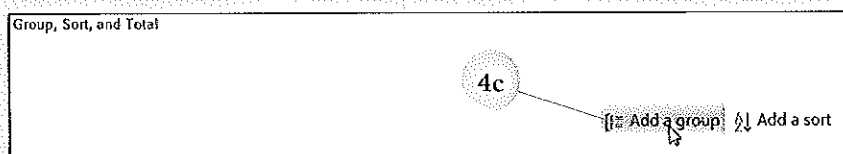
To delete a grouping or sorting level in the Group, Sort, and Total pane, click the Delete button at the right side of the level row. After specifying the grouping and sorting levels, close the Group, Sort, and Total pane by clicking the Close button in the upper right corner of the pane or by clicking the Group & Sort button in the Grouping & Totals group.

## Project 1d Grouping and Sorting Records in a Report

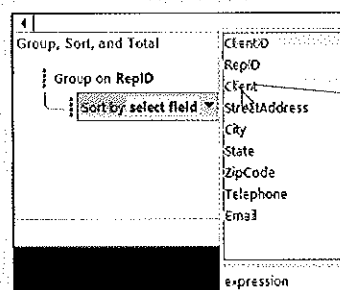
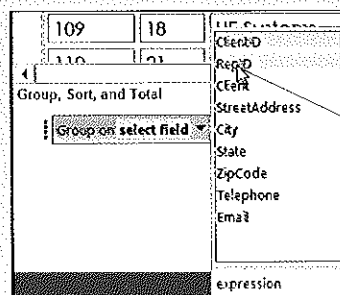
Part 4 of 5

1. With 6-Dearborn.accdb open, create a report with the Clients table using the Report button on the Create tab.
2. Click in each column heading individually and then decrease the size of each column so the right border is just right of the longest entry.
3. Change to landscape orientation by completing the following steps:
  - a. Click the Report Layout Tools Page Setup tab.
  - b. Click the Landscape button in the Page Layout group.
4. Group the report by representative ID and then sort by clients by completing the following steps:
  - a. Click the Report Layout Tools Design tab.
  - b. Click the Group & Sort button in the Grouping & Totals group.

- c. Click the Add a group button in the Group, Sort, and Total pane.



- d. Click the *RepID* field in the list box.
  - e. Scroll through the report and notice that the records are grouped by the *RepID* field. Also, notice that the client names within each *RepID* field group are not in alphabetic order.
  - f. Click the Add a sort button in the Group, Sort, and Total pane.
  - g. Click the *Client* field in the list box.
  - h. Scroll through the report and notice that client names are now alphabetized within *RepID* field groups.
  - i. Close the Group, Sort, and Total pane by clicking the Group & Sort button in the Grouping & Totals group.
5. Save the report with the name *RepIDGroupedRpt*.
  6. Change column width and print the first page of the report by completing the following steps:
    - a. Click the File tab, click the *Print* option, and then click the *Print Preview* option.
    - b. Click the Columns button on the Print Preview tab, select the current measurement in the *Width* measurement box, type 10, and then click OK.
    - c. Click the Print button on the Print Preview tab.
    - d. At the Print dialog box, click the *Pages* option in the *Print Range* section.
    - e. Type 1 in the *From* text box, press the Tab key, and then type 1 in the *To* text box.
    - f. Click OK.
  7. Close the *RepIDGroupedRpt* report.
  8. Create a report with the *InOrMunSalesOver\$99999Query* query using the Report button on the Create tab. Make sure the report displays in Layout view.
  9. Group the report by city and then sort by clients by completing the following steps:
    - a. Click the Group & Sort button in the Grouping & Totals group on the Report Layout Tools Design tab.
    - b. Click the Add a group button in the Group, Sort, and Total pane.
    - c. Click the *City* field in the list box.
    - d. Click the Add a sort button in the Group, Sort, and Total pane.
    - e. Click the *Client* field in the list box.
    - f. Close the Group, Sort, and Total pane by clicking the Group & Sort button in the Grouping & Totals group.
  10. Print the first page of the report. (Refer to Step 6.)
  11. Save the report, name it *InMunSalesOver\$99999*, and then close the report.
  12. Close 6-Dearborn.accdb.
  13. Open 6-WarrenLegal.accdb from the AL1C6 folder on your storage medium and enable the content.





14. Design a query that extracts records from three tables with the following specifications:
  - a. Add the Billing, Clients, and Rates tables to the query window.
  - b. Insert the *LastName* field from the Clients table field list box in the first field in the *Field* row.
  - c. Insert the *Date* field from the Billing table field list box in the second field in the *Field* row.
  - d. Insert the *Hours* field from the Billing table field list box in the third field in the *Field* row.
  - e. Insert the *Rate* field from the Rates table field list box in the fourth field in the *Field* row.
  - f. Click in the fifth field in the *Field* row, type *Total: [Hours]\*[Rate]*, and then press the Enter key.

|           |                                     |                                     |                                     |                                     |                                     |
|-----------|-------------------------------------|-------------------------------------|-------------------------------------|-------------------------------------|-------------------------------------|
|           | 14b                                 | 14c                                 | 14d                                 | 14e                                 | 14f                                 |
| Field:    | LastName                            | Date                                | Hours                               | Rate                                | Total: [Hours]*[Rate]               |
| Table:    | Clients                             | Billing                             | Billing                             | Rates                               |                                     |
| Sort:     |                                     |                                     |                                     |                                     |                                     |
| Show:     | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> |
| Criteria: |                                     |                                     |                                     |                                     |                                     |
| or:       |                                     |                                     |                                     |                                     |                                     |

- g. Run the query.
- h. Save the query with the name *ClientBilling*.
- i. Close the query.
15. Create a report with the ClientBilling query using the Report button on the Create tab.
16. Click in each column heading individually and then decrease the size of each column so the right border is near the longest entry.
17. Apply currency formatting to the numbers in the *Total* column by completing the following steps:
  - a. Click the Report Layout Tools Format tab.
  - b. Click in the first field below the *Total* column (the field containing the number 350).
  - c. Click the Apply Currency Format button in the Number group.
  - d. If necessary, increase the size of the *Total* column so the entire amounts (including the dollar symbols (\$)) are visible.
18. Group the report by last name and then sort by date by completing the following steps:
  - a. Click the Report Layout Tools Design tab.
  - b. Click the Group & Sort button in the Grouping & Totals group.
  - c. Click the Add a group button in the Group, Sort, and Total pane.
  - d. Click the *LastName* field in the list box.
  - e. Click the Add a sort button in the Group, Sort, and Total pane.
  - f. Click the *Date* field in the list box.
  - g. Close the Group, Sort, and Total pane by clicking the Close button in the upper right corner of the pane.
19. Scroll to the bottom of the report and delete the total amount in the *Rate* column and the line above the total. (Click the line and then press the Delete key.)
20. Save the report with the name *ClientBillingRpt*.
21. Close the report.

|               |                |            |          |
|---------------|----------------|------------|----------|
|               | 17c            | 17a        | 17b      |
| External Data | Database Tools | Design     | Arrange  |
| Format        | Page Setup     |            |          |
| (Data1)       | 11             | Currency   |          |
| Font          | Number         | Background | Image    |
| ClientBilling |                |            |          |
| ClientBilling |                |            |          |
| LastName      | Date           | Hours      | Rate     |
| Cruzek        | 6/1/2018       | 1.75       | \$200.00 |
| Valencia      | 6/1/2018       | 0.50       | \$200.00 |
| Kasper        | 6/3/2018       | 2.00       | \$200.00 |
|               |                |            | \$400.00 |

Check Your Work

## Tutorial

### Inserting a Calculation in a Report

#### Quick Steps

##### Insert Calculation in Report

1. Click Text Box button on Report Layout Tools Design tab.
2. Click in report to insert label and text box control objects.
3. Click in text box control object.
4. Click Property Sheet button in Tools group.
5. Click Data tab.
6. Click in *Control Source* property box.
7. Type calculation.
8. Click Close button.

## Inserting a Calculation in a Report

Like a form, a calculation can be inserted in a report in a text box control object. To insert a text box control object as well as a label control object, click the Text Box button in the gallery in the Controls group on the Report Layout Tools Design tab, and then click in a location in the report where the two objects are to display. Click in the label control box and then type a label for the calculated field.

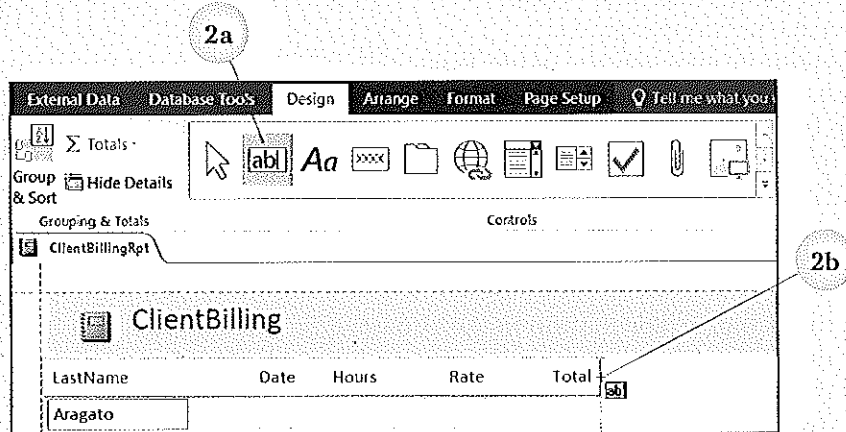
Insert a calculation by clicking in the text box control object and then clicking the Property Sheet button in the Tools group on the Report Layout Tools Design tab. At the Property Sheet task pane, click the Data tab, click in the *Control Source* property box, and then type the calculation. Type a calculation in the *Control Source* property box using mathematical operators and type field names in the calculation inside square brackets. Begin the calculation with an equals sign (=). A field name must be typed in the calculation as it appears in the source object.

If a calculation result is currency, apply currency formatting to the text box control object. Apply currency formatting by clicking the Report Layout Tools Format tab and then clicking the Apply Currency Format button in the Number group.

## Project 1e Inserting a Calculation in a Report

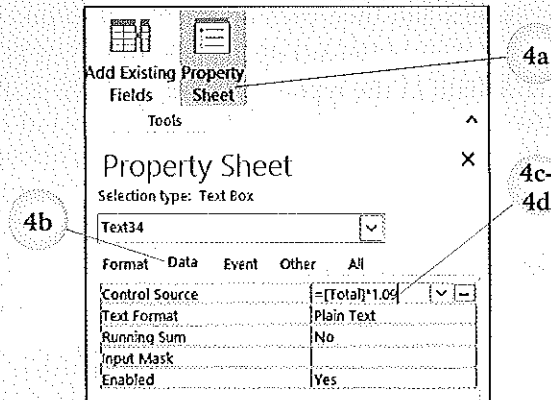
Part 5 of 5

1. With 6-WarrenLegal.accdb open, open the ClientBillingRpt report in Layout view.
2. Insert label and text box control objects by completing the following steps:
  - a. Click the Text Box button in the gallery in the Controls group on the Report Layout Tools Design tab.
  - b. Position the crosshairs to the right of the *Total* field name and then click the left mouse button. (This inserts a label control object and text box object in the report.)



3. Name the new field by clicking in the label control object, double-clicking the text in the label control object, and then typing Total + 9% Tax.

4. Click in the text box control object and then insert a calculation by completing the following steps:
  - a. Click the Property Sheet button in the Tools group on the Report Layout Tools Design tab.
  - b. At the Property Sheet task pane, click the Data tab.
  - c. Click in the *Control Source* property box.
  - d. Type `=Total*1.09` and then press the Enter key.



- e. Close the Property Sheet task pane by clicking the Close button in the upper right corner of the task pane.
5. With the text box control object still selected, apply currency formatting by clicking the Report Layout Tools Format tab and then clicking the Apply Currency Format button in the Number group.
6. Save and then print the report. (The report will print on three pages.).
7. Close the ClientBillingRpt report and then close 6-WarrenLegal.accdb.

**Check Your Work**

## Project 2 Use Wizards to Create Reports and Labels

**3 Parts**

You will create reports using the Report Wizard and prepare mailing labels using the Label Wizard.

**Preview Finished Project**

## Tutorial

### Creating a Report Using the Report Wizard



#### Report Wizard

### Quick Steps

#### Create a Report Using the Report Wizard

1. Click Create tab.
2. Click Report Wizard button.
3. Choose options at each Report Wizard dialog box.



**Hint** Use the Report Wizard to select specific fields and specify how data is grouped and sorted.

# Creating a Report Using the Report Wizard

Access offers a Report Wizard that provides the steps for creating a report. To create a report using the wizard, click the Create tab and then click the Report Wizard button in the Reports group. At the first Report Wizard dialog box, shown in Figure 6.3, choose a table or query with options from the *Tables/Queries* option box. Specify the fields to be included in the report by inserting them in the *Selected Fields* list box and then clicking the Next button.

At the second Report Wizard dialog box, shown in Figure 6.4, specify the grouping level of data in the report. To group data by a specific field, click the field in the list box at the left side of the dialog box and then click the One Field button. Use the button containing the left-pointing arrow to remove an option as a grouping level. Use the up and down arrows to change the priority of the field.

Figure 6.3 First Report Wizard Dialog Box

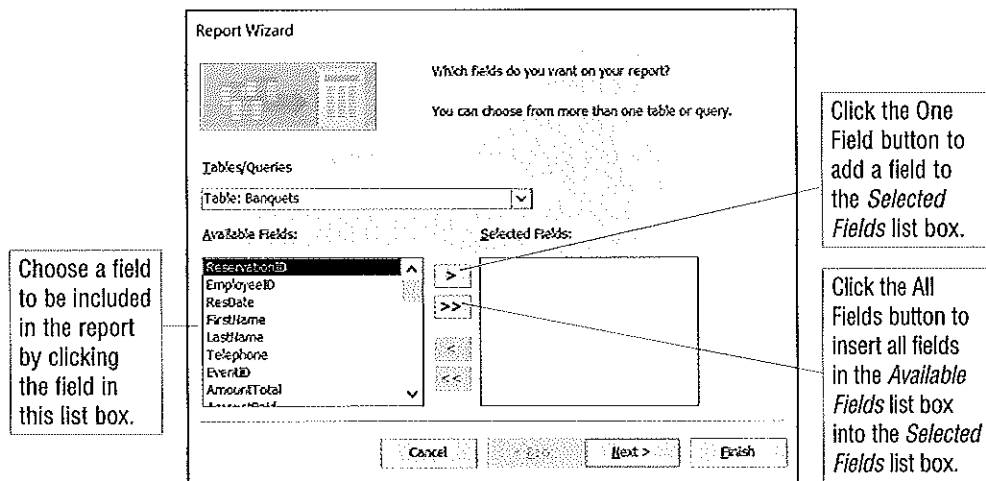
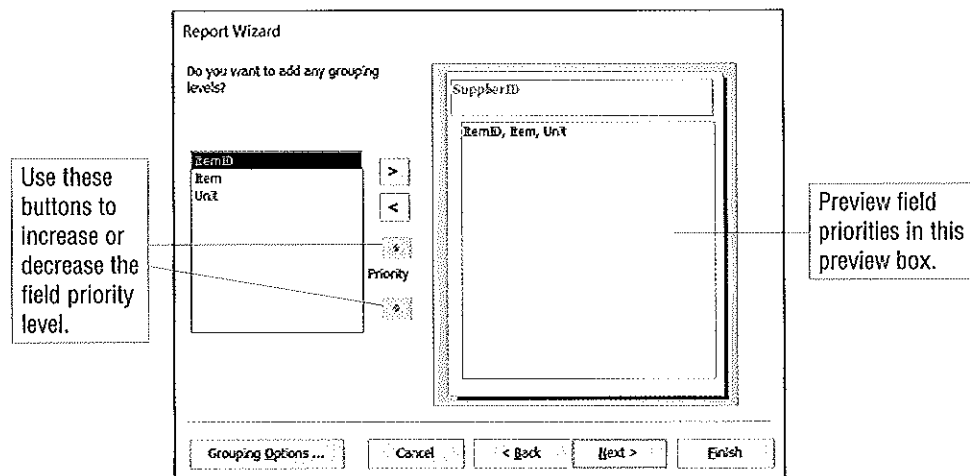


Figure 6.4 Second Report Wizard Dialog Box

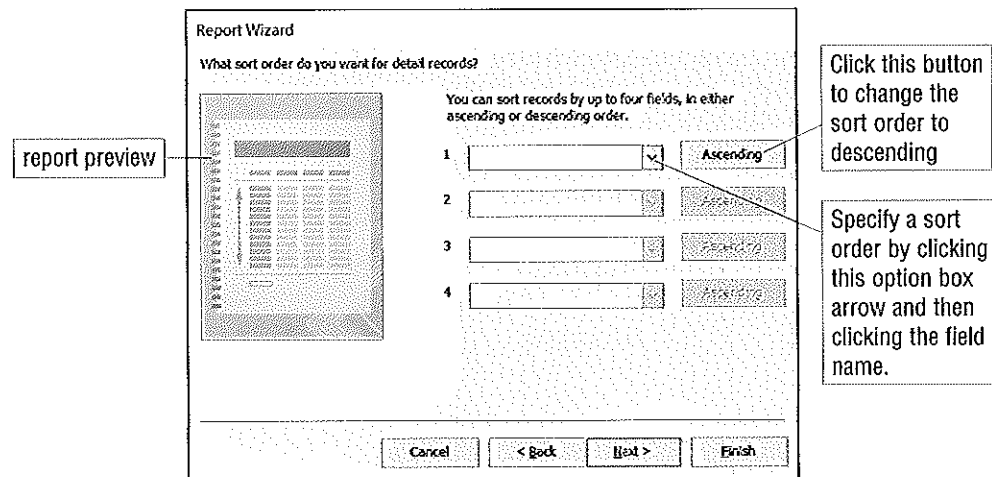


Specify a sort order with options at the third Report Wizard dialog box, shown in Figure 6.5. To specify a sort order, click the option box arrow for the option box preceded by the number 1 and then click the field name. The default sort order is ascending. This can be changed to descending by clicking the button at the right side of the option box. After identifying the sort order, click the Next button.

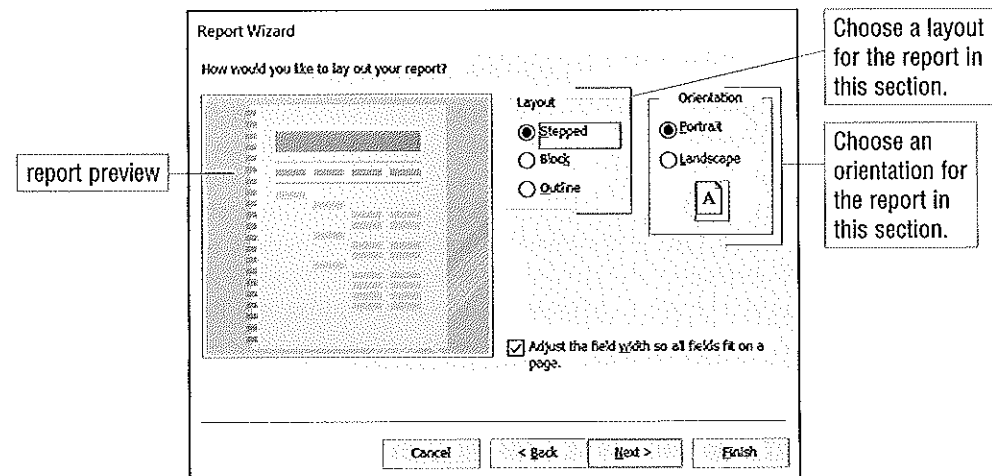
Use options at the fourth Report Wizard dialog box, shown in Figure 6.6, to specify the layout and orientation of the report. The *Layout* section has the default setting of *Stepped*, which can be changed to *Block* or *Outline*. By default, the report will print in portrait orientation. Change to landscape orientation by clicking the *Landscape* option in the *Orientation* section of the dialog box. Access will adjust field widths in the report so all of the fields fit on one page. To specify that field widths should not be adjusted, remove the check mark from the *Adjust the field width so all fields fit on a page* option.

At the fifth and final Report Wizard dialog box, type a name for the report and then click the Finish button.

**Figure 6.5** Third Report Wizard Dialog Box



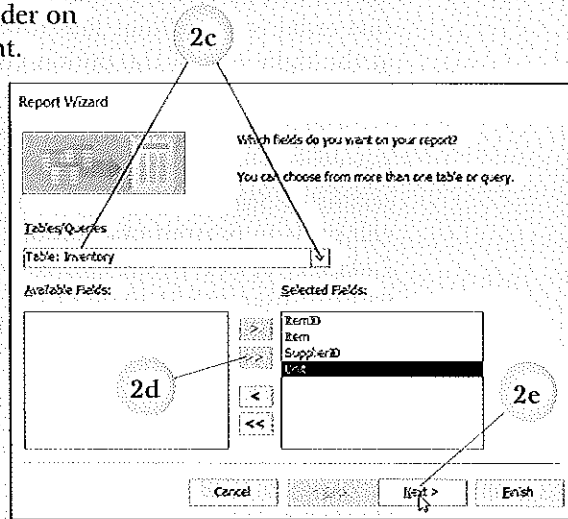
**Figure 6.6** Fourth Report Wizard Dialog Box



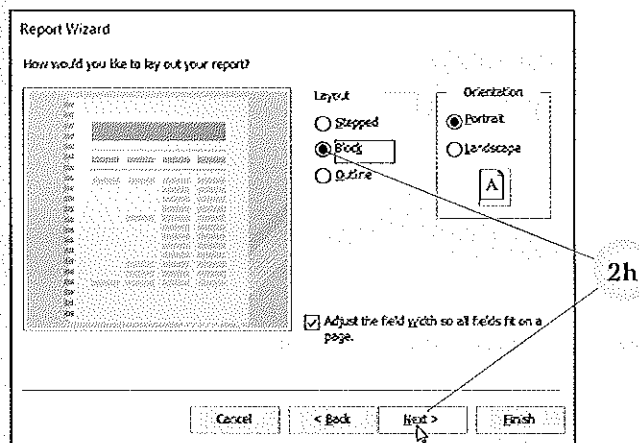
1. Open 6-Skyline.accdb from the AL1C6 folder on your storage medium and enable the content.

2. Create a report using the Report Wizard by completing the following steps:

- Click the Create tab.
- Click the Report Wizard button in the Reports group.
- At the first Report Wizard dialog box, click the *Tables/Queries* option box arrow and then click *Table: Inventory* at the drop-down list.
- Click the All Fields button to insert all of the Inventory table fields in the *Selected Fields* list box.
- Click the Next button.



- At the second Report Wizard dialog box, make sure *SupplierID* displays in blue at the top of the preview page at the right side of the dialog box and then click the Next button.
- At the third Report Wizard dialog box, click the Next button. (You want to use the sorting defaults.)
- At the fourth Report Wizard dialog box, click the *Block* option in the *Layout* section and then click the Next button.



- At the fifth Report Wizard dialog box, make sure *Inventory* displays in the *What title do you want for your report?* text box and then click the Finish button. (The report displays in Print Preview.)
- With the report in Print Preview, click the Print button at the left side of the Print Preview tab and then click OK at the Print dialog box. (The report will print on two pages.)
  - Close Print Preview.
  - Switch to Report view by clicking the View button on the Report Design Tools Design tab.
  - Close the Inventory report.

Check Your Work

If a report is created with fields from only one table, options are specified in five Report Wizard dialog boxes. If a report is created with fields from more than one table, options are specified in six Report Wizard dialog boxes. After choosing the tables and fields at the first dialog box, the second dialog box that displays asks how the data will be viewed. For example, if fields are selected from a Suppliers table and an Orders table, the second Report Wizard dialog box will ask if the data is to be viewed “by Suppliers” or “by Orders.”

## Project 2b Creating a Report with Fields from Two Tables

Part 2 of 3

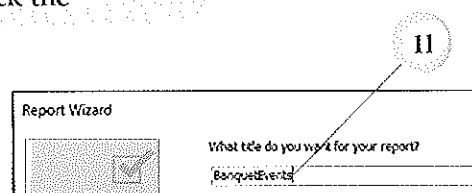
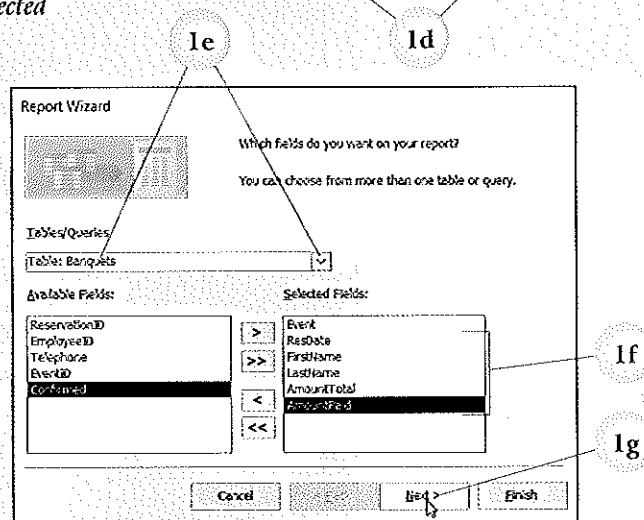
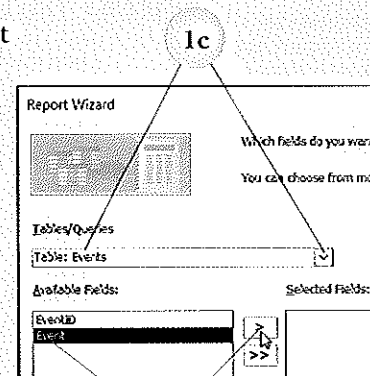
1. With 6-Skyline.accdb open, create a report with the Report Wizard by completing the following steps:

- a. Click the Create tab.
- b. Click the Report Wizard button in the Reports group.
- c. At the first Report Wizard dialog box, click the *Tables/Queries* option box arrow and then click *Table: Events* at the drop-down list.
- d. Click the *Event* field in the *Available Fields* list box and then click the One Field button.
- e. Click the *Tables/Queries* option box arrow and then click *Table: Banquets* at the drop-down list.
- f. Insert the following fields in the *Selected Fields* list box:

*ResDate*  
*FirstName*  
*LastName*  
*AmountTotal*  
*AmountPaid*

- g. After inserting the fields, click the Next button.
- h. At the second Report Wizard dialog box, make sure *by Events* is selected and then click the Next button.
- i. At the third Report Wizard dialog box, click the Next button. (The report preview shows that the report will be grouped by event.)
- j. At the fourth Report Wizard dialog box, click the Next button. (You want to use the sorting defaults.)
- k. At the fifth Report Wizard dialog box, click the *Block* option in the *Layout* section, click *Landscape* in the *Orientation* section, and then click the Next button.
- l. At the sixth Report Wizard dialog box, select the current name in the *What title do you want for your report?* text box and then type *BanquetEvents*.
- m. Click the Finish button.

2. Close Print Preview and then change to Layout view.
3. Print and then close the BanquetEvents report.
4. Close 6-Skyline.accdb.



Check Your Work

## Tutorial

### Creating Mailing Labels



### Quick Steps Create Mailing Labels Using the Label Wizard

1. Click table.
2. Click Create tab.
3. Click Labels button.
4. Choose options at each Label Wizard dialog box.

## Creating Mailing Labels

Access includes a mailing label wizard that provides the steps for creating mailing labels with fields in a table. To create mailing labels, click a table, click the Create tab, and then click the Labels button in the Reports group. At the first Label Wizard dialog box, shown in Figure 6.7, specify the label size, unit of measure, and label type and then click the Next button. At the second Label Wizard dialog box, shown in Figure 6.8, specify the font name, size, weight, and color and then click the Next button.

Figure 6.7 First Label Wizard Dialog Box

| Product number: | Dimensions:       | Number across: |
|-----------------|-------------------|----------------|
| C2169           | 1 1/2" x 2 1/2"   | 3              |
| C2163           | 1 1/2" x 3 9/16"  | 2              |
| C2241           | 1 1/4" x 7 31/50" | 2              |
| C2242           | 2" x 2"           | 3              |

Scroll through this list box and choose a label.

Figure 6.8 Second Label Wizard Dialog Box

Choose the label font name, size, weight, and color in this section.

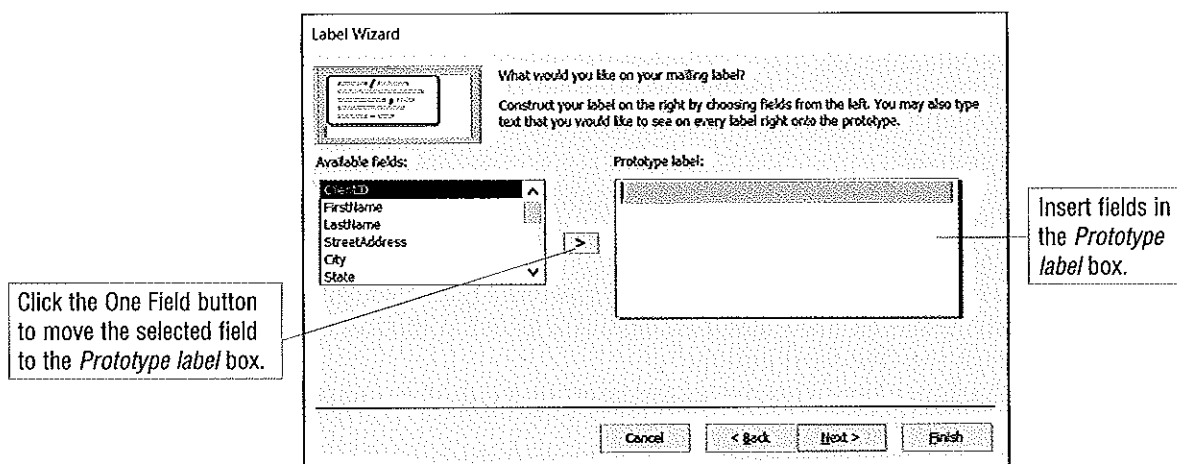


Specify the fields to be included in the mailing labels at the third Label Wizard dialog box, shown in Figure 6.9. To do this, click the field in the *Available fields* list box and then click the *One Field* button. This moves the field to the *Prototype label* box. Insert the fields in the *Prototype label* box as the text should display on the label. After inserting the fields in the *Prototype label* box, click the *Next* button.

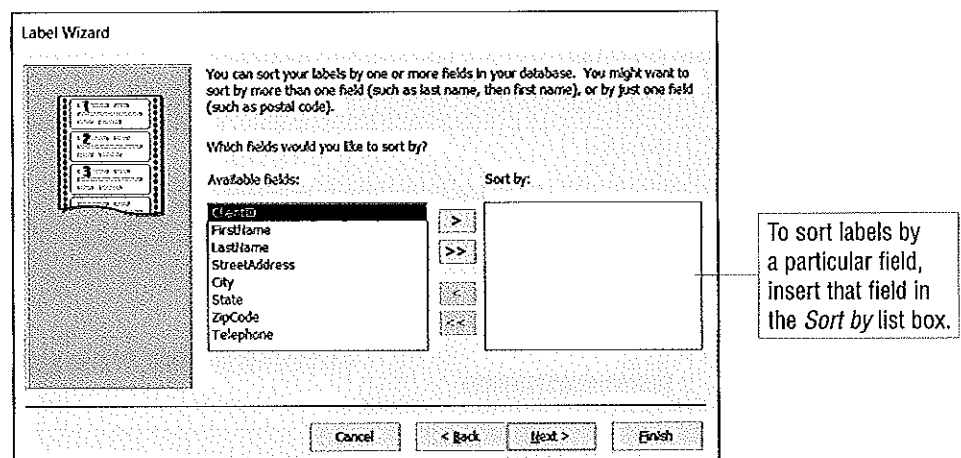
At the fourth Label Wizard dialog box, shown in Figure 6.10, specify a field from the database by which the labels will be sorted. To sort labels (for example, by last name, postal code, etc.), insert that field in the *Sort by* list box and then click the *Next* button.

At the last Label Wizard dialog box, type a name for the label report and then click the *Finish* button. After a few moments, the labels display on the screen in *Print Preview*. Print the labels and/or close *Print Preview*.

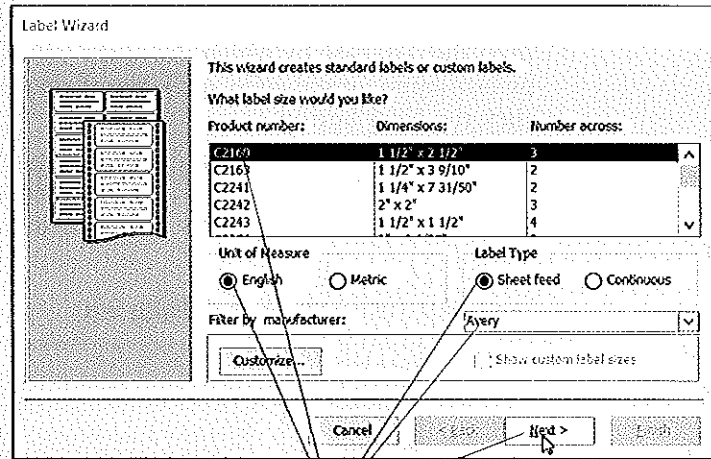
**Figure 6.9** Third Label Wizard Dialog Box



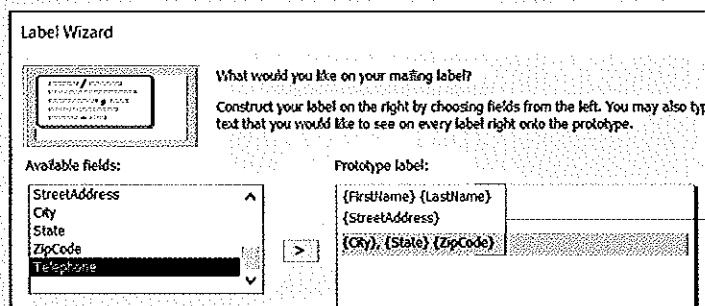
**Figure 6.10** Fourth Label Wizard Dialog Box



1. Open 6-WarrenLegal.accdb and enable the content.
2. Click *Clients* in the Tables group in the Navigation pane.
3. Click the Create tab and then click the Labels button in the Reports group.
4. At the first Label Wizard dialog box, make sure *English* is selected in the *Unit of Measure* section, *Avery* is selected in the *Filter by manufacturer* list box, *Sheet feed* is selected in the *Label Type* section, and *C2160* is selected in the *Product number* list box and then click the Next button.



6. At the third Label Wizard dialog box, complete the following steps to insert the fields in the *Prototype label* box:
  - a. Click *FirstName* in the *Available fields* list box and then click the One Field button.
  - b. Press the spacebar, make sure *LastName* is selected in the *Available fields* list box, and then click the One Field button.
  - c. Press the Enter key. (This moves the insertion point down to the next line in the *Prototype label* box.)
  - d. With *StreetAddress* selected in the *Available fields* list box, click the One Field button.
  - e. Press the Enter key.
  - f. With *City* selected in the *Available fields* list box, click the One Field button.
  - g. Type a comma (,) and then press the spacebar.
  - h. With *State* selected in the *Available fields* list box, click the One Field button.
  - i. Press the spacebar.
  - j. With *ZipCode* selected in the *Available fields* list box, click the One Field button.



- k. Click the Next button.

7. At the fourth Label Wizard dialog box, sort by zip code. To do this, click *ZipCode* in the *Available fields* list box and then click the One Field button.

8. Click the Next button.

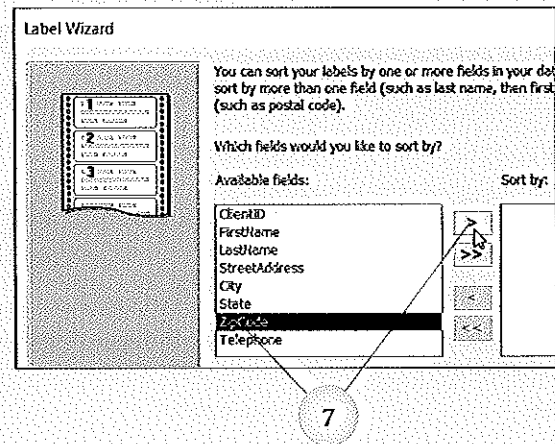
9. At the last Label Wizard dialog box, click the Finish button. (The Label Wizard automatically names the label report *Labels Clients*.)

10. Print the labels by clicking the Print button at the left side of the Print Preview tab and then click OK at the Print dialog box.

11. Close Print Preview.

12. Switch to Report view by clicking the View button on the Report Design Tools Design tab.

13. Close the labels report and then close 6-WarrenLegal.accdb.












**Check Your Work**

## Chapter Summary

- Create a report with data in a table or query to control how data appears on the page and how the data is formatted when printed.
- Create a report with the Report button in the Reports group on the Create tab.
- Four views are available for viewing a report: Report view, Print Preview, Layout view, and Design view.
- Use options on the Print Preview tab to specify how a report prints.
- In Layout view, a report control object can be selected and then sized or moved.
- One method for changing column width in a report is to click a column heading and then drag the border to the desired width.
- Sort data in a record using the Ascending button or Descending button in the Sort & Filter group on the Home tab.
- Customize a report with options on the Report Layout Tools ribbon with the Design tab, Arrange tab, Format tab, or Page Setup tab selected.
- To make data in a report easier to understand, divide the data into groups using the Group, Sort, and Total pane. Display this pane by clicking the Group & Sort button in the Grouping & Totals group on the Report Layout Tools Design tab.
- Insert a calculation in a report by inserting a text box object, displaying the Property Sheet task pane with the Data tab selected, and then typing the calculation in the *Control Source* property box. If a calculation result is currency, apply currency formatting with the Apply Currency Format button on the Report Layout Tools Format tab.
- Use the Report Wizard to provide the steps for creating a report. Begin the wizard by clicking the Create tab and then clicking the Report Wizard button in the Reports group.
- Create mailing labels with data in a table using the Label Wizard. Begin the wizard by clicking a table, clicking the Create tab, and then clicking the Labels button in the Reports group.

# Commands Review

| FEATURE   | RIBBON TAB, GROUP                              | BUTTON  | KEYBOARD SHORTCUT |
|---|--|---|-------------------|
| Conditional Formatting Rules Manager dialog box | Report Layout Tools Format, Control Formatting |  |                   |
| Find dialog box                                 | Home, Find                                     |  | Ctrl + F          |
| Group, Sort, and Total pane                     | Report Layout Tools Design, Grouping & Totals  |  |                   |
| Labels Wizard                                   | Create, Reports                                |  |                   |
| Property Sheet task pane                        | Report Layout Tools Design, Tools              |  | Alt + Enter       |
| report  | Create, Reports                                |  |                   |
| Report Wizard                                   | Create, Reports                                |  |                   |
| Sort data in ascending order                    | Home, Sort & Filter                            |  |                   |
| Sort data in descending order                   | Home, Sort & Filter                            |  |                   |

## Workbook

Chapter study tools and assessment activities are available in the *Workbook* ebook. These resources are designed to help you further develop and demonstrate mastery of the skills learned in this chapter.