

## LAB SESSION 5

### Outline of lab session:

- brief lecturing from lecture 5 on extra testing topics:
  - \*  $z$ -test and one/two-sided tests (5L–17/18/21), also including parts of Exercises 6.20 and 6.47,
- Minitab demonstration for confidence intervals and tests: using the menu: **Stat-Basic Statistics-1 Sample Z**,
- individual work on the exercises:  
3:74; 5:14; 6:13,14, **33**, **55**, 87, 140, 70, **95**, 68, 103 (5:7,9,40,54; 6:11,12,20,45,46,47,85,96; x:10,11, **12**) — recommended order, bold  $\sim$  lab review,
- summary worksheets (for Wednesday’s lab review): S.5:3, S.6:1.

### Notes and questions for specific exercises:

- 5.54: skip part b), or use the Appendix slide (5L–22),
- 6.13, 6.14: do calculations both by hand (calculator; the mean yield equals 123.80) and using software,
- 6.68: not a normal distribution problem, so use general testing principles instead,
- 6.95: for part (b), see page 5L–19 on using confidence intervals for statistical tests,
- 6.140: use software (maybe also compute the test by hand), and state the assumptions of the analysis,
- x:10, x:11: extra problems based on applets; you may find these illustrative (and helpful),
- x:12: extra problem for the lab review (interpretation of tests).