

Problem Set 6  
Econometrics 410  
Prof. Taber  
Due: Thurs March 31

**Problem 1.** Wooldridge 4.6

**Problem 2.** Wooldridge 4.9

**Problem 3.** Wooldridge C4.6

**Problem 4.** Wooldridge C4.10

**Problem 5.** Consider the unrestricted regression.

$$Y_i = \beta_0 + \beta_1 X_{1i} + \beta_2 X_{2i} + \beta_3 X_{3i} + u_i$$

Explain what restricted regression you would run to test the following null Hypotheses:

a)

$$\beta_2 = 0$$

b)

$$\beta_2 = 0$$

$$\beta_3 = 0$$

c)

$$\beta_2 = \beta_1$$

$$\beta_3 = 0$$

d)

$$\beta_2 = 4$$

$$\beta_3 = 1$$

e)

$$\beta_2 = 1 + \beta_1$$

f)

$$\beta_2 = \beta_3$$

$$\beta_3 = \beta_1$$

g)

$$\beta_3 = 1 - \beta_2$$

$$\beta_1 = 1 + \beta_2$$