“Step Sheet: Graphing Pairs of Lines in Excel”

Using Microsoft Excel Spreadsheets with Data

This step sheet will help you convert the data from your T-Chart into a graph of the linear equation.

Using Microsoft Excel

To set up a document for your data and charts, follow these steps:

➢ Opening Microsoft Excel

Step 1
Open your spreadsheet with data using Microsoft Excel.

➢ Converting the Data Table to a Graph

Before you can use the Chart Wizard to create a graph from your data table, you must use the cursor to drag through the information you need in your table. You will not need to include the title in the cells you highlight for your graph.

Step 1
Click the upper left cell of the T-Chart data in the spreadsheet and drag through the data for Equation 1, cells C5 through D6.

Step 2
Click the Chart Wizard icon on the toolbar.

Step 3
A series of windows will appear asking you for information about your chart. The first thing you must decide is which type of graph you would like. For a graph of a linear equation select XY (Scatter) and use the type in the bottom left corner (Scatter with data points connected by lines). Click Next.

Step 4
The next window will show you a sample of your data as a graph. Click Series in: Columns.

Step 5
Click the Series tab, and then click Add.

Step 6
Click the Selection button to the right of the X values box.

Step 7
Click cell C7 and drag through C8, and then press Return. This selects the x data for Equation 2.

Step 8
Click the Selection button to the right of the Y values box.

Step 9
Click cell D7 and drag through D8, and then press Return. This selects the y data for Equation 2.

Step 10
Click Next.

Step 11
Click the Gridlines tab and select Major gridlines under **Value (X) axis**. Click Next.

Step 12
Click the Titles tab, click the field under Chart title and type in the equations being graphed, and then click Next.

Step 13
The final step of the Chart Wizard asks you to decide if you want your chart to be an object in your current workbook or a new workbook page. Leave it as an object and click Finish.

Step 14
Your completed graph will appear on top of your sheet. You can move it around the page and resize it with the handles on the corners.

Step 15
From the File menu, choose Print Preview. Note the layout of the page, then click Close. Move the graph as needed.

- **Adjusting the Scale for Better Viewing**

This will allow you to adjust the scale so that the graphs are easier to see.

Step 1
Double–click the x-axis, then select the Scale tab.

Step 2
Set the Minimum to –10, the Maximum to 10, the Major unit to 2, and the Minor unit to 1, in the appropriate boxes. Click OK.

Step 3
Double–click the y-axis, then select the Scale tab.
Set the Minimum to –10, the Maximum to 10, the Major unit to 2, and the Minor unit to 1, in the appropriate boxes. Click OK.

Step 4
Click the graph and use the handles on the corner to enlarge the graph.

Step 5
Click the gray plot area and use the handles on the corner to make the background grid square. This will allow perpendicular lines to actually look like they intersect at a right angle.

- **Adjusting the Graph for Better Printing**

Step 1
Double-click the gray plot area. Under Area, click None. Click OK.

Step 2
Double-click the first line. Under Line, click Custom, and for Color, select black.

Step 3
Under Marker, click Custom, then in Foreground and Background, select black. Click OK.

Step 4
Double-click the second line. Under Line, click Custom, and for Color, select black.

Step 5
Under Marker, click Custom, then in Foreground and Background, select black. Click OK.