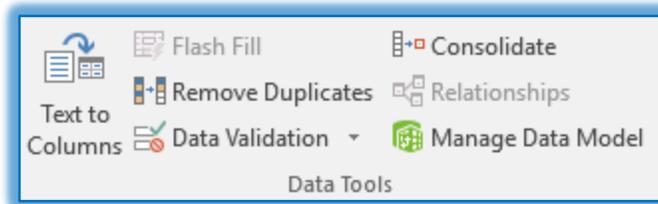


DATA CONSOLIDATION

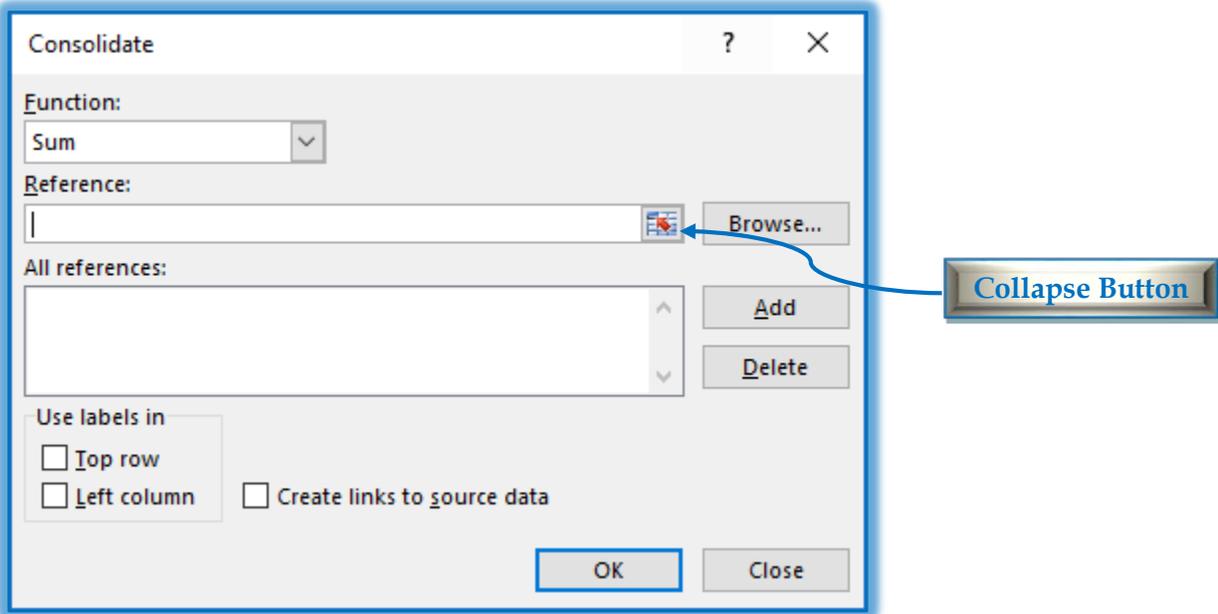
This option is used to define ranges of cells from multiple worksheets and have Excel summarize the data into a single worksheet. With the Consolidate command, it is possible to use several functions to consolidate data such as SUM, AVERAGE, MAX, or MIN. Prior to consolidating data, it is a good idea to open and arrange on-screen the worksheets or workbooks that contain the data that are to be used. When Consolidate is used to link worksheets and/or workbooks, the 3-D references are inserted into the dialog box. To consolidate worksheets, complete the steps below.

Link Worksheets

- † Open the document **EMP Monthly Earnings (Link Worksheets)** from the area where the files that were downloaded from the **Excel Training Web** page are stored.
- † Select cells **C3** through **D6** from the **Monthly Total** worksheet.
- † Click the **Data** Tab.
- † In the **Data Tools Group**, click the **Consolidate** button.



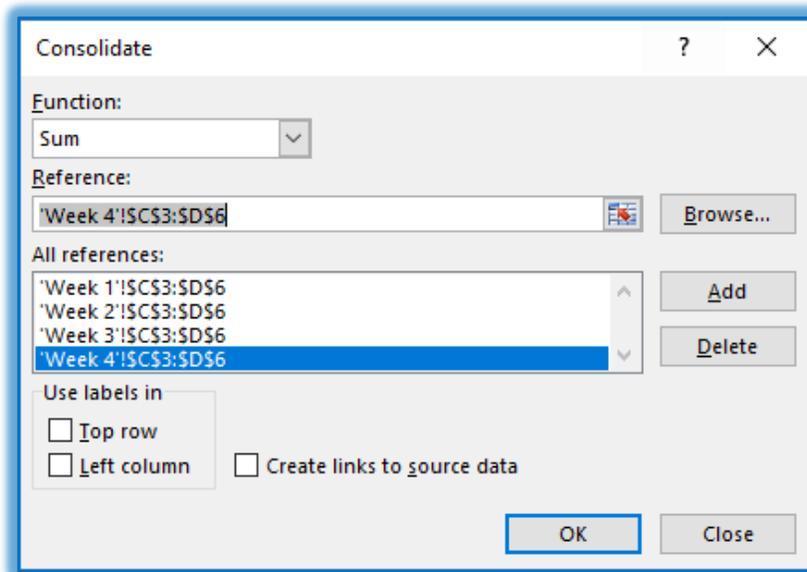
- † The **Consolidate** dialog box will open.



- † If **Sum** is not displayed in the **Function** box, click the drop-down arrow and choose **Sum**.
- † In the **References** box, click the **Collapse** button.
- † The dialog box will display just the **Reference** row.
- † Click the **Week 1** tab and then select cells **C3** through **D6**.



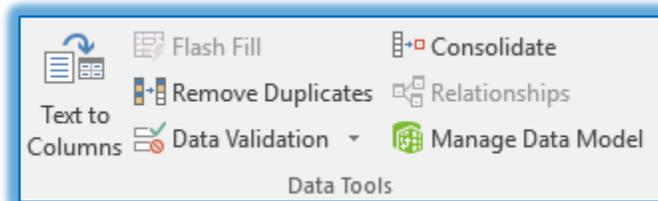
- † Click the **Expand** button on the **Consolidate - Reference** dialog box.
- † The reference **'Week 1'!\$C\$3:\$D\$6** appears in the **Consolidate - Reference** box.
- † Click the **Add** button to add this information to the **All References** box.
- † With the **Consolidate** dialog box still active, click the **Week 2** tab.
- † The reference in the **Consolidate - Reference** box should change to **Week 2**.
- † Select cells **C3** through **D6**.
- † Click the **Expand** button.
- † Click the **Add** button to insert this reference into the **All references** list.
- † Continue the above process to add the references for **Week 3** and **Week 4**.
- † The **Consolidate** dialog box should look like the illustration below.



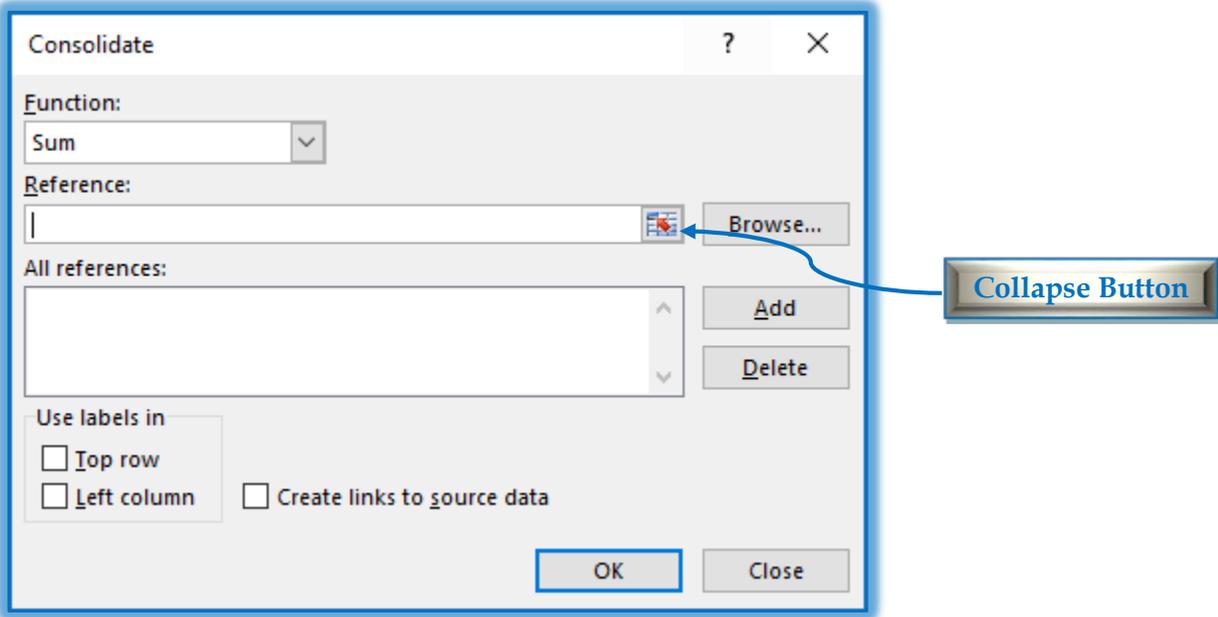
- † After the four references have been added to the **Consolidate** dialog box, click the **OK** button.
- † The cumulative totals for these four worksheets should be displayed in the **Monthly Total** worksheet.

Link Workbooks

- † Open the following documents from the folder where the documents that were downloaded from the Excel Training Web page were stored.
 - ★ EMP Monthly Earnings (Link Workbooks)
 - ★ EMP Week 2
 - ★ EMP Week 1
 - ★ EMP Week 3
 - ★ EMP Week 4
- † Click **EMP Monthly Earnings (Link Workbooks)** from the Excel workbooks list.
- † Select cells **C3** through **D6** in this workbook.
- † Click the **Data Tab**.
- † In the **Data Tools Group**, click the **Consolidate** button.



† The **Consolidate** dialog box will open.



† If **Sum** is not displayed in the **Function** box, click the drop-down arrow and choose **Sum**.

† Click the **Create Links to Source Data** check box.

★ With this option, links are created to each of the workbooks.

★ When the data is updated in the original documents, it will be updated in the workbook where the consolidation was created.

† Click the **Collapse** button in the **Reference** box.

† Click the **EMP Week 1** tab on the **Task Bar**.

† Select cells **C3** through **D6** in this workbook.

† Click the **Expand** button on the **Consolidate - Reference** dialog box.

† The reference '[EMP Week 1]Sheet 1!\$C\$3:\$D\$6' appears in the **Reference** box.



† Click the **Add** button to add this information to the **All References** box.

† Delete the information in the **Consolidate-Reference** dialog box.

† Continue the above process to add the references for **Week 2**, **Week 3** and **Week 4**.

★ This option works differently than when you were linking Worksheets.

★ When Workbooks are linked, you have to select the range in each workbook.

★ The range doesn't stay selected for each one.

† The Consolidate dialog box should look like the illustration on the previous page.

† Click the **OK** button.

Viewing Data from Links

Once the data has been consolidated, it is possible to view it in different ways. These ways are described in this section.

† Look at the **Row Numbers**. You will notice that some rows are not displayed.

† Click the **Number 2** in the **Level** area on the left side of the worksheet.

	A	B	C	D
1	Monthly Payroll Totals			
2	Employee	Rate of Pay	Hours Worked	Gross Pay
+ 7	A3121	14.15	182.75	2,585.91
+ 12	B4325	12.75	188.60	2,404.65
+ 17	H9891	21.95	142.50	3,127.88
+ 22	K7198	13.60	182.35	2,479.96
23	Total		1,209.65	18,610.88

- † The numbers that were consolidated will be displayed, as well as the totals.
- † Click the **Number 1** button to show just the **Totals**.
- † To display the consolidated data for each individual section, click the **Show Detail** button. This is the plus (+) sign beside the total for the category.
- † To remove the display for the consolidated data for each of the data categories, click the **Hide Details** button. This is the minus (-) sign that will appear beside the total for the category after the plus (+) sign is clicked.
- † Close the document and save the changes.