

- Solve the problems.
  - 1 Marcus has three random samples of the same size from a population of 700 people. In one sample, 53% of people have a library card. In another, 51% of people have a library card. In the third, 43% have a library card. Based on the mean of the three samples, how many people with a library card should he expect are in the population?

A 301

**B** 343

C 357

**D** 371

2 A school secretary plans to order 510 sandwiches for students at a school picnic. He asks 85 students selected at random which type of sandwich is their favorite. Based on the data from the sample, how many of each type of sandwich should the secretary order? Show your work.

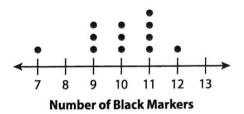
Sandwich Type	Quantity
Hummus	37
Ham	18
Egg Salad	5
Turkey	25

SOLUTION			 

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A bag contains 60 markers. The markers are either red or black. Each student in Mr. Jones's class selects a random sample of 15 markers from the bag, counts the number of black markers, and returns the sample to the bag. What is a reasonable estimate for the number of black markers in the bag? Show your work.



SOLUTION	

Desiree, Marina, and Raúl each survey a random sample of 60 students in their school about whether they prefer to listen to music while completing homework. They use the results to infer about what percent of students in the school prefer to listen to music while completing homework. Based on the results of the three surveys, what range of inferences is reasonable? Write your answers in the blanks.

Student Who Gave Survey	Students Who Prefer to Listen to Music While Completing Homework
Desiree	48
Marina	39
Raúl	42

From	% to	% of students in the school prefer to lister
to music wh	ile completing hom	ework.