

STAT525 HOMEWORK #7

DUE MARCH 31, 2019, **BEFORE** CLASS

1. KNNL Problem 11.7 (part (b) is optional)
2. KNNL Problem 11.16
3. KNNL Problem 16.2
4. KNNL Problem 16.5
5. KNNL Problem 16.47

For the remainder of the assignment, use the data from problem 16.11 described on page 725 of the text.

6. Give a table of sample sizes, means, and standard deviations for the six different filling machines.
7. Statistically examine the question of whether or not the six machines place the same amount of fill into the cartons. Write a model for this analysis, state the null and alternative hypothesis in terms of your model parameters (cell-based or factor effects), give the test statistic with degrees of freedom, the P-value, and your conclusion.
8. Examine the residuals of this analysis to make sure the assumptions are not violated. Display (and comment on) the plots and/or tests you use to do this.