Statistic decision making final exam

Exercise 2: Sample Design and Evaluation The information can be summarized as follows: N1= N2 Standard Deviation= 15 Difference in Performance= 5 Power= . 8 After entering the given information, the window looks as follows, which shows us that N1= N2= 142 In the window above, change the power to . 9, then N1= N2 = 190 In the window above, change the sigma1= 15, sigma2= 12, and don't select Egual Sigmas checkbox, thus I get N1= N2= 156 In the window above, change the N1= 200 (control group), N2= 120 (testing group), and select Independent in Allocation, thus I get . 046 to be the power. =((61-64. 5)-(0))/v((16*16)/200+(13*13)/120) = (-3. 5)/1. 6396 = -2. 1347 Critical Value: Z? /2= Z0. 05/2= @qnorm(1-0. 05/2)= 1. 96 When comparing the test statistic to the critical value: Z= 2. 1347> 1. 96, we reject the null hypothesis. We can calculate the P-value using the EViews command: Show @tdist (t, d. f) In this EViews command, t stands for the appropriate test statistic and d. f are the degrees of freedom. The appropriate test statistic was calculated above, namely Z= 2. 347. For the degrees of freedom, we can insert NA+NB-2. Show @tdist (2. 1347, 318)= 0. 03355 Since the P-value= 0. 033550, and ? 1= 0. 86361050000 ls price c assessval Dependent Variable: PRICE Method: Least Squares Date: 01/21/13 Time: 16: 07 Sample: 1 650 IF PRICE> 50000 Included observations: 562 VariableCoefficientStd. Errort-StatisticProb. C12314. 913021. 9884. 0751030. 0001 ASSESSVAL0. 8230410. 02269536. 265460. 0000 R-squared0. 701363 Mean dependent var113069. 1

Adjusted R-squared0. 700829 S. D. dependent var51534. 97 S. E. of regression28187. 83 Akaike info criterion23. 33472 Sum squared resid4. 45E+11 Schwarz criterion23. 35013 Log likelihood-6555. 056 Hannan-Quinn criter. 23. 34074 F-statistic1315. 184 Durbin-Watson stat1. 337129 Prob(F-statistic)0. 000000 Estimated intercept (b0): 12314. 91 Estimated slope (b1): 0. 823041 The result in (g) does NOT change my conclusion from part (e), since now, ? 0= 12314. 91> 0, and ? 1= 0. 823041