MATH 567 - Chapter 5 and 6 Questions Winter quarter 2016

Chapter 5

- 1. Which of the following is least affected by outliers?
 - A. The range.
 - B. The mean.
 - C. The median.
 - D. The standard deviation.
- 2. Which of the following transformations is most useful for correcting skewed data?
 - A. Log transformation.
 - B. Tangent transformation.
 - C. Arcsine transformation.
 - D. Cosine transformation.
- 3. The assumption of homogeneity of variance is met when:
 - A. The variance in one group is twice as big as that of a different group.
 - B. Variances in different groups are approximately equal.
 - C. The variance across groups is proportional to the means of those groups.
 - D. The variance is the same as the interquartile range.

Chapter 6

- 4. The covariance is:
 - A. An unstandardized version of the correlation coefficient.
 - B. A measure of the strength of relationship between two variables.
 - C. Dependent on the units of measurement of the variables.
 - D. All of the above.
- 5. Children can learn a second language faster before the age of 7. Is this statement:
 - A. It can be used as an effect size measure.
 - B. It varies between -1 and +1.
 - C. It cannot be used with binary variables (those taking on a value of 0 or 1).
 - D. It can be used on ranked data.
- 6. How much variance has been explained by a correlation of .9?
 - A. 81%
 - B. 18%
 - C. 9%
 - D. None of the above.
- 7. The relationship between two variables controlling for the effect that a third variable has on one of those variables can be expressed using a:
 - A. Semi-partial correlation.
 - B. Bivariate correlation.
 - C. Point-biserial correlation.
 - D. Partial correlation.