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ECON 257
EXERCISES 5

Classical linear model: R^2
Review questions

1. In the context of the classical linear regression model (with an intercept),
   (a) define R^2 and $\bar{R}^2$;
   (b) show that $\overline{R}^2 \leq R^2 \leq 1$;
   (c) give conditions under which $\overline{R}^2 = R^2$.
2. In the context of the classical linear regression model,
   (a) can R^2 be negative ? If so, when?
   (b) can $\bar{R}^2$ be negative ? If so, when?
3. Can you relate R^2 to a test of significance ? If so, explain what this test can be.