

PSY 3330: Elementary Statistics for Behav. Sci.

Tarleton State University

Exam 1 Review

Fall 2017

Exam 1 will consist of 35-40 multiple choice questions and 3-4 computational questions. The MC questions will cover definitions, concepts, simple calculations, etc. Make sure and review the lecture notes to review the following definitions and concepts:

- Know the difference between nominal, ordinal, interval, and ratio scales of measurement
- Be able to work with frequency tables
- What are histograms, and how are they constructed?
- Be able to describe distributions using terms such as *center*, *spread*, and *skew*.
- Know how to compute measures of central tendency
- Know how to compute variance and standard deviation
- What are *z*-scores, and how are they computed?
- What is correlation, and how is it computed?
- Be able to translate correlation to effect size

Computational practice problems

1. Draw a histogram and compute the mean, median, and mode for the set of scores shown in the following frequency distribution table:

<i>X</i>	7	6	5	4	3	2	1
Freq	1	2	3	4	1	0	1

2. Compute the variance and standard deviation for the following scores: 1,8,0,4,2
3. For a data set with $M = 70$ and $SD = 20$, find the *z*-score that corresponds to each of the following *X* values: 80, 100, 65, 40
4. For a data set with $M = 60$ and $SD = 6$, find the *X*-value that corresponds to each of the following *z*-scores: 1.50, -0.50, 2.00, -1/3
5. Compute the correlation coefficient for the following data:

<i>X</i>	7	3	6	4	5
<i>Y</i>	3	1	5	4	2