# Lab Exercise 4: K-means Clustering

## Step 8

### Part 2

The means of each cluster is (1) 65306.31, (2) 54309.58, and (3) 44032.50.

### Part 3

The available components are "cluster", ”centers", "totss", "withinss", "tot.withinss", "betweenss", "size", "iter", and "ifault".

### Part 4

The number of points in each cluster is 13, 19, and 20.

## Step 10

### Part 2

Yes, here is an elbow around 2 to 5 on the graph.

## Step 12

### Part 4

The results from 12 and 7 were different, but used the same 52 length integer dataset. The results were different because the MadLib used 6 clusters (k=6) where the R kmean used 3 clusters (k=3).