Random sampling word problems

name _____   class _____

Solve the following word problems.

1 In the town of Denwar, 8000 adults are there. In a random sample, 78 out of 200 adults said they work at least 7hrs a day. Based on the results, approximately how many adults have work more than 7hrs a day?

2 St. Xavier college conducted student's secretary elections for 3500 students. The principal wants who won the elections in a very short span. He decided to randomly pick 150 paper ballots. There were 3 candidates and the results of his sample are shown below:

	John	Dennis	Barner	Total
Votes	35	90	25	150

A. Write at least two inferences the principal can make about Dennis ?

B. Approximately how many total votes will John and Barner receive combined?

3 In a random sample, 48 out of 128 students at Cambridge Elementary School said they prefer sandwich for lunch in the cafetaria. How many sandwiches should the cafetaria prepare if there are 1200 students?

4 The MASTER bakery would like to know the customer's interests. They normally serve 1500 customers each day, but decided to randomly ask 300 customers what they prefer. The data from the five days of sampling is below.

Day	Pie	Cake	Cookie	Donuts	Pudding	Ice cream	Total
Mon	8	16	14	8	4	10	60
Tue	7	20	10	4	7	12	60
Wed	5	18	13	7	6	11	60
Thu	5	18	8	12	8	9	60
Fri	6	10	8	13	8	15	60
Total							300

A. Based on the results, approximately how many cakes should they prepare every day?

B. About what percent of the people want cookies?

C. What is the second most popular in the bakery? _____