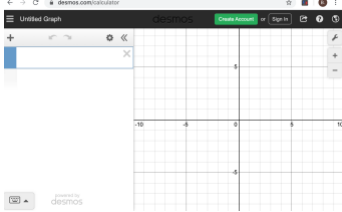
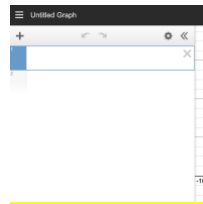


How to Display Data and find The line of Best Fit Using Desmos

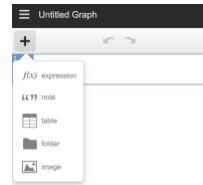
1. Go to Desmos <https://www.desmos.com/calculator>



2. In upper left, click the "+" sign:



3. This screen should appear:



4. Click the "Table".

5. This screen should appear:



6. Enter data in the x and y columns.

x_1	y_1
50	190
10	90
25	105
5	85
-----	-----

7. Enter the following equations in cell 2.

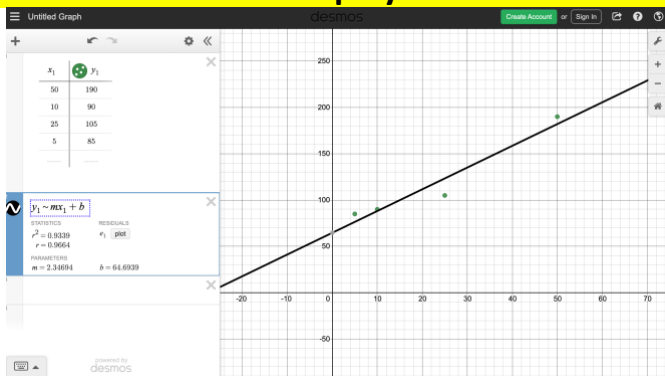
$$y_1 \sim mx_1 + b$$

8. This should appear:



9. Press the "+" sign:

10. The data should be displayed with the line of best fit.



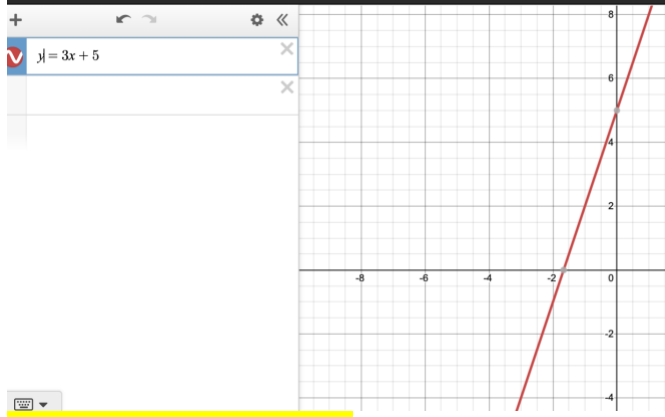
Note: Linear Regression is given just below

$$y_1 \sim mx_1 + b$$

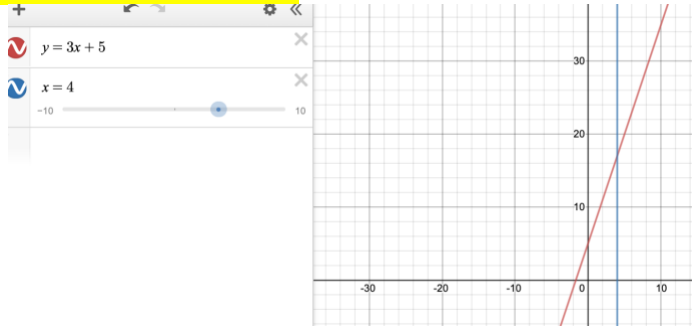
11. To Find the value of x when y is given.

Example, find the value of y when $x = 4$ using the equation $y = 3x + 5$

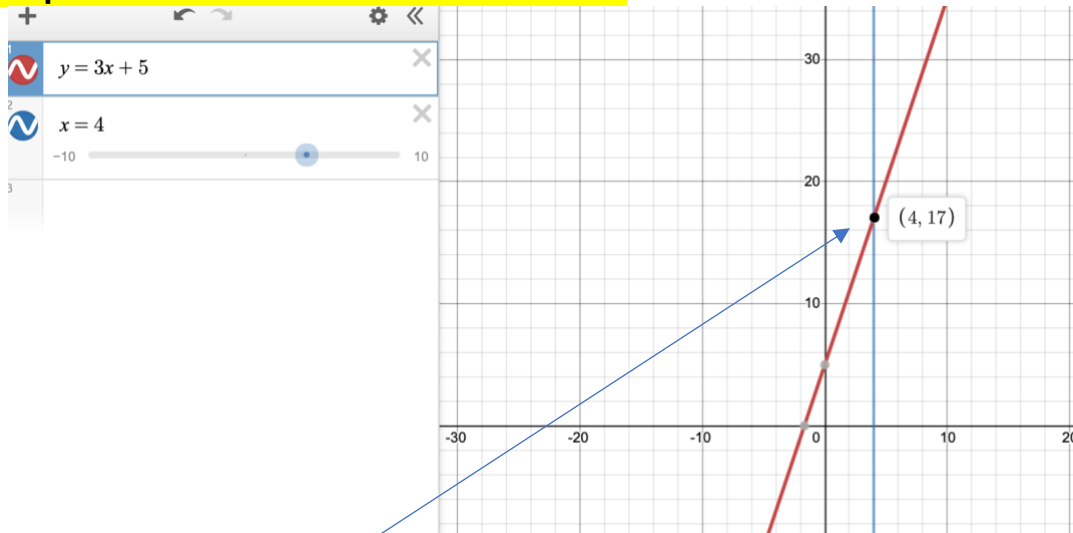
a) Enter the equation $y = 3x + 5$ in cell 1.



b) Enter $x = 4$ in cell 2.



c) Tap on the intersection of the two lines.

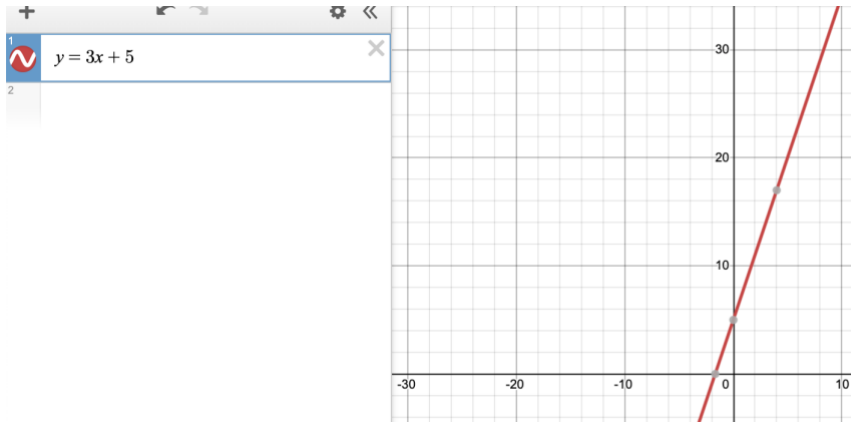


**When $x=4$,
 $y= 17$**

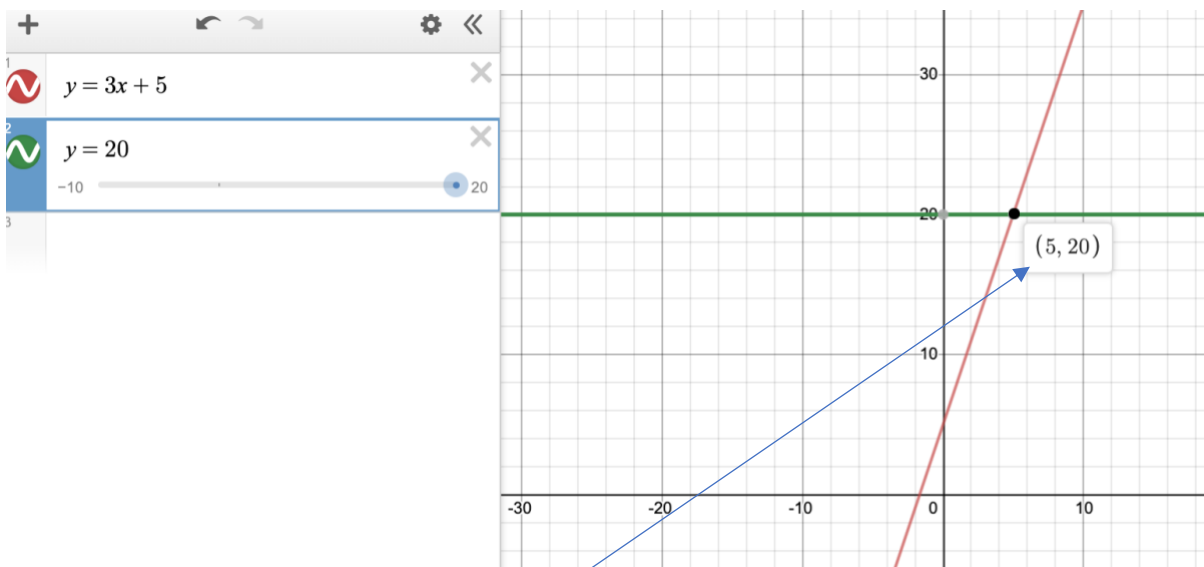
12. To Find the value of y when x is given.

Example, find the value of x when y = 20 using the equation y = 3x + 5

a) Enter the equation y = 3x + 5 in cell 1.



b) Enter y = 20 in cell 2, then tap on the intersecting point of the two lines.



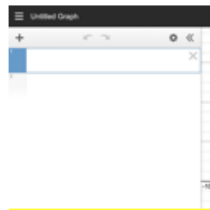
**When y=20,
x = 5**

Finding the Quadratic Regression Equation from a set of Data.

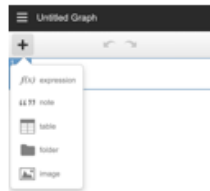
1. Go to Desmos <https://www.desmos.com/calculator>



2. In upper left, click the "+" sign:



3. This screen should appear:

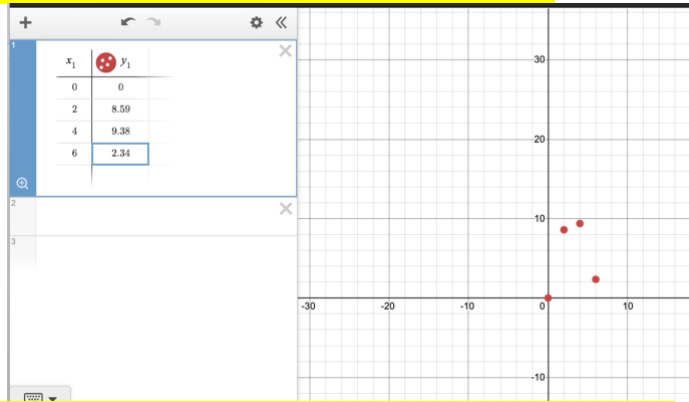


4. Click the "Table".

5. This screen should appear:



6. Enter data in the x and y columns.



7. Enter the following equations in the cell 2.

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

8. The Quadratic Regression Equation is below.

$$y = -0.976875x^2 + 6.25175x - 0.0015$$

