

## Self Evaluation Problems Class 1

Suppose we are interested in estimating the mean dollars charged for coronary artery bypass graft (CABG) surgery at a major medical center. From the literature, the standard deviation of expenditures among patients within a hospital is thought to be approximately \$3,000.

- 1) If the mean expenditure is \$35,000, about what fraction of the population of CABG patients will spend between \$29,000 and \$41,000?
  - a) 1%
  - b) 5%
  - c) 25%
  - d) 50%
  - e) can't say
  
- 2) A 95% confidence interval for the mean expenditure in a sample with 100 CABG patients would be how wide?
  
  
  
  
  
  
  
  
  
  
- 3) To obtain a 95% CI that is  $\pm \$1,000$ , how big a sample would be needed?