Your Name: _____

Math 140: Statistics, April 15, 2008
Quiz 14, Chapter 20: Chance Errors in Sampling

In a hypothetical city with a population of 100,000 workers, 90,000 earn $75,000 or less in a year while 10,000 earn more than $75,000. A sample of 900 workers is drawn.

1. (4 pts.) Find the expected value and SE for the number of workers in the sample that earn less than $75,000 in a year.

2. (4 pts.) Find the percentage and percent SE of workers in the sample that earn less than $75,000 in a year.

3. (4 pts.) Estimate the chance that between 89% and 92% of the workers in the sample earn less than $75,000 in a year.

4. (4 pts.) Find the correction factor and the corrected percent SE.

Pledged: _____