

STAT 8250 — Applied Multivariate Analysis
Homework 2 – Due Monday, September 25

Homework Guidelines:

- Homework is due by 4:30 on the due date specified above. You may turn it in at the beginning of class or place it in my mailbox in the Statistics Building. **No late homeworks will be accepted!**
- Use only standard (8.5 × 11 inch) paper and use only one side of each sheet.
- Homework should show enough detail so that the reader can clearly understand the procedures of the solutions.
- Problems should appear in the order that they were assigned.
- If you use a computer to obtain your results, append both the computer program and the associated output to your homework. Label all appended sheets clearly and in your answer refer specifically to appended results when relevant. For example, “The correlation matrix is

$$\begin{pmatrix} 1.00 & 0.53 \\ 0.53 & 1.00 \end{pmatrix}$$

(see p.3 of attached output labelled ‘hwk1_3a.lst’).”

Assignment:

From the text do the following problems:

3.5, 3.8, 3.11, 4.3a,c,e, 4.5a,b, 4.18, 4.19, 4.22, 4.24, 4.26a,c,d, 4.30a,b.

Comments, hints, advice:

1. Regarding 3.8: see p.22 of the notes for how to take the determinant of a 3×3 matrix. (See also p.98 of the text). You may also use the computer to take this determinant.
2. Regarding 4.24, 4.26 and 4.30: I recommend using the computer even though its a small data set. See the example given in class.