1. **Problem**
   A continuous random variable X was measured 11 times. The sorted data are shown below, along with each datum's index.

i	x
1	41.852
2	42.606
3	42.986
4	43.023
5	43.569
6	43.736
7	43.942
8	44.227
9	44.354
10	44.385
11	44.860

   The total of the measurements is 479.54.

   (a) Determine the percentile rank of the value 43.569. In other words, determine what percent of data are less than or equal to 43.569.

   (b) Determine the datum corresponding to a percentile rank of 0.727. In other words, determine x such that 72.7% of the data are less than or equal to x.

   (c) Determine the mean of the measurements.

   (d) Determine the median of the measurements.

2. **Problem**
A continuous random variable X was measured 35 times. The sorted data are shown below.

70.696	71.661	74.010	75.000	75.077	75.147	75.420
78.056	83.739	85.889	86.022	87.356	89.209	90.095
91.306	91.623	92.396	93.200	93.637	94.323	95.201
96.122	96.758	97.152	99.480	100.429	102.139	102.550
102.951	104.752	105.043	105.840	106.561	107.458	107.755

The total of the measurements is 3204.053.

(a) Determine the percentile rank of the value 83.739. In other words, determine what percent of data are less than or equal to 83.739.

(b) Determine the datum corresponding to a percentile rank of 0.343. In other words, determine x such that 34.3% of the data are less than or equal to x.

(c) Determine the mean of the measurements.

(d) Determine the median of the measurements.