

(3, 11, 14, 14, 20), $\bar{x} = 13.1$.

p. 126: 37. (a) (6 pts) (0, 0, 0, 4.5, 6), $\bar{x} = 1.6$.

The method is cluster sampling. Clearly, the groups are the different departments. A random sample of departments is taken, which is characteristic of cluster sampling, and all the professors in those departments are included in the sample. If this had been a stratified sample, the dean would have selected a few professors from each of the 60 departments.

(b) (8 pts) (0, 8, 8, 8, 8), $\bar{x} = 7.6$.

Enter 79 \rightarrow `rand` to set the seed to 79. Then enter `randInt(1,60)` and press ENTER 6 times. The result is 54, 37, 49, 5, 15, 43.

(c) (6 pts) (0, 3, 3, 6, 6), $\bar{x} = 3.9$.

Any given professor will be in the sample if his department is chosen, so his chances are the same as his department's chances. Because 6 out of 60 departments are chosen, each department, and therefore each professor, has a $6/60 = 1/10$ chance of being chosen.