

### **Problem 1 (30 points)**

A college advisor was interested if the amount of hours that students worked per week affected their GPA. He surveyed 10 psychology students all working different schedules (hours) on campus. Using SPSS run a correlation on the data.

<i>Hours Worked Per Week</i>	<i>GPA</i>
40	2.5
25	3.0
35	3.2
15	4.0
20	3.8
35	2.9
35	2.5
20	4.0
20	2.3
10	3.7

## Problem 2 (30 points)

A car dealership wants to know if there is a preference for color based on their gender. They hypothesize that men are more likely to prefer black cars, while women would prefer white cars. Twenty clients are asked their preference. Is there a preference based on gender. Run the appropriate analysis on SPSS.

	<i>Women</i>	<i>Men</i>
<i>Black</i>	<i>9</i>	<i>4</i>
<i>White</i>	<i>1</i>	<i>6</i>

### Problem 3 (40 points)

Participants in a study examining depression scores were given a depression scale at different seasons in the year. The first scale was given in April and the second scale was given months later in October. Researchers were interested if depression varies based on the time of year (season). Higher scores mean more depression symptoms.

<i><u>Participants</u></i>	<i><u>April</u></i>	<i><u>October</u></i>
1	18	18
2	15	13
3	14	17
4	16	19
5	16	16
6	13	16
7	13	17
8	12	19
9	11	16
10	13	19