

Polynomial Linear Regression

Regressions

Simple
Linear
Regression

$$y = b_0 + b_1x_1$$

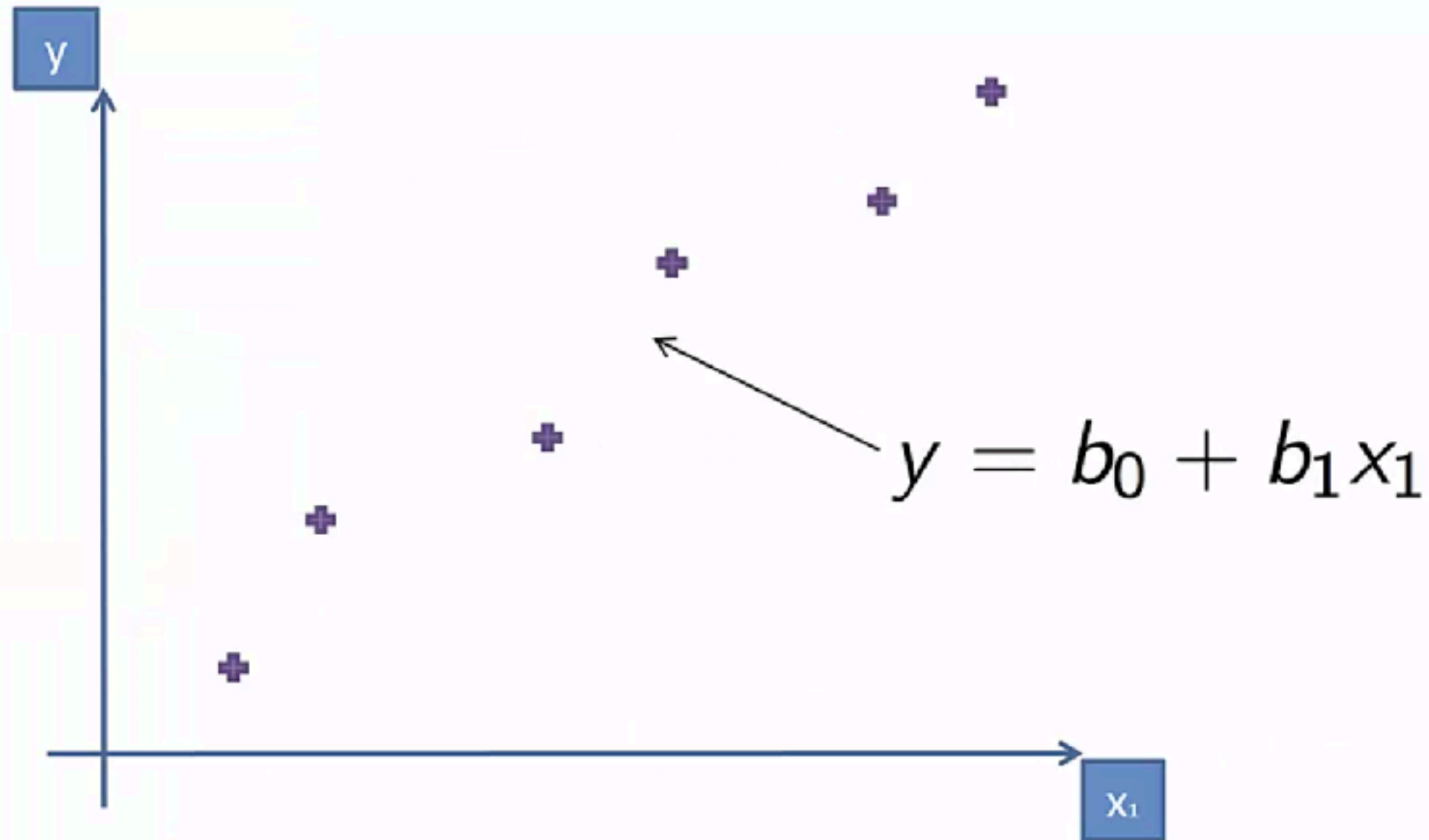
Multiple
Linear
Regression

$$y = b_0 + b_1x_1 + b_2x_2 + \dots + b_nx_n$$

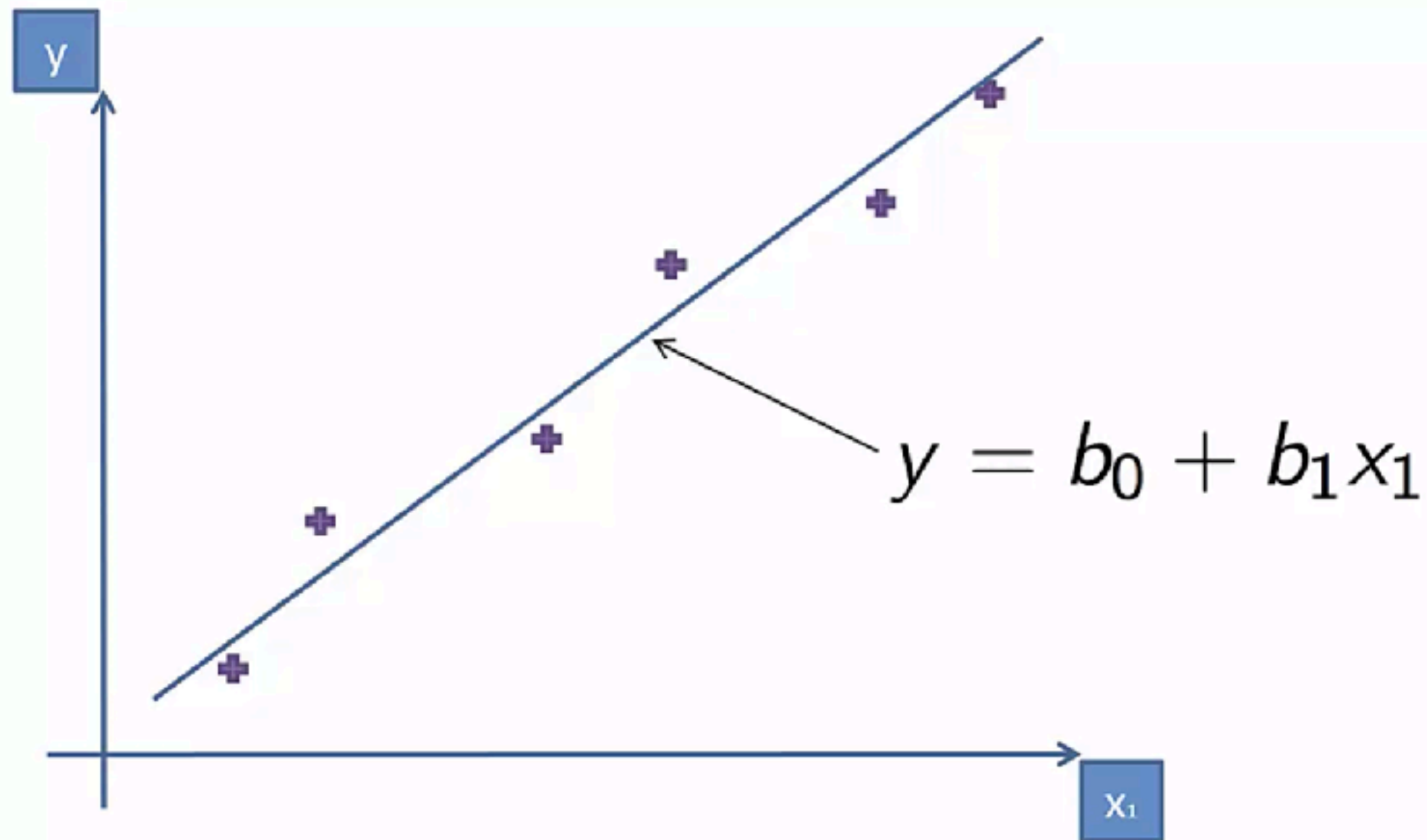
Polynomial
Linear
Regression

$$y = b_0 + b_1x_1 + b_2x_1^2 + \dots + b_nx_1^n$$

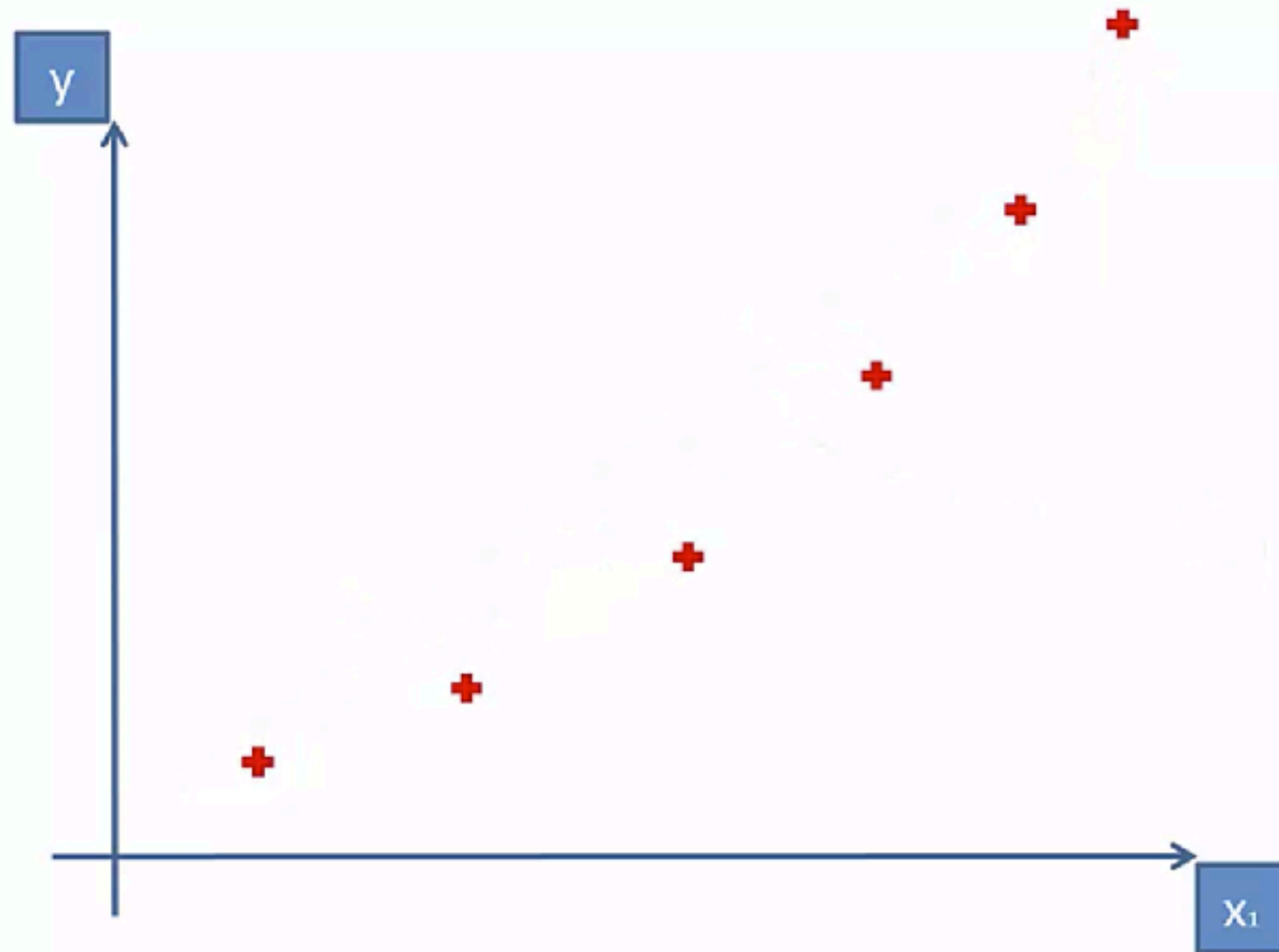
Simple Linear Regression



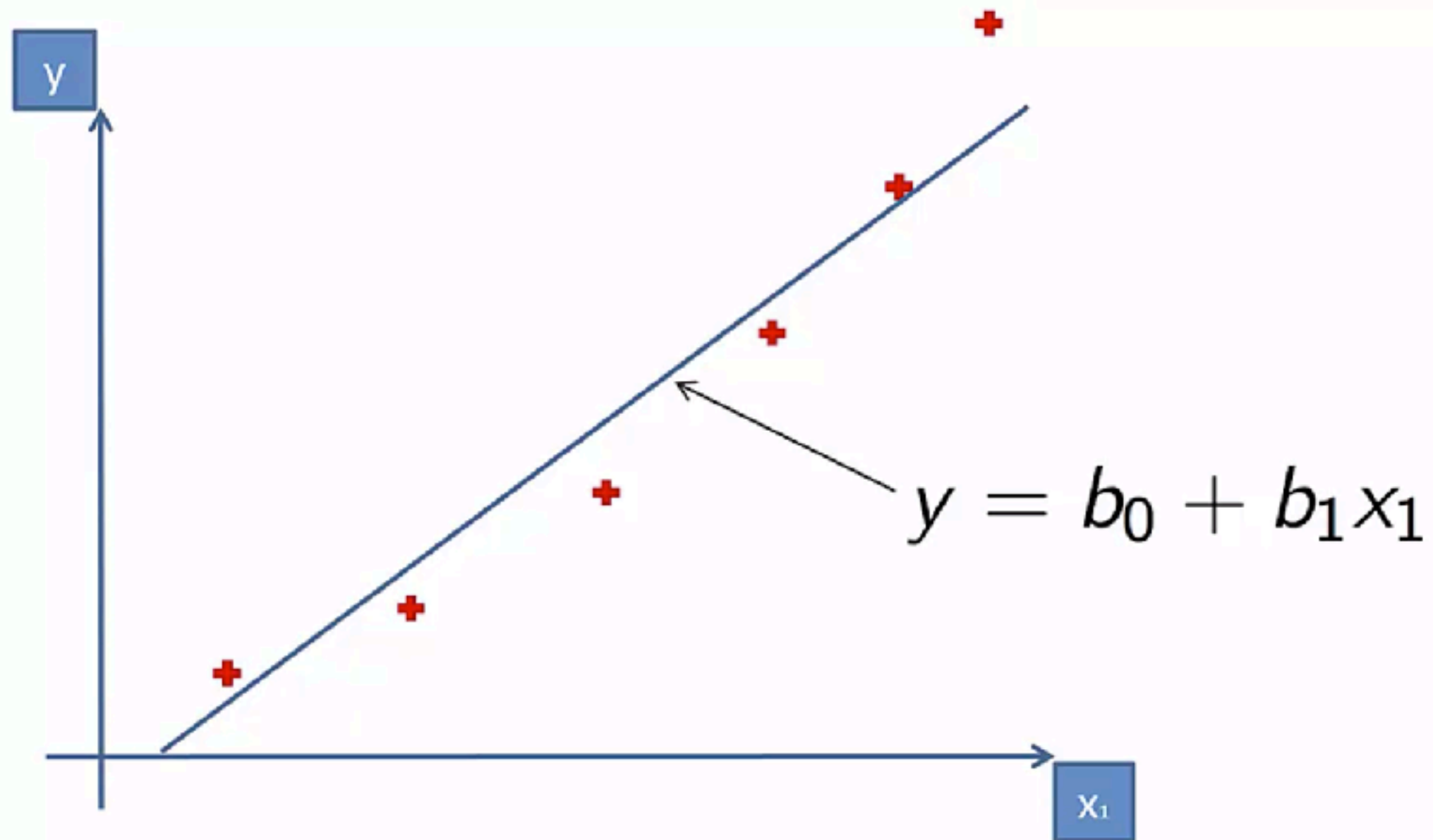
Simple Linear Regression



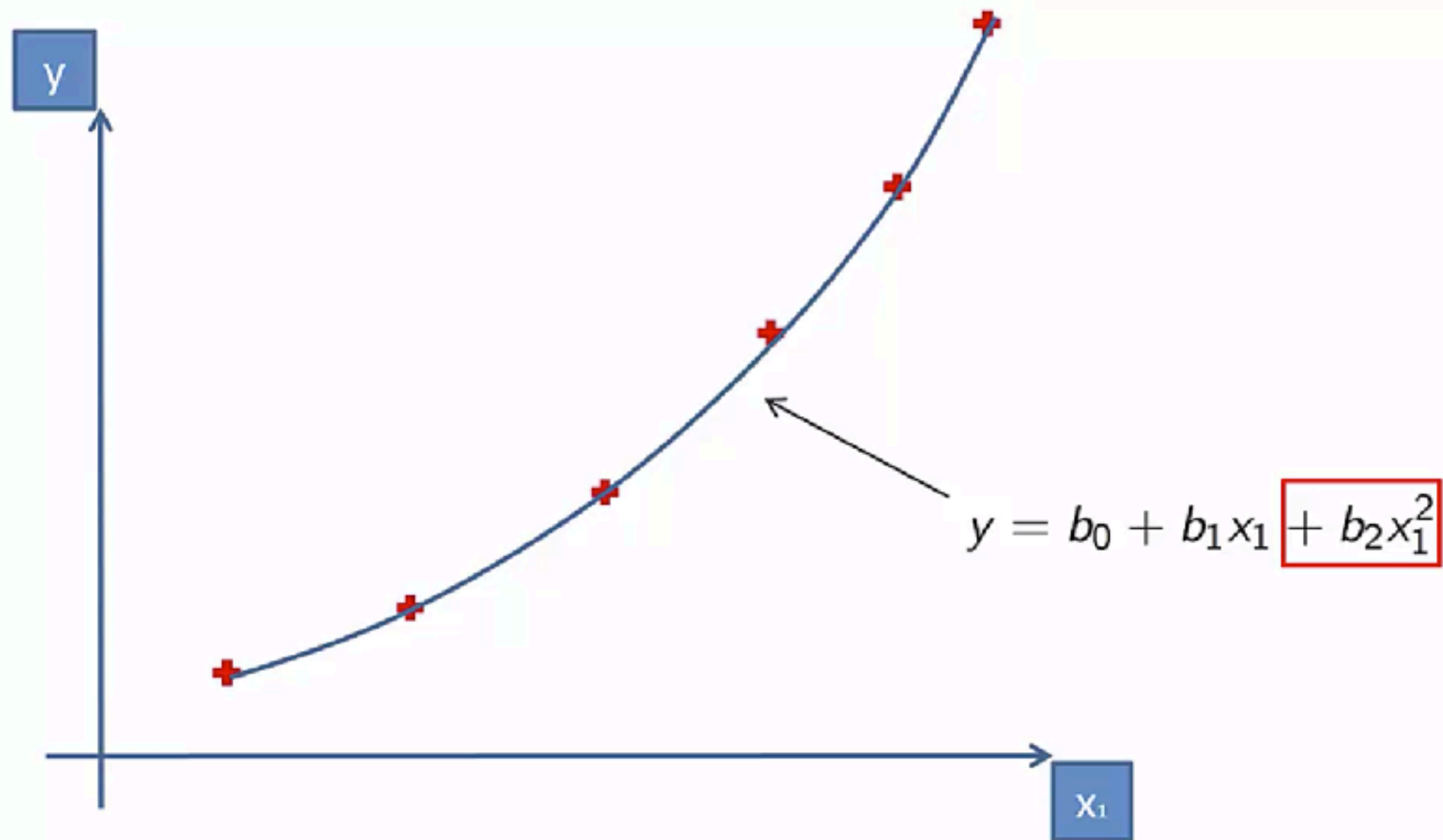
Simple Linear Regression



Simple Linear Regression



Polynomial Regression



**Why We Call it
Linear?**

Its all about Coefficients

Polynomial
Linear
Regression

$$y = b_0 + b_1x_1 + b_2x_1^2 + \dots + b_nx_1^n$$