

Download the data file “income.xls” from D2L. Import it into R. This data has four variables:

monthinc = monthly income

educ = years of education

exper = years of job experience

tenure = years employed at current firm

Use R to answer the following questions. You will need to turn in a printout of your work in R and answers for each of the questions listed above. For all hypothesis tests, lists the null and alternative hypotheses, the decision rule, the calculated test statistic, the critical value of the test statistic, and the decision.

1. Run a regression with monthinc as the dependent variable and the other three variables as the independent variables. Write out the estimated regression equation.
2. Provide an interpretation of the coefficient on educ.
3. Provide an interpretation of the coefficient on tenure.
4. Test the overall significance of the model you estimated in (1) at the 5% level.
5. Test the significance of the estimated coefficient on tenure. (Use a 5% significance level.)

6. Run a regression with monthinc as the dependent variable and educ and exper as independent variables. Write out the estimated regression equation.
7. Test the significance of the estimated coefficient on exper. (Use a 5% significance level.)
8. Run a regression with monthinc as the dependent variable and educ as the independent variable. Write out the estimated regression equation.
9. Test the significance of the estimated coefficient on educ. (Use a 5% significance level.)