

Printed Name: _____

I randomly sampled 36 students and asked them to report the number of speeding tickets they have ever received. Nationally, adults average 8 speeding tickets with a standard deviation of 3 speeding tickets.

1. What should I expect the average number of speeding tickets to be for the 36 students?
2. How much should I expect the sample mean to differ from the population mean?
3. What shape will the distribution of sample means have? Justify your answer.

Scores on the Jealousy scale are known to be positively skewed with a population mean of 50 and a population standard deviation of 10. I randomly sampled 16 college students and administered the Jealousy scale to them.

1. What should I expect the average jealousy of the 16 students to be?
2. How much should I expect the average jealousy score of the 16 students to differ from the population mean?
3. What shape will the distribution of sample means have? Justify your answer.

Scores on the Jealousy scale are known to be positively skewed with a population mean of 50 and a population standard deviation of 10. I randomly sampled 100 college students and administered the Jealousy scale to them.

1. What should I expect the average jealousy of the 100 students to be?
2. How much should I expect the average jealousy score of the 100 students to differ from the population mean?
3. What shape will the distribution of sample means have? Justify your answer.
4. How likely are we to obtain an average jealousy score that is greater than 52 if 100 college students were sampled?
5. How likely are we to obtain an average jealousy score that is lower than 55 if 49 college students were sampled?

