3. The Online police department was asked by the mayor’s office to estimate the cost of crime to citizens of Online. The police began their study with the crime of identity theft, taking a random sample of files (there is too much crime to calculate the statistics for all the crimes committed). They found the average dollar loss in an identity theft was $6640, with a standard deviation of $5600, and that the dollar loss was normally distributed. In this sample:

What proportion of identity thefts had dollar losses above $10000?

A. 0.60

B. 0.2743

C. .05

D. 5000

3b. What percentage of identity thefts had dollar losses between $1000 and $3000?

A. 0.997

B. 0.05

C. 0.0991

D. 0.2528

c. What is the probability that any one identity theft had a dollar loss above $4000?

A. 0.6808

B. 0.5

C. .1591

D. .025

3e. What proportion of thefts are above $17616?

A. 0.95

B. 0.0250

C. 0.05

D. .5

4. In an “Excite Poll” October 14, 2002, a self-response poll of internet users, the question was:

It is now possible for school students to log on to Internet sites and download homework. Everything from book reports to doctoral dissertations can be downloaded free or for a fee. Do you believe giving a student who is caught plagiarizing an “F” for their assignment is the right punishment?

In all, 14,793 people clicked “Yes,” 1778 clicked “No, it is too harsh,” 2566 clicked “No, it is not harsh enough,” and 988 clicked “don’t know” or “don’t care.”

a) What is the sample size for this poll?

A. 1778

B. 2566

C. 4344

D. 20125

E. 14793

4b. The "Excite Poll" internet write in poll described above has a much larger sample than standard sample surveys. Can we trust the result to give good information about any clearly defined population. Why or why not? Would a random sample of 50 provide better or worse data?