

Appendix B-2 Practice

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Appendix B #10

Suppose that at a large university, college GPA and SAT score are related by the conditional expectation $E(GPA|SAT) = 0.70 + 0.002SAT$ - Find expected GPA when $SAT = 800$. Find $E(GPA|SAT = 1400)$. - If average SAT at the university is 1,100, what is the average GPA?

If an individual student's SAT is 1,100, does this mean they will have the same GPA as the previous question?

Correlogram Practice

Make a correlogram of the affairs dataset that includes the following variables:

- Age (age)
- Years married (yrsmarr)
- Years of education (educ)
- Number of affairs (naffairs)

Give your corrgram the following panel attributes:

- Scatter plots in the lower panel;
- Correlation coefficients in the upper panel;
- Estimated empirical uni-variate densities in the diagonal panel;
- Black color palette.