Grader's comments (Homework #5)

#1.
Look up your favorite formula for R^2, SST, and SSE, conveniently listed on the inside of the backcover.
$$R^2 = 0.8612$$
The F-statistics is 114.75 and the critical F is 3.25. The evidence suggests REJECT.

#2.
$F = 7.1175$ and reject null.

#3.
Everyone did well.

#4.
$\hat{y}$ is perfectly collinear with x and z; i.e.
$$\hat{y} = b_1 + b_2 x + b_3 z$$

#5.

b. Question only assk "Does", but still you need to show your calculations of RESET. With one term $F = 9.528$, and with two terms $F = 4.788$. RESET considers two artificial models and test whether the coefficients of the added terms are (jointly) signficant.
c. Take derivative with respect to HE and HA, and say something.
d. RESET with one term yields $F = 0.326$, and with two terms $F = 0.882$.
e. The wage rate is 7.94 higher in large cities than it is outside.
f. This is an example that the RESET does not always pick up the misspecification. Compare the result of the t-stat test on the CIT variable and RESET.
g. The omited variable bias from omission of CIT is not severer. Note that the remaining coefficients have similar same signs and similar magnitutdes. CIT is not highly correlated with other regressors.