STATISTICS WORKSHEET-6

ANSWERS:

1. d) All of the mentioned
2. a) Discrete
3. a) pdf
4. c) mean
5. b) standard deviation, c) empirical mean
6. a) variance
7. c) 0 and 1
8. b) bootstrap
9. b) summarized
10. Boxplots may also depict values that are far outside of the normal range of responses (referred to as outliers). A histogram is a graphical representation of the spread of data points.
11. The key point is to choose metrics that clearly indicate where you are now in relation to your goals. Good metrics measure progress, which means there needs to be room for improvement.
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.
13. Exponential distributions or any type of data that is categorical will not have these distributions.
14. Income is the classic example of when to use the median instead of the mean because its distribution tends to be skewed.
15. Likelihood is the chance that something will happen or the probability of something to happen.