

Homework #1
Economics 113
Introduction to Econometrics
Professor Spearot
Due Wednesday, January 14th, 2008 – Beginning of class

1. A fictitious Governor, Bob Smaglojevich, has taken a few kick-backs while in office. The total value of the kick-backs for each year in office is listed in the following table:

Year	Kick-backs (millions)
1	200
2	250
3	100
4	300
5	300

Calculate the mean, median, mode, variance, standard deviation, and range of the kick-backs received by Gov. Smaglojevich.

2. Many claim that these kick-backs are directly related to the number of state-level appointments made by Gov. Smaglojevich during each year. Data on this behavior is detailed in the following table:

Year	Appointments
1	1
2	3
3	1
4	4
5	5

What is the covariance and correlation between kick-backs and appointments?

3. Suppose that we measure kick-backs in thousands rather than millions. Re-derive the mean and standard deviation of kick-backs. What happens to covariance and correlation?