Charles Hwang – CJC 206-001

Homework 02
Counts, rates, and percentages

1. Refer to *Table 1*.
    a. How many students are Criminal Justice majors? (1 point) ___3___
    b. How many students are Business majors? (1 point) ___2___

Table 1
Students interviewed

Student name	Major
The Hulk	Criminal Justice
Black Widow	Business
Iron Man	Criminal Justice
Thor	Criminal Justice
Captain America	Business

2. Refer to *Table 1*. **Show your work!**
    a. What percent of students are Criminal Justice majors? (1 point) ___60%___

$$\frac{3 \text{ Criminal Justice majors}}{5 \text{ total students}} = .6 * 100 = 60\%$$

    b. What is the rate per 1,000 students who are Business majors? (2 points) ___400___

$$\frac{2 \text{ Business majors}}{5 \text{ total students}} = .4 * 1,000 = 400$$

3. There were 380 arrests for battery in Winnebago County, which has a population of 298,000. What is the rate of battery arrests per 100,000 people? (Show your work!) (2 points) __127.52__

$$\frac{380 \text{ arrests}}{298,000 \text{ people}} = 0.00127516779 * 100,000 = 127.516779$$

4. On June 30, 2013 there were 23,452 active probationers in the Cook County Adult Probation Department. On that same day in 2018 there were 24,901 probationers.
    a. What is the percent change in the number of probationers between 2013 and 2018? (2 points) _____6.18%_____

$$\frac{24,901 - 23,452}{23,452} = \frac{1,449}{23,452} = 0.0617857752 * 100 = 6.17857752\%$$

5. Use the excel file that we went over in class (Week2_Pretrial cases.xlsx)
    a. PO2 is trying to make the case to her boss that she needs a raise by showing how her workload has changed over the last year. What is the percent change in her total caseload size from July 2018 to July 2019? (3 points) ___46.67%___
    b. For 1 point of extra credit, write the Excel formula you used to calculate part a.
       =(SUM('July 2019'!B4:E4)-SUM('July 2018'!B4:E4))/SUM('July 2018'!B4:E4)*100

Homework 2
Hoonuit Excel learning module

On the Sakai site for this class, access the Hoonuit tab on the left side navigation menu. You should see a lesson available called Excel 2016, by Dan Fanella. There are 3 sections of short videos to review, totaling about 45 minutes. Completing the modules is worth 9 points total (3 points for each section).

1. Review all video tutorials listed, including Section A: Getting Started; Section B: Work with Data and Datasets; and Section C: Create Formulas.
2. When you have reviewed all videos, take a screenshot or screenshots to demonstrate that you have completed the tutorial. Upload the screenshots to your drop box on Sakai. You can access instructions for using the drop box functionality here: https://loyola.screenstepslive.com/s/17190/m/84386/l/1015448-how-do-students-add-items-to-the-drop-box