

Objective: To use desmos to

1/16/19

compare 2 different quantities
of data through linear and
quadratic regression.

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1.) hit plus key $\boxed{+}$

• table

X_1	Y_1
1	8
2	9
3	12
4	16
5	21
6	23

Scatterplot: Is a graph
displaying data points
relating two different
quantities.

$Y_1 \sim mX_1 + b$ \longrightarrow Linear Regression

$$y = mx + b$$

$$m = 3.8571 \text{ (slope)}$$

$$b = 3.\bar{3} \text{ (y-int)}$$

$r = 0.9847$ (correlation coefficient: which
shows how strong or weak
the relationship is.

0 being the weakest and

1 being the strongest.

Positive or Negative

$$Y_i \sim ax_i^2 + bx_i + c$$

→ Quadratic Regression

$$y = ax^2 + bx + c$$

$$a = 0.23$$

$$b = 1.66$$

$$c = 5.5$$

(Round a, b, and c to nearest hundredth)

$$R^2 = 0.98$$

correlation coefficient for quadratic regression.

Conclusion: The data shows a stronger linear relationship or correlation.