

“Step Sheet: Slope and Intercepts”

Using Microsoft Excel Spreadsheets with Data

This step sheet will help you build a data table to find the slope and intercepts of a linear equation, as well as help you graph the line.

Using Microsoft Excel

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

➤ Opening Microsoft Excel

Step 1

Find the Microsoft Excel icon, which could be in your application folder or in a Microsoft Office folder.

Step 2

Double-click the Microsoft Excel icon to open the program.

Step 3

When the Project Gallery opens, click OK to select a new blank workbook.

When the new workbook opens, you will have a blank spreadsheet ready to accept your text and data.

➤ Setting Up the Data Table

Step 1

Find cell number B1 and click the cell.

Step 2

Enter “Linear Equation”, then press the Return key.

Step 3

Click cell B1 again, then click the **B** icon on the toolbar to make the text bold.

Step 4

Find cell number A3 and click the cell.

Step 5

Enter “Equation”, then press Return.

Step 6

In cell A4, enter "x-coefficient", then press Return.

Step 7

In cell A5, enter "y-coefficient", then press Return.

Step 8

In cell A6, enter "constant", then press Return.

Step 9

In cell A8 enter "x-intercept", then press Return.

Step 10

In cell A9, enter "y-intercept", then press Return.

Step 11

In cell A10, enter "slope", then press Return.

Step 12

In cell A12 enter "T-Chart", then press Return.

Step 13

In cell A13, enter "x", then press Tab.

Step 14

In cell B13, enter "y", then press Return.

Step 15

In cell B3, enter " $4x+3y=8$ ", then press Return. This is the linear equation.

Step 16

In cell B4, enter 4, then press Return. This is the coefficient of the x term.

Step 17

In cell B5, enter 3, then press Return. This is the coefficient of the y term.

Step 18

In cell B6, enter 8, then press Return. This is the constant term.

Step 19

Press Return, in cell B8 enter " $=B6/B4$ ", then press Return. This is the formula you found in problem #6 of Worksheet 1, $x = c/a$.

Step 20

In cell B9, type " $=B6/B5$ ", then press Return. This is the formula you found in problem #6 of Worksheet 1, $y = c/b$.

Step 21

In cell B10, enter " $=-B4/B5$ ", then press Return. This is the formula you found in problem #6 of Worksheet 1, slope = $-a/b$.

Step 22

In cell A14, enter " $=B8$ ", then press Return.

Step 23

In cell A15, enter 0, then press Return.

Step 24

Click cell B14, enter 0, then press Return.

Step 25

In cell B15, enter " $=B9$ ", then press Return.

Step 26

Click cell A3 and drag down to cell A13, then click the **B** icon on the toolbar to make the text bold.

Step 27

Click cell B13, then click the **B** icon on the toolbar to make the text bold.

Step 28

Place the cursor at the top of the spreadsheet and select column headings A and B. This should select columns A and B, which are the columns in which you have information.

Step 29

From the Format menu, choose Column, then AutoFit Selection. Your columns should resize to fit the information.

➤ **Creating a Graph**

Create a graph of your data table (See "Step Sheet: Creating a Graph in Excel.")

➤ **Saving the Document**

Step 1

From the File menu, choose Save.

Step 2

In the dialog box that appears, type the name of your document. Make sure you are saving your work to the right location. Click Save.

➤ **Printing the Document**

Step 1

Click cell C4 or any empty cell.

Step 2

From the File menu, choose Print Preview.

Check to see that you are printing the cells you want and click the Print... button.

Step 3

In the dialog box that appears, make sure you are printing to a valid printer. Click Print.