

4 d) sett opp Hypotesetest

$$H_0: \beta = \beta_0, \quad H_a: \beta \neq \beta_0$$

Testverdi:

$$AN \hat{\beta}_1 \quad t = \frac{\hat{\beta} - \beta_0}{s} \sqrt{\sum x_i^2}$$

Forhaster H_0 hvis

$$t \geq t_{\alpha/2, n-1} \text{ eller } t \leq -t_{\alpha/2, n-1}$$

Der α er signifikansverdi

□

e) Vis to

$$\sum (y_i - \hat{\beta} x_i)^2 = \sum y_i^2 - \hat{\beta}^2 \sum x_i^2$$

leser quadrat

$$\sum y_i^2 - 2 y_i \hat{\beta} x_i + \hat{\beta}^2 x_i^2$$

$$\sum y_i^2 + \sum \hat{\beta}^2 x_i^2$$