Due November 10, 2010, at the **beginning of section**

1. Results from a CNN/Opinion Research Corp. poll were released Thursday, which say that in a possible general election showdown, "....Obama leads Palin 52-44 percent among all registered voters." The article further goes on to say the following:
"The CNN/Opinion Research Corp. poll was conducted October 27-30, before the midterm elections, with 921 registered voters, including 500 respondents who describe themselves and Republicans or independents who lean Republican, and 453 respondents who describe themselves as Democrats or independents who lean Democratic, questioned by telephone. The survey's overall sampling error is plus or minus three percentage points."

   (a) (1 pt) What is the population?

   (b) (1 pt) What is the sample?

   (c) (2 pts) What does "sampling error is plus or minus three percentage points" mean?

2. An August 2009 poll conducted by the Pew Research Center's Forum on Religion & Public Life finds that almost one in five (18%) Americans claim to have been in the presence of a ghost. (Incidentally, this proportion has doubled in the last decade - in 1996, only 9% of Americans claimed this.) These results are based on a nationwide random sample of 4013 adults (age 18 and over).

   (a) (2pts) Find the margin of error if we want a 90% confidence interval for the percent of Americans that believe in ghosts.

   (b) (1 pt) If we want a 99% confidence interval, will the margin of error be larger or smaller?

   (c) (1pt) In general, if all other aspects of the situation remain the same, will smaller margins of error involve greater or less confidence in the interval?

3. Review exercise 10 (a) through (f), from Chapter 23, page 467. (1pt each)