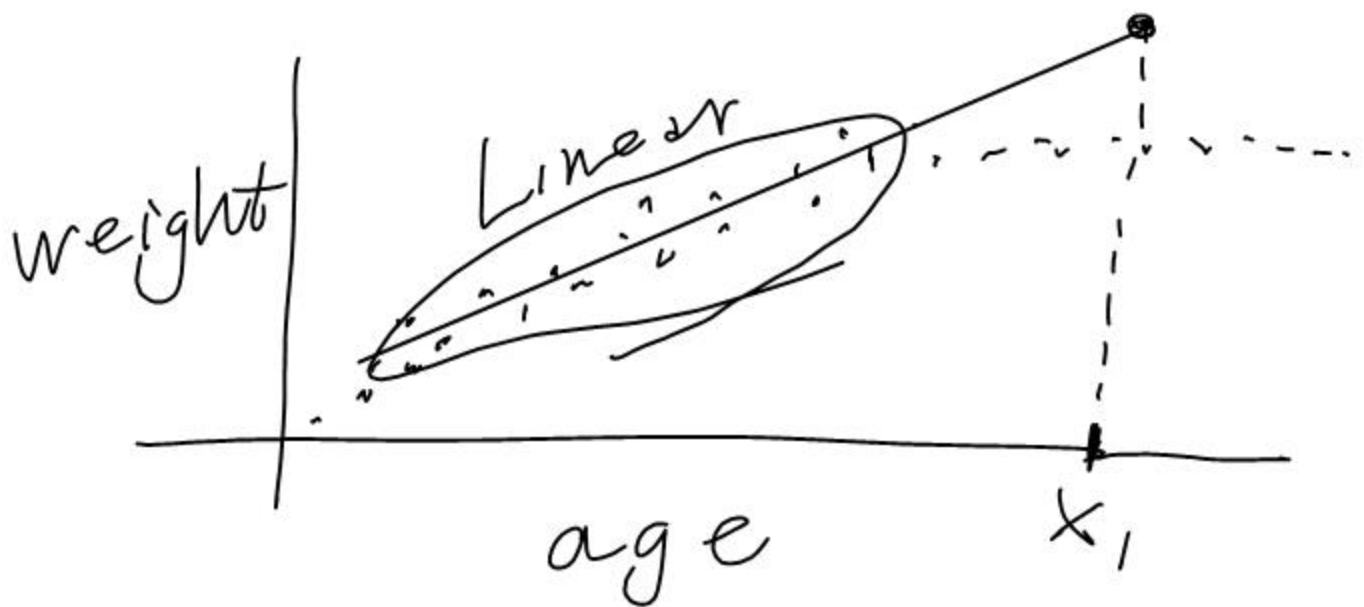
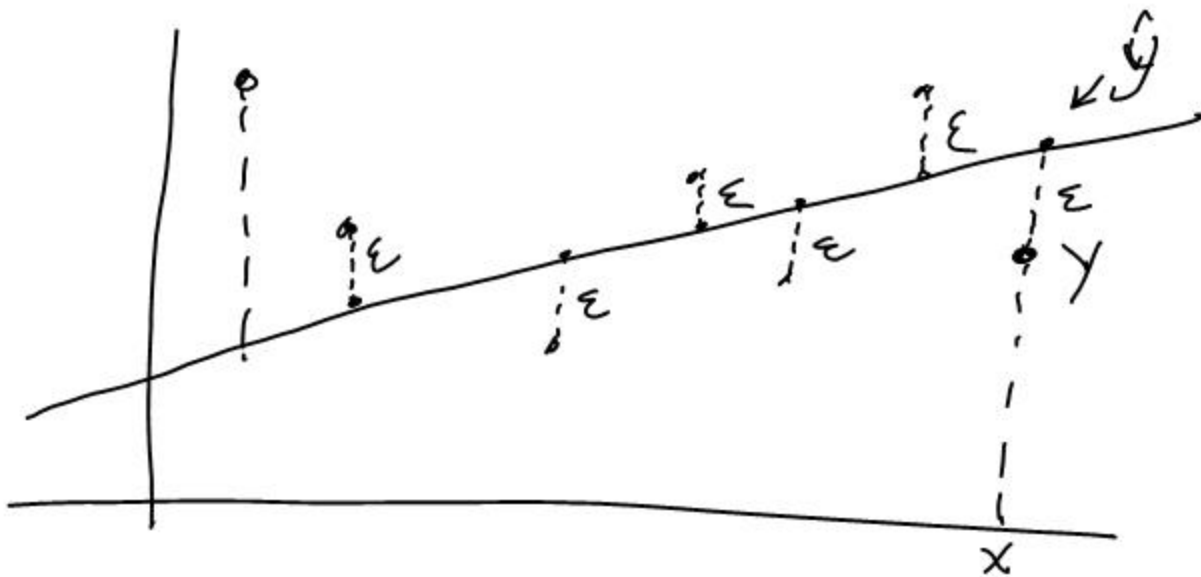


Trying to predict a y -value using an x -value that is larger or smaller than the values on the data table, is extrapolation.



$$\bar{x} = 4.78 \text{ m} \quad \bar{y} = 89.6 \text{ kg}$$

A regression line always goes through (\bar{x}, \bar{y}) .



$$\text{error} = \hat{y} - y$$

{ Total error = sum of the squares of all the errors

The line of best fit has the smallest possible total error.

Least-squares regression