**Multiple Choice [32 pts] -- choose the ONE BEST answer for each question by writing the corresponding letter in the blank to the left of the question.**

E\_\_\_\_\_\_

A\_\_\_\_\_\_

D\_\_\_\_\_\_

B\_\_\_\_\_\_

B\_\_\_\_\_\_

E\_\_\_\_\_\_

A\_\_\_\_\_\_

D\_\_\_\_\_\_

C\_\_\_\_\_\_

A\_\_\_\_\_\_

E\_\_\_\_\_\_

B\_\_\_\_\_\_

D\_\_\_\_\_\_

D\_\_\_\_\_\_

C\_\_\_\_\_\_

E\_\_\_\_\_\_

1. Two samples of 80 Oak trees each resulted in 31% and 47% of trees exhibiting wilt (a type of disease), respectively. This difference among statistics is an example of what type of variability?

**A.** Natural **B.** Extreme **C.** Process **D.** Variable **E.** Sampling

1. The heights of three waves were 1.7. 0.2, and 3.6 feet, respectively. This difference between individuals is an example of what type of variability?

**A.** Natural **B.** Extreme **C.** Process **D.** Variable **E.** Sampling

1. What is the summary of all possible individuals of interest, whether actually examined or not, called?

**A.** Sample **B.** Statistic **C.** Gang **D.** Parameter **E.** Population

1. What is the summary of the group of individuals actually examined in a statistical study called?

**A.** Sample **B.** Statistic **C.** Gang **D.** Parameter **E.** Population

1. What type of variable is level of difficulty rating for ski hills (from easiest to most difficult) – “green circle”, “blue square”, “black diamond”, “black diamond”?

**A.** Nominal **B.** Ordinal **C.** Response **D.** Continuous **E.** Discrete

1. What type of variable is the number of lift tickets sold on one day?

**A.** Nominal **B.** Ordinal **C.** Response **D.** Continuous **E.** Discrete

1. Which graph would best be used to examine the distribution of preference for computer operating system (e.g., Windows, MacOS, Linux)?

**A.** Bar Chart **B.** Dot Plot **C.** Histogram **D.** Scatterplot **E.** Stemplot

1. What is the symbol used to represent the population standard deviation?

**A.** x **B.** s **C.**  **D.**  **E.** Q3

1. The mean is \_\_\_\_\_\_\_\_ the median for an extremely right-skewed distribution.

**A.** less than **B.** equal to **C.** greater than **D.** five times **E.** a sibling of

1. On any normal distribution, what proportion of the individuals are within +1 of ?

**A.** 0.680 **B.** 0.900 **C.** 0.950 **D.** 0.997 **E.** 1.000

1. On a N(18,9) distribution, what proportion of the individuals are positive?

**A.** 0.025 **B.** 0.16 **C.** 0.50 **D.** 0.84 **E.** 0.975

1. What type of normal distribution question is “What percentage of dogs can jump higher than 1 meter?”

**A.** forward, left-of **B.** forward, right-of **C.** forward, between **D.** reverse, left-of **E.** reverse, right-of

1. What type of normal distribution question is “What is the length of duration such that 20% of light bulbs last for less time?”

**A.** forward, left-of **B.** forward, right-of **C.** forward, between **D.** reverse, left-of **E.** reverse, right-of

1. What is the name of the variable that we are interested in predicting or explaining?

**A.** Continuous **B.** Discrete **C.** Explanatory **D.** Response **E.** Sampling

1. What type of study is it if every individual has the same chance of being selected for the sample?

**A.** Convenience **B.** Inference **C.** Simple Random **D.** Regression **E.** Voluntary Response

1. What type of study is it if the researcher sends a survey to the entire population, but only some of the individuals return it?

**A.** Convenience **B.** Inference **C.** Simple Random **D.** Regression **E.** Voluntary Response