Ans. 1) D

Ans. 2) A

Ans. 3) A

Ans. 4) C

Ans. 5) A

Ans. 6) D

Ans. 7) C

Ans 8) B

Ans. 9) B

Ans. 10) Box plots graph data utilizing minimum and maximum values, quartile values, outliers, and the median. Histograms display the frequency of responses at a given interval and display a data set's distribution. Dot plots denote each response as a single dot at a value marked on the x-axis.Ans.

Ans. 11) Aligned to strategy, Transparent, Contextualised, Reliable, Consistent

Ans. 12) To assess statistical significance, you would use hypothesis testing. The null hypothesis and alternate hypothesis would be stated first. Second, you'd calculate the p-value, which is the likelihood of getting the test's observed findings if the null hypothesis is true. Finally, you would select the threshold of significance (alpha) and reject the null hypothesis if the p-value is smaller than the alpha — in other words, the result is statistically significant.

Ans. 13) Exponential distributions do not have a log-normal distribution or a Gaussian distribution. In fact, any type of data that is categorical will not have these distributions as well. Example: Duration of a phone car, time until the next earthquake, etc.

Ans. 14) Income is the classic example of when to use the median instead of the mean because its distribution tends to be skewed. The median indicates that half of all incomes fall below 27581, and half are above it. For these data, the mean overestimates where most household incomes fall.

Ans. 15) The likelihood is the probability that a particular outcome is observed when the true value of the parameter is , equivalent to the probability mass on ; it is not a probability density over the parameter . The likelihood, , should not be confused with , which is the posterior probability of given the data .