

MTH 441A: Lab 8

P 1. Consider the Hald Cement data set given in Table 10.1 of Montgomery Book. Find a subset model based in R^2 :

- ~~(a)~~ Calculate the maximum R_p^2 for each set of regression models containing $\binom{5}{p}$ regressors for $p = 1, \dots, 4$.
- ~~(b)~~ Plot $\max R_p^2$ versus p .
- (c) Observe the plot and recommend a suitable model.

~~**P 2.**~~ Repeat exercise **P 1** with R^2 replaced by adjusted R^2 .