

Quiz

- Suppose the time to answer calls by a customer service center are normally distributed with a mean of 2 minutes and a standard deviation of 0.5 minutes. Estimate the percentage of calls that will take longer than 3.5 minutes to answer.

0.14%

- Suppose the time to answer calls by a customer service center are normally distributed with a mean of 2 minutes and a standard deviation of 0.5 minutes. Estimate the percentage of calls that will take between 2.5 and 3.0 minutes to answer.

13.5%

- Which of the following is NOT a requirement to model with the binomial distribution?

Less than 25 trials

A constant probability of success between

A discrete random variable

Exactly two possible states for the random variable

Quiz

- Suppose that a sample of size 10 is randomly chosen from a batch of size 100 that is known to be 8% defective. What is the probability that there is exactly two defective items in your sample?

.148

- Which of the following COULD be modeled using the binomial distribution?

The number of each type of value meal at McDonalds ordered from the first 100 cars
<this does not have two states.

- Which of the following is true about variation:

Control charts are used to recognize special cause variation when it occurs so that appropriate action is taken.

- The impact of a defective batch of raw material on the variability in a process would be characterized as what type of variation?

Special cause