

PS2

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I am trying out using markstat package for better reproducability, All code and answers will be in the same document, I will include the .stmd file and the boot file I use for running it (you will need to change the directories

Also, all files can be found on my github at <https://github.com/MattarKlein/Econometrics-B.git>

Import Data

```
. clear all
. use "star_problem_set.dta"
```

Question 1

(a) Run Regression Basic Regression

```
. quietly gen sc = .
. quietly gen ra = .
. foreach v in k 1 2 3{
2. quietly gen tss`v' = treadss`v' + tmathss`v'
3. quietly replace sc = cltype`v' == 1
4. quietly replace ra = cltype`v' == 3
5. quietly regress tss`v' sc ra, robust
6. quietly eststo a_reg_`v'
7. }
```

```

. label variable tssk "Kindergarden"
. label variable tss1 "1st Grade"
. label variable tss2 "2st Grade"
. label variable tss3 "3st Grade"
. label variable sc "Small Class"
. label variable ra "Regular + Ass"
.
. esttab a_reg_k a_reg_1 a_reg_2 a_reg_3, label

```

	(1) Kindergarden	(2) 1st Grade	(3) 2st Grade	(4) 3st Grade
Small Class	13.90*** (5.66)	29.78*** (10.52)	19.39*** (7.15)	15.59*** (6.51)
Regular + Ass	0.314 (0.14)	11.96*** (4.51)	3.479 (1.37)	-0.291 (-0.13)
Constant	918.0*** (562.05)	1039.4*** (582.43)	1157.8*** (637.88)	1228.5*** (731.25)
Observations	5786	6379	6049	5967

```

t statistics in parentheses
* p<0.05, ** p<0.01, *** p<0.001
. //[Fuel Efficiency by Weight](test.pdf)

```

(b) Run Regression With Normalized Grades

```

. foreach v in k 1 2 3{
2. quietly summarize tss`v`
3. quietly gen tss`v`_normalized = (treadss`v` + tmathss`v`)/r(sd)
4. quietly replace sc = cltype`v` == 1
5. quietly replace ra = cltype`v` == 3
6. quietly regress tss`v`_normalized sc ra, robust
7. quietly eststo b_reg_`v`
8. }

. label variable tssk_normalized "Kindergarden Norm"
. label variable tss1_normalized "1st Grade Norm"
. label variable tss2_normalized "2st Grade Norm"
. label variable tss3_normalized "3st Grade Norm"
. label variable sc "Small Class"
. label variable ra "Regular + Ass"
.
. esttab b_reg_k b_reg_1 b_reg_2 b_reg_3, label

```

	(1) Kindergard_m	(2) 1st Grade _m	(3) 2st Grade _m	(4) 3st Grade _m
Small Class	0.188*** (5.66)	0.326*** (10.52)	0.231*** (7.15)	0.213*** (6.51)
Regular + Ass	0.00426 (0.14)	0.131*** (4.51)	0.0414 (1.37)	-0.00397 (-0.13)
Constant	12.45*** (562.05)	11.39*** (582.43)	13.77*** (637.88)	16.77*** (731.25)

Observations	5786	6379	6049	5967
t statistics in parentheses				
* p<0.05, ** p<0.01, *** p<0.001				