1. **Problem**
   A continuous random variable X was measured 9 times. The sorted data are shown below, along with each datum's index.

i	x
1	80.033
2	80.090
3	80.236
4	80.307
5	80.662
6	81.187
7	81.344
8	81.652
9	81.682

   The total of the measurements is 727.193.

   (a) Determine the percentile rank of the value 80.307. In other words, determine what percent of data are less than or equal to 80.307.

   (b) Determine the datum corresponding to a percentile rank of 0.889. In other words, determine x such that 88.9% 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 49 times. The sorted data are shown below.

40.003	40.011	40.063	40.111	40.200	40.225	40.256
40.275	40.373	40.449	40.504	40.806	40.807	40.949
41.040	41.195	41.219	41.221	41.450	41.535	41.689
41.929	42.328	42.475	42.543	42.850	42.976	42.998
43.112	43.193	43.227	43.400	43.718	43.989	44.024
44.062	44.411	44.415	44.429	44.508	44.525	44.539
44.622	44.681	44.729	44.743	44.749	44.808	44.930

The total of the measurements is 2081.294.

(a) Determine the percentile rank of the value 44.622. In other words, determine what percent of data are less than or equal to 44.622.

(b) Determine the datum corresponding to a percentile rank of 0.959. In other words, determine x such that 95.9% of the data are less than or equal to x.

(c) Determine the mean of the measurements.

(d) Determine the median of the measurements.