Workshop 1

Scales of Measurements

Name: _____

Date Completed: _____

Provide all solutions, answers and requested outputs after each question.

Question 1. A researcher claims that high blood pressure causes heart attacks. (a) state the independent variable and (b) the dependent variable

Question 2. Religion, as a variable, is continuous or discrete and which of the four measurement scale would be appropriate here?

Question 3. For each scale below, enter the key word or phrase that characterizes that scale:

(a) Nominal
(b) Ordinal
(c) Interval
(d) Ratio

Question 4. A teacher uses three different sections of her statistics class to compare different methods. Her sample would be classified as?

Question 5. Sixty percent of the registered voters in a county are Democrats, 30% are Republicans, an dthe rest are Independents. A proportional stratified sample of the registered voters in the county contains 420 Democrats. How many registered voters are there in the total sample? (hint: 60% of voters are Democrats; total Democrats are 420).

Question 6. Given the following: $\Sigma X = 10, \Sigma XY = 5, \Sigma X^2 = 38, N = 3$

Compute $\dfrac{(\Sigma X)^2 - \Sigma X^2}{N(\Sigma XY)}$ (state answer to 2 decimal places)

Questions 7 through 10. Compute the following by filling out the table

X	(X - 17.47)	(X - 17.47)^2
13		
17		
10		
16		
22		
22		
18		
15		
12		
19		
22		
18		
18		
17		
23		
N =	$\Sigma(X - 17.47)$	$\Sigma(X - 17.47)^2$

(10) $\dfrac{\Sigma(X - 17.47)^2}{N-1} =$