GRADED EXAMPLES
Statistics for Psychologists

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Types of Graded Student Work

My Statistics for Psychologists course involves two basic types of written material to be graded: essay questions and problem-based questions. This document provides a few graded examples of each type of graded work.

For an extensive explanation of my grading guidelines:
http://www4.uwsp.edu/psych/cw/teaching/Wendorf-GradingRubricExplanation.pdf

Samples of Graded Work

A 4-Point Short Essay Question from Statistics with a Sample Student Answer

1. What is a standardized score and how is it interpreted? Answer the question by defining a standardized score and by describing the major properties or features of a standardized score.

> A standardized score is an average or most common/likely score. Though it is not always the most frequently occurring score, it can be used to represent what most peoples scores were. The standardized score is usually a score found near the center of a frequency distribution. Standardized scores while useful, are somewhat irrelevant without additional information such as the standard deviation.

Essay Grade: 1/4 Points

Category	Unacceptable	Pro…	…y	Good
Theories & Concepts (0-3 Points)	☑ **Inappropriate** ☑ **Incorrect** ☑ **Incomplete**	❑ Relevancy Vague ❑ Major Inacc… ❑ Lacking	❑ Relevancy Implied ❑ …uracies	❑ Relevancy Described No Inaccuracies Thorough
Writing Style & Integration (0-1 Points)	❑ Improper Format for Question ❑ Several Grammatical/Spelling Errors ❑ Unclear or Haphazard Organization		☑ **Proper Format for Question** **Few Grammatical/Spelling Errors** **Focused and Integrated Organization**	

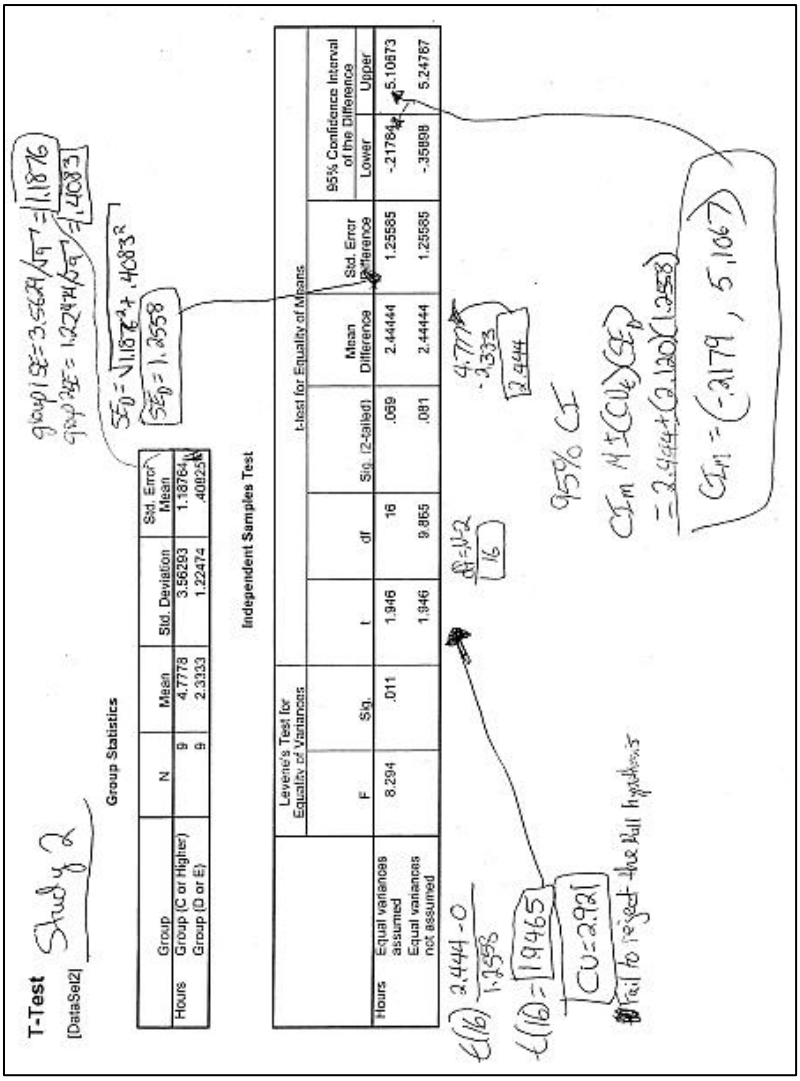
- This answer is wrong. The student confused a z-score (standardized score) with a measure of central tendency (perhaps the median).
- The answer is probably also too short (it was about one-third of an 8.5" x 11" sheet of paper). While the writing is a bit informal and there are a few errors, it (barely) meets expectations.

A 4-Point Problem-Based Question from Statistics with a Sample Student Answer

Study 1 (Nonexperimental): An instructor hypothesized that the students who earn a B or higher spend a significantly different number of hours per week outside of class on course work than those who receive a C or lower. She collects the following data on two independent samples of students.

B or higher: 9, 4, 7, 11, 1, 5, 3, 2, 1
C or lower: 3, 2, 0, 3, 2, 1, 4, 3, 3

2. Given the data for the study above, use SPSS to obtain an independent samples *t* test and a confidence interval for the difference between the means (using α = .01).
   a. On your SPSS output, calculate "by hand" the statistical significance test and the confidence interval using the descriptive statistic information given to you. [You do not need to recalculate the means and standard deviations.] Use appropriate marks (e.g., arrows, circles, etc.) to show that your calculations match the statistics provided by SPSS. (3 pts.)
   b. Describe your findings in an appropriate APA-style Results section. Be sure to interpret the findings of the study. What do the analyses tell you about the difference between the groups? (1 pt.)



Problem Grade: 3/4 Points

Category	Unacceptable	Problematic	Satisfactory	Good
Procedures & Formulae (0-3 Points)	❑ Inappropriate ❑ Incorrect ❑ Incomplete	❑ Relevancy Va ❑ Major Inaccu ❑ Lacking	❑ Relevancy Implied ❑ Inaccuracies ❑ Too Broad	☑ **Relevancy Described** **No Inaccuracies** **Thorough**
Writing Style & Integration (0-1 Points)	☑ **Improper Format for Question** ❑ Several Grammatical/Spelling Errors ❑ Unclear or Haphazard Organization		❑ Proper Format for Question Few Grammatical/Spelling Errors Focused and Integrated Organization	

- This student did a very good job with the calculation part of the problem (Problem 2a). The SPSS is printout is correct. The hand calculations are on the printout and they match the SPSS printout. The student clearly indicated that she understood how the calculations match the output by using arrows and boxes.
- However, the second part of the problem (Problem 2b) is virtually missing. There is a slight interpretation of the output ("fail to reject the null hypothesis"), but there is no written description or explanation of the results in appropriate APA style.