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| By Cliff Rodriguez |
| ECON 4811: Problem Set 2 |
| Due: Feb 14, 2018 |

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# Question 1

All answers for question 1 use datasetps2q1.dta.

(i)



Estimate Regression:

4.33 + .1.96 ln () +1.08 ln () + .42 +.05

The interpretation of is:

The interpretation of is:

(ii) Based on the value of the predicted effect of an additional unit of ability on attained education is …

\*\*should I include abil^2 here?

(iiii)

(iv)

Given your answer in (iii), explain, in a way that your non-Econ, non-mathematical friend

would understand, what the result in part (iii) means in terms of the relationship between

*educ* and *abil*?

(v)



Estimated Regression:

8.44 + ..19 +.11 + .50

Interpretation:

= .43

(vi)



The assumption being made here regarding the effect of father’s and mother’s education on their children is that …..

(vii)

# Question 2

1. D



1. Var(math4) =

Total sum of squares =

Variance and total sum of squares are related ….

The residual sum of squares is…

1. R2 =

Comparison of calculated and STATA output for R2:

Interpretation of R2:



Compare R2 in this regression to R2 in i.

The interpretation of in part iv is:

1. An important factor excluded from the model that would case the estimate of to be smaller is

Because:

1. An important factor excluded from the model that would case the estimate of to be larger is

Because:

1. Even if all other important factors were included in the model, another reason we would be skeptical that this type of model could provide internal validity for the causal relationship between single-parent households and student’s math performance is ….

# Question 3