STAT 5201 HW5

- **5-1.** Edition 2: Chapter5-Problem 11 (Edition 1: Chapter5-Problem 3)
- **5-2.** Edition 2: Chapter5-Problem 12 (Edition 1: Chapter5-Problem 5)
- **5-3.** Edition 2: Chapter5-Problem 14(a) (Edition 1: Chapter5-Problem 15(a))
- **5-4.** An inspector samples cans from a truckload of canned creamed corn to estimate the average number of worm fragments per can. The truck has 580 cases, each case contains 24 cans. The inspector samples 12 cases at random and subsamples 3 cans at random from each selected case.

| | Case | | | | | | | | | | | |
|----------------------|------|---|---|---|---|---|---|---|---|----|---|---|
| | | | | | | | | | | 10 | | |
| can1 can2 can3 | 1 | 4 | 0 | 3 | 4 | 0 | 5 | 3 | 7 | 3 | 4 | 0 |
| can2 | 5 | 2 | 1 | 6 | 9 | 7 | 5 | 0 | 3 | 1 | 7 | 0 |
| can3 | 7 | 4 | 2 | 6 | 8 | 3 | 1 | 2 | 5 | 4 | 0 | 0 |

Estimate the mean number of worm fragments per can. Give the standard error of your estimate.

Note: The handout "Working with cluster samples" has some R code which could prove useful in some of the problems.