GEOG380 Fall 2018 Name: _____

Worksheet 1 – Measure of central tendency and dispersion

(Please use this file to answer the questions and submit **either a hard copy to the instructor** or **a digital copy to the "WS1" dropbox on the BeachBoard.)**

Assigned date: 9/4/2018 **Due date:** Start of Class, 9/11/2018
Grading: 30 points (3% of total points of the course)

Instructions for Q1 and Q2
Based on lecture notes 03_1&03_2, chapter 3 pp.51-52, answer the following two questions.

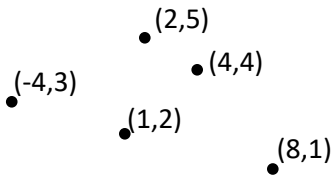

Figure 1. Point objects of "set A" (map not to scale)

1. What is the mean center of the given points of set A in Figure 1? Show ALL of your work for full credits. [10 points]

2. What is the standard distance of the given points in Figure 1? Show ALL of your work for full credits. Use the formula below to answer the question. [15 points]
   If you have another set of points, say set B, and if the standard distance of the set B is 4, is the set A more compact or dispersed than set B? [5 points]

$$d = \sqrt{\frac{\sum_{i=1}^{n}\left(\left(x_i - \mu_x\right)^2 + \left(y_i - \mu_y\right)^2\right)}{n}}$$