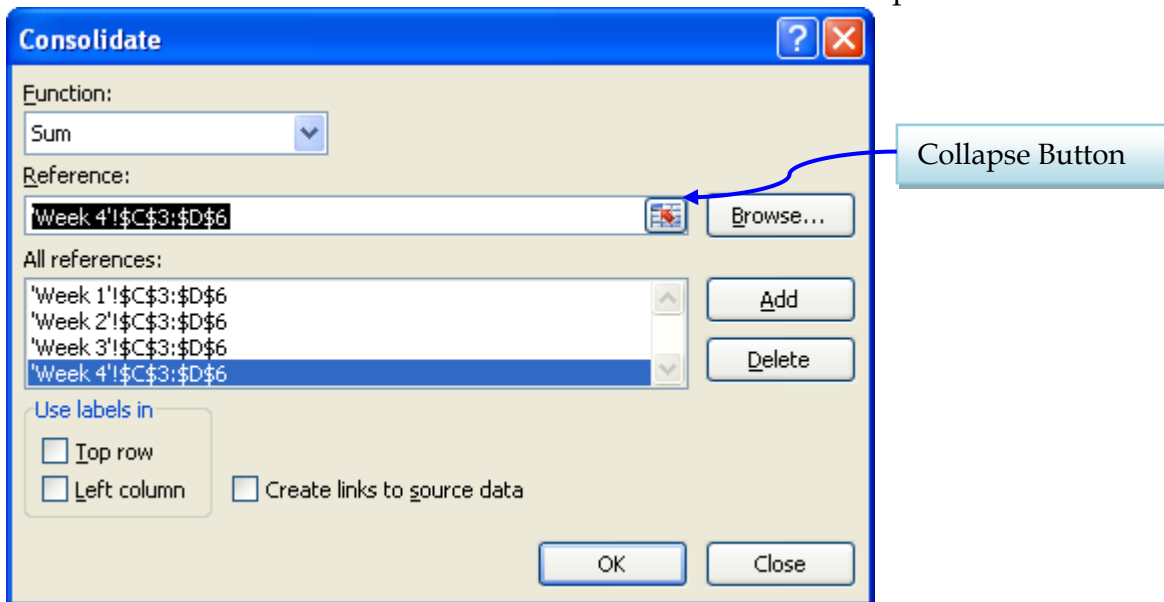


DATA CONSOLIDATION

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.

Linking Worksheets

- ❖ Open the document **EMP Monthly Earnings (Link Worksheets)** from the area where the files that were downloaded from the Excel 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 (see illustration). This illustration shows what the dialog box will look like once all the cells for the consolidation have been specified.



- ❖ 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. (This is the red arrow at the end of the reference box.)
- ❖ The dialog box will display just the **Reference** row (see illustration).

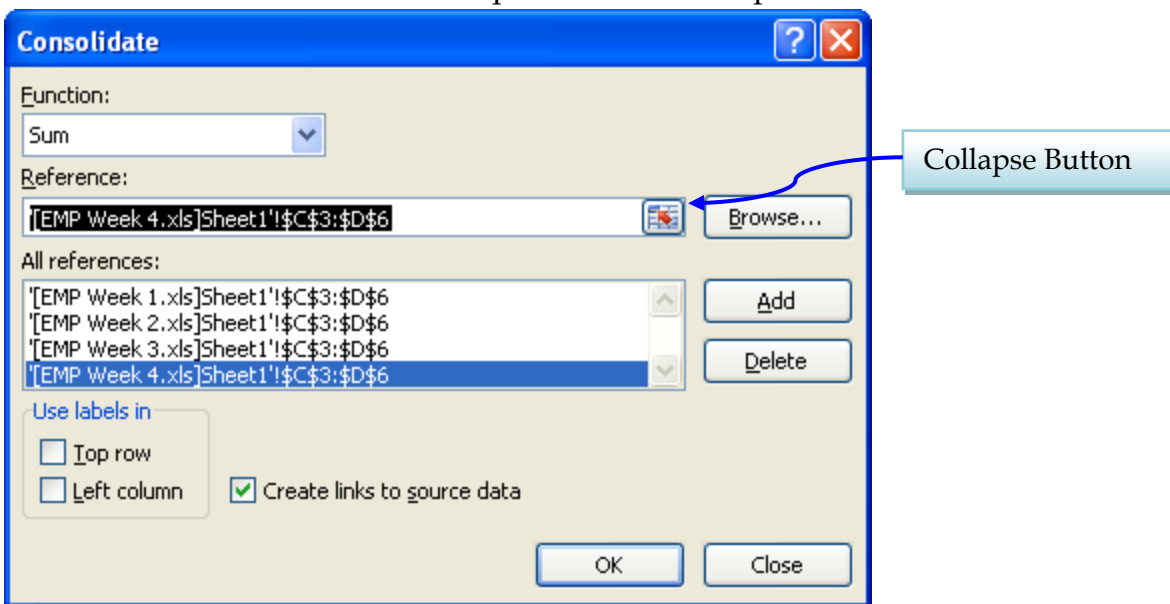


- ❖ Click the **Week 1** tab and then select cells **C3** through **D6**.
- ❖ Click the **Expand** button on the **Consolidate - Reference** dialog box. (This is the red arrow at the end of the box.)
- ❖ The reference **'Week 1'**C\$3:\$D\$6 appears in the **Consolidate - Reference** box.
- ❖ Click the **Add** button to add this information to the **All References** box.
- ❖ Click the **Reference Collapse** button again.
- ❖ Click the **Week 2** tab.

- ❖ Select the same cells that were selected in the **Week 1** sheet.
 - The reference in the **Consolidate - Reference** box should change to **Week 2**.
 - The rest of the reference should remain the same as the reference for **Week 1**.
- ❖ Continue the above process to add the references for **Week 3** and **Week 4**.
- ❖ After the four references have been added to the **Consolidate** dialog box, click the **OK** button.
- ❖ The totals for these four worksheets should be displayed in the **Monthly Total** worksheet.

Linking Workbooks

- ❖ Open the following documents from the folder where the documents that were downloaded from the Excel Web page were stored.
 - **EMP Monthly Earnings (Link Workbooks)**
 - **EMP Week 1**
 - **EMP Week 2**
 - **EMP Week 3**
 - **EMP Week 4**
- ❖ Click **EMP Monthly Earnings (Link Workbooks)** on the **Task Bar**.
- ❖ 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 (see illustration). This illustration shows what the dialog will look like when the consolidation options have been specified.



- ❖ 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 worksheets.
 - 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 (see illustration).



- ❖ Click the **Add** button to add this information to the **All References** 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.
 - You may have to delete the information in the **Consolidate-Reference** dialog box.
- ❖ 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.

	1	2	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

- ❖ 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.
- ❖ 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 beside the total for the category.
- ❖ Close the document and save the changes.