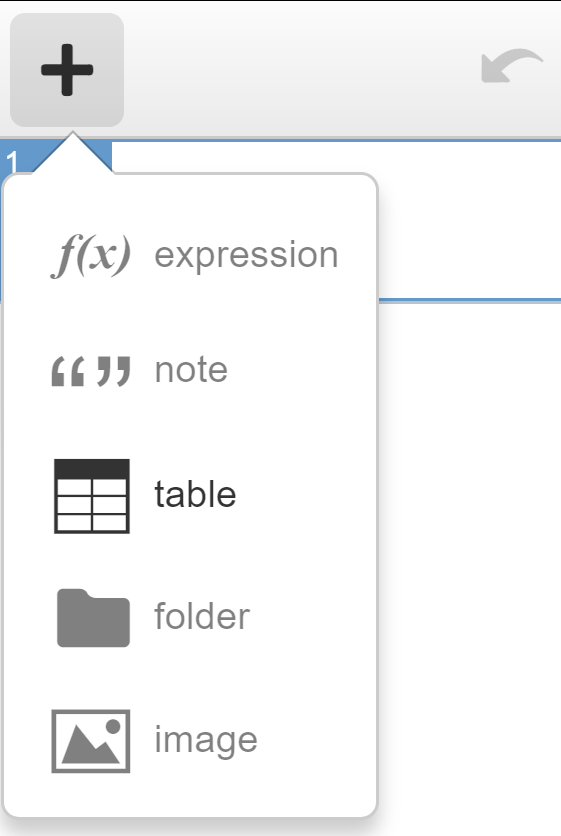
 How-to guide: desmos regression analysis

Part 1: Making a scatterplot

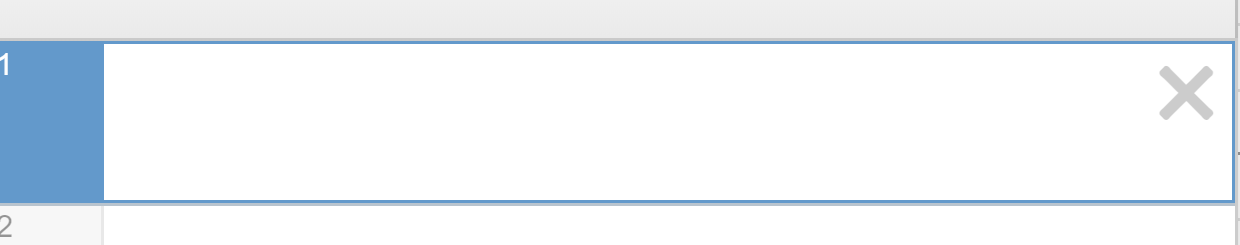
1. Enter your data into desmos.

Method 1: Press plus, then table and then manually enter data.



Method 2: If the data exist in a table such as in a MS Word document or MS Excel spreadsheet, copy the data and paste it into desmos

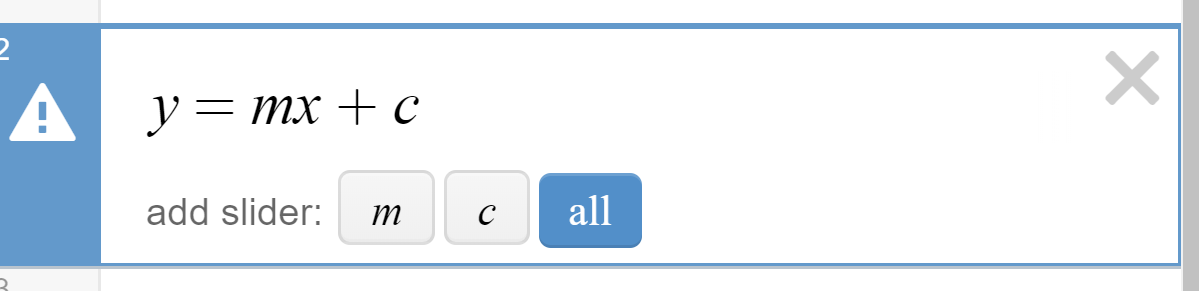
* Click into a blank rectangle next to a number
* Press Ctrl V to paste.



1. The headers of the table can be renamed by clicking into the appropriate location.
2. A scatterplot will automatically appear.
3. Settings can be adjusted using the settings menu by clicking the spanner on the right hand side of the Cartesian plane.

Part 2: Fitting a line of best fit by eye using Desmos.

1. Add a line. Type y=mx+c into a blank row. Select all to add sliders for m and c.

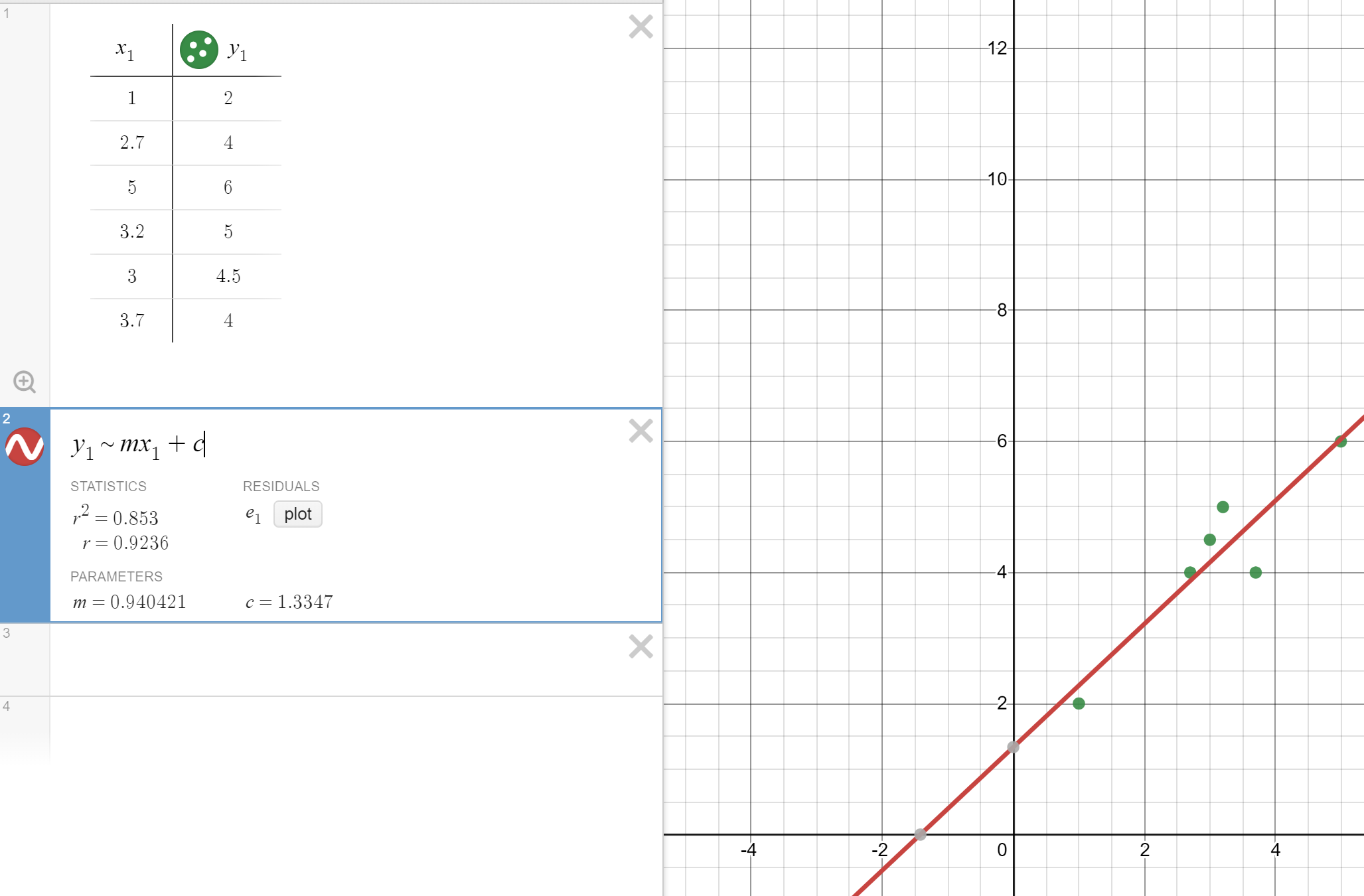


1. Use the sliders for m and c to adjust the gradient and y intercept of the line until you believe it represents a line of best fit.

Part 3: Least squares regression line

1. Add a least square regression line by typing into a blank row: y1~mx1+c

* y1 and x1 are used as they are the headers in the table.
* The 1s will automatically subscript in desmos



1. The equation of the least squares regression line can be recorded using the parameter values for m and c.
2. The correlation coefficient, r, is automatically shown when a least squares regression line is added.
3. Residuals can be plotted by clicking plot.
4. Note on forecasting with desmos

* Algebraic method: Substitute into the equation of the least squares regression line to forecast.
* Graphical method: You may need to adjust the data range if you wish to forecast a value outside of the original data range using the graph. Select the spanner then adjust the axis values as required.

