

# Linear Regression

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## Gradient Derivation

a)

$$\frac{\partial}{\partial \beta_0} \frac{1}{2m} \left[ \sum_{i=0}^m (\beta_0 + \beta_1 y^{(i)} - y^{(i)})^2 \right] =$$

b)

$$\frac{\partial}{\partial \beta_1} \frac{1}{2m} \left[ \sum_{i=0}^m (\beta_0 + \beta_1 y^{(i)} - y^{(i)})^2 \right] =$$

## Linear Regression by Gradient Decent

## Linear Model on Airbnb Data