

## NOTES FOR EXERCISES IN SESSION 10

- 12:1,9,43,25; x:17; 12:54; 6:7; 12:55; x:18; 12:35; 27:22  
(12:26,27,40; 27:45; final2014:2)
- review of analysis after the ANOVA table + extras (10L: 12–17),
- summary worksheet review (3:30pm): S.11:2,3,
- indiv. work on exercises + time for questions on midterm/home assign.

Minitab for one-way ANOVA<sup>1</sup>: **Stat-ANOVA-One Way** menu:

- ignore residual plots for now,
- for Bonferroni corrections, use **Comparisons** menu and Fisher (LSD) method with manually corrected error level  $\alpha$ ,
- method without assuming equal variances not in VHM 801.

Notes and questions for specific exercises:

- 12.1, 12.9, 12.25: from lecture (10L–10 has solutions and outline for 12.25); we already did (a) in 12.1/12.9).
- 12.25, 12.26, 12.27: on construction of ANOVA tables by manual calculations; in 12.27, forget about  $R^2$ ,
- 12.35: power calculation for one-way ANOVA,
- 27.22: use software for the Kruskal-Wallis test; analyze also by one-way ANOVA procedure and discuss the models' assumptions,
- 27.45: for pairwise comparisons after Kruskal-Wallis test, use two-sample methods for all pairs with a Bonferroni-adjustment for multiple testing (IPS Exercise 15.47),
- final2014:2: recommended — text + solution at 2014 homepage.

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<sup>1</sup> Stata for one-way ANOVA: **Statistics-Linear-ANOVA/MANOVA-Oneway** menu, or **oneway** command; R: **lm** function with model formula, see R programs.