

Instructions for Exam 1:

- A) Complete the following problems using Microsoft Excel (or similar processor).
- B) You may use your manual and class notes/recordings to help you.
 - a. **Make sure you answer every part of each question!**
- C) Save the file to your directory as ...
 - a. *[First Name] [Last Name] – Exam 1 (i.e., “Shantal Taveras – Exam 1”)*
 - b. Save the file multiple times to ensure you don’t lose your progress!
- D) Exams are due by Wednesday, September 29th (9/29) at 11:59pm end of day
 - a. You will lose 5 points for each day that they are late! So be prompt!

Exam 1

Problem 1. (40 points) The Head of Psychiatry at the Mount Sinai Hospital was interested in determining the most common neuropsychological tests for children. The following data are the responses of the 25 neuropsychologists in the department.

NEPSY	HRB	NEPSY	CMS	CMS
CMS	CMS	WISC	WISC	HRB
HRB	HRB	WISC	NEPSY	CMS
NEPSY	CMS	NEPSY	CMS	WISC
NEPSY	NEPSY	WISC	NEPSY	NEPSY

Please complete this problem on sheet 1 of your Excel workbook.

- 1) Make a frequency table for this data. (20 points)
- 2) Create a fully labelled graph of the frequency data. Choose formatting that is easy to read (i.e., no wild colors, backgrounds, etc.). (20 points)
 - a. Create a graph of the frequency data (determine whether a bar graph or histogram is appropriate) (15 points)
 - b. Label the graph (title and both axes) (5 points)

In case you wanted to know the expansions of the acronyms, they are...

CMS = Children's Memory Scales

HRB = Halstead-Reitan Battery

NEPSY = Developmental NEuroPSYchological Assessment

WISC = Wechsler Intelligence Scale for Children

PSYCH1071 – Stats Lab: Exam 1 _ III

Fall 2021 | Taveras

- 1.) Problem 2. (60 points) A drug company is interested in seeing which dose of a sedative has the most robust effect in reducing anxiety in patients. Each dose is given to 5 different patients. Listed below are each patient's response on an anxiety rating scale, with 0 representing no anxiety and 10 representing extreme anxiety.

	Dosage		
	1-5 mg	6-10 mg	11-15 mg
Anxiety Ratings	8	3	1
	8	8	4
	7	5	1
	10	4	2
	8	4	3

Please complete this problem on sheet 2 of your Excel workbook.

- 1) Using Microsoft Excel functions (formulas), compute the following descriptive statistics for each group. *(30 points total)*
 - a. Mean *(6 points)*
 - b. Sample size (n) for each group *(6 points)*
 - c. Standard Deviation *(6 points)*
 - d. Square root of n *(6 points)*
 - e. Standard error of the mean (SEM) *(6 points)*

- 2) Create a fully labeled graph of the descriptive statistics. Choose formatting that is easy to read (i.e., no wild colors, backgrounds, etc.). *(30 points total)*
 - a. Create a graph of the group means (determine whether a line graph or bar graph is appropriate) *(20 points)*
 - b. Label the graph (title and both axes) *(5 points)*
 - c. Show variability for each group by adding error bars using standard error of the mean (SEM) or standard deviation *(5 points)*