

## Quiz 9

**1. (5 points)**

Describe the process for finding the variance of stratified sample estimator for a population mean. You are welcome to use mathematical equations or prose.

**2. (5 point)**

Variance calculations for ratio estimators require the term  $s_e^2$ . Provide some intuition behind the quantity  $y_i - \hat{B}x_i$  that shows up in this variance calculation. Recall the variance for srs used  $y_i - \bar{y}$ .