1)What does symmetric distribution mean?

A symmetrical distribution occurs when the values of variables appear at regular frequencies and often
the mean, median, and mode all occur at the same point. Bell curves are a commonly-cited example of symmetrical distributions.

2)What is left skewed distribution and right skewed distribution?

For skewed distributions, it is quite common to have one tail of the distribution considerably longer or drawn out relative to the other tail. A "skewed right" distribution is one in which the tail is on the right side. A "skewed left" distribution is one in which the tail is on the left side.

3)Where are long-tailed distributions used?

The long tail of distribution represents a period in time when sales for less common products can return a profit due to reduced marketing and distribution costs. Overall, long tail occurs when sales are made for goods not commonly sold. These goods can return a profit through reduced marketing and distribution costs.

4)What is central limit theorem?

In probability theory, the central limit theorem (CLT) states that the distribution of a sample variable approximates a normal distribution (a "bell curve") as the sample size becomes larger, assuming that all samples are identical in size, and regardless of the population's actual distribution shape.

5)What are observational and experimental data in statistics?

In an observational study, we measure or survey members of a sample without trying to affect them. In a controlled experiment, we assign people or things to groups and apply some treatment to one of the groups, while the other group does not receive the treatment.