

EE325 Participation credit #7

Name: _____ Last 4-digits Student ID: _____

In the case of **perfect multicollinearity**, can we get a unique solution for the individual regression coefficients?

Consumption Function for United States, 1947-2000.

$$\ln C_i = \beta_1 + \beta_2 \ln Y_i + \beta_3 \ln w_i + i_i + u_i$$

Source	SS	df	MS	Number of obs	=	54
Model	16.1637474	3	5.3879158	F(3, 50)	=	37832.66
Residual	.007120721	50	.000142414	Prob > F	=	0.0000
				R-squared	=	0.9996
				Adj R-squared	=	0.9995
Total	16.1708681	53	.305110719	Root MSE	=	.01193

lnc	Coefficient	Std. err.	t	P> t	[95% conf. interval]	
lnyd	.8048728	.0174978	46.00	0.000	.7697273	.8400182
lnw	.2012702	.0175926	11.44	0.000	.1659345	.236606
i	-.0026891	.0007619	-3.53	0.001	-.0042194	-.0011587
_cons	-.467712	.042778	-10.93	0.000	-.5536342	-.3817899

Is there evidence of multicollinearity in the data? How do you know?