Probability and Statistics (MATH 1530-017)

Attendance Quiz, April 2, 2009

NAME _____ E-NUMBER _____

Pick the letter of the best answer. The problems are worth 2 points each.

1. The Bureau of Labor Statistics announces that last month it interviewed all members of the labor force in a sample of 60,000 households; **4.9%** of the people interviewed were unemployed. The boldfaced number is a
   (a) sampling distribution.   **(b)** control.   **(c)** parameter.   **(d)** statistic.

2. Annual returns on the more than 5000 common stocks available to investors vary a lot. In a recent year, the mean return was 8.3% and the standard deviation of returns was 28.5%. The Law of Large Numbers says that

   (a) you can get an average return higher than the mean 8.3% by investing in a large number of stocks.

   (b) as you invest in more and more stocks chosen are random, your average return on these stocks gets ever closer to 8.3%.

   (c) if you buy 8.3% of the 5000 common stocks, then your return will be 28.5%.

   (d) if you buy 28.5% of the 5000 common stocks, then your return will be 8.3%.