1. Emma Rose took a random sample of 250 visitors to an art museum to ask them which exhibit they came to see.

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Exhibit | Sculpture garden | Modern art | Traveling exhibit | other |
| Number of responses | 47 | 130 | 48 | 25 |

Which of these inferences about the population of visitors is well supported by her sample?

1. About half of all visitors came to the museum to see the modern art exhibit.
2. More visitors came to see the modern art exhibit than any other exhibit.
3. More visitors came to see the traveling exhibit that the sculpture garden
4. More visitors came to see the sculpture garden or the traveling exhibit than cam to see the modern art exhibit.
5. A journalist investigates user complaints about their new laptops. She take a random sample of 5,000 new laptop buyers and asks them to describe their main complaint about their laptops.

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Short battery life | Screen too small | Slow speed | Other complaints | No complaints |
| 2,015 | 428 | 477 | 896 | 1,184 |

Based on this sample, which is the best estimate for how many of the 15,600.000 new laptop buys in the United States last year had no complaints?

Complete a proportion.

1. A scientist studies one type of bird. He takes 2 random samples of 500 birds and measures their beak lengths. There are a total of 4,500 of these birds in the forest.

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Beak length | Less than 1 inch | Between 1 and 2 inches | Between 2 and 3 inches | Greater than 3 inches |
| Sample 1 | 46 | 317 | 72 | 65 |
| Sample 2 | 50 | 295 | 85 | 70 |

Based on both samples, what is the most likely number of birds in this forest with beak lengths between 1 and 2 inches?

Complete a proportion using the average of the samples. (page 276 on the sheet you have from class)