

ST 432 Homework Set 7

March 10, 2009. Due March 17, 2009

1. Q1a and Q2a P 139. Parts b are optional but advise you do them if you have time. You will have to calculate the variances in Q4.
2. If the M_i are all equal then show that the ratio and unbiased estimators are the same for cluster sampling.
3. If $m_i = M_i$ then show that equation 1 on page 145 reduces to the i th primary unit total and hence the unbiased estimator in Chapter 13 reduces to the corresponding unbiased estimator in Chapter 12.
4. Q1 P154.