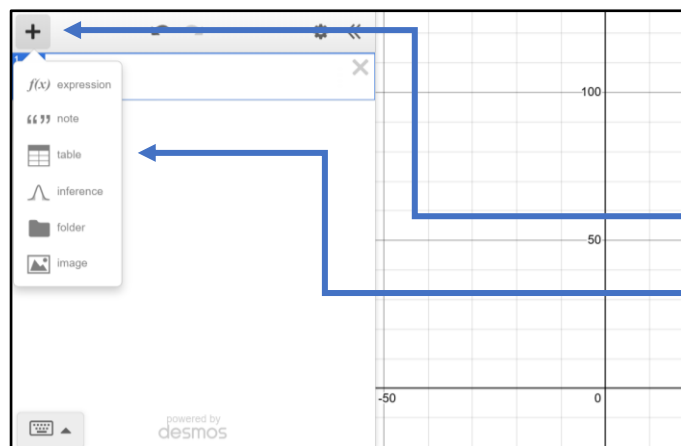


Solving Systems with Desmos

Step 1 – Create a New Table



Open Desmos (desmos.com/calculator)

Click the plus sign above the expression list

Click table

Step 2 – Add the Points

x_1	 y_1
0	-3
2	3
3	18

Type input values in the first column and output values in the second column

t	 M
0	-3
2	3
3	18

Optional: You may rename the columns

Step 3 – Tell Desmos the Form of the Function

A screenshot of the Desmos calculator interface. It shows a table with columns x_1 and y_1 containing the points (0, -3), (2, 3), and (3, 18). Below the table, a quadratic regression equation is entered: $y_1 \sim ax_1^2 + bx_1 + c$. The regression parameters are displayed: $a = 4$, $b = -5$, and $c = -3$. The statistics section shows $R^2 = 1$. The residuals section shows e_1 and a 'plot' button.

x_1	 y_1
0	-3
2	3
3	18

$y_1 \sim ax_1^2 + bx_1 + c$

REGRESSION PARAMETERS

$a = 4$ $b = -5$

$c = -3$

STATISTICS RESIDUALS

$R^2 = 1$ e_1

On a new line in the expression list, type the function you would like to pass through the points.

Use the column names from the table to refer to the input and output values (i.e. use $M \sim at^2 + bt + c$ if you renamed the first column t and the second column M)

Use $\sim$ instead of an equals sign

On a keyboard, this comes from the shift key and the key to the left of 1
Or, launch the Desmos keyboard by clicking the keyboard icon. Then, use the ABC key to open a keyboard of symbols that includes $\sim$

Use the shift key and the 6 key as a shortcut for creating exponents