Hand in Exercise 13.9 and 13.10.

13.9

ANOVA summary table

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
|  | Sum of Squares | df | Mean Square | F | Sig. |
| Between groups | 2240 | 2 | 1120 | 5 | 0.00824813 |
| Within groups | 26208 | 117 | 224 |  |  |
| Total | 28448 | 119 |  |  |  |

13.10(a)

文本

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Figure 1

As shown in Figure 1, the normal distribution assumption is tenable.

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Figure 2

As shown in Figure 2, the homogeneity of variance is also tenable. So One-Way ANOVA can be conducted.

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Figure 3

The results of One-Way ANOVA indicate that the mean scores of these four teaching methods have statistically significant differences (F(3,16)=6.97, p<0.01)

13.10(b)

The Tukey’s honestly significant difference post-hoc test should be conducted because the result of One-Way ANOVA is significant, and it contains more than two groups.

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Figure 4

The result of Tukey’s honestly significant difference post-hoc test is shown in Figure 4. The result indicates that there’re significant differences between Group 4 and Group 2&3. No other statistical significant differences are detected.