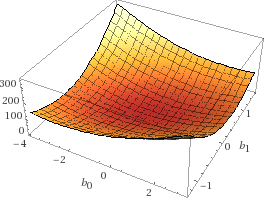
# Assignment 4: Logistic Regression

## 1 Classification with Linear Regression

### 1. Provide the coefficients β of the linear regression (on x and y) and explain shortly how you computed them.

Linear regression function:

Minimize:

Wolfram Alpha gives following solutions:

### 2. Classify each of the 6 samples with your linear regression model. Explain how you map the continuous output of the linear model to a class label

All outputs are classified as and all others as .

Therefore, is classified as , and all other inputs are classified as .

### 3. Discuss in your own words, why linear regression is not suitable for classification