

STAT423/523 Homework 4

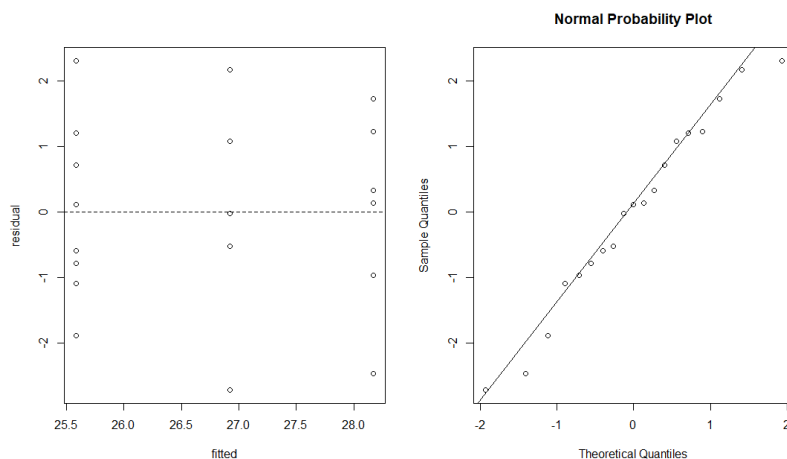
Show your work (if appropriate) for full credits. Submit your answer in pdf.

1. Chapter 10, Section 10.2, Exercise 17

- Use $MSE = 0.660\bar{3}$, $I = 3$, $J = 10$ and compute a 2-sided CI for the contrast.

2. Consider the data in **Exercise 42 in Chapter 10 Supplementary Exercises**. Carry out the instructions below. **Use software if possible.**

- Obtain the ANOVA table for testing the hypothesis that mean cff values are all the same.
- State/give the relevant hypotheses at $\alpha = 0.05$. **Follow the 4-step hypothesis test outline.** Give the reject region or the P-value.
- Do the following residual plots suggest strong evidence that the model assumptions are violated? Explain briefly.



- Perform the Tukey method of underscoring (95% confidence) to determine which means differ. Write a few sentences to summarize your findings.