Notes for Exercises in Session 6

- 6:87,140,70,85,95; 7:4,73,74,64; 6:68; x:12 (6:46,103,108,142; home assign.2009:2) — note suggested (non-random!) order,
- practice also a proper layout of the statistical analysis: notation, assumptions/model, calculations, conclusions (see solutions for suggested layout, but do use the real symbols like μ, $\bar{X}$ etc.),
  - in particular, write conclusions (also) in "non-technical" terms.

Outline of lab session:

- follow-up on 1-sample inference with unknown σ (6L−12/13/14),
- Minitab demonstrations[1]: z-tests + t-distribution inference:
  - `Stat-Basic Statistics-1 Sample Z` and `...-1 Sample t`,
- individual work on the remaining exercises.

Notes and questions for specific exercises:

- 6.140, 7.73, 7.74: analyse first manually, using formulae and calculator, repeat using software; state the assumptions of the analyses,
- 6.68: not a normal distribution problem, so use general testing principles instead,
- 6.95: see page 6L−7 on using confidence intervals for statistical tests,
- x:12: based on Statistical Significance applet,
- home2009.2: (5)-(6) optional; data and solution at 2009 webpage.

[1] For Stata and R, see solution program files for details.