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	34.057
2	34.267
3	34.846
4	35.966
5	37.428
6	38.548
7	40.399
8	44.588
9	51.692

   The total of the measurements is 351.791.

   (a) Determine the percentile rank of the value 51.692. In other words, determine what percent of data are less than or equal to 51.692.

   (b) Determine the datum corresponding to a percentile rank of 0.222. In other words, determine x such that 22.2% 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 70 times. The sorted data are shown below.

10.039	10.101	10.501	10.657	10.749	10.830	11.004	11.027	11.099	11.288
11.431	11.503	11.563	11.648	11.706	11.773	11.804	12.042	12.548	12.719
12.950	12.962	12.965	12.977	13.354	13.727	13.762	13.960	14.104	14.113
14.128	14.521	14.583	14.656	14.717	14.750	14.914	14.943	14.954	15.199
15.418	15.612	15.654	16.287	16.442	16.477	16.954	16.957	17.283	17.483
17.778	17.950	18.025	18.096	18.354	18.476	18.902	19.360	19.556	19.690
20.428	20.883	21.041	21.510	22.742	23.065	23.878	24.185	24.451	25.675

   The total of the measurements is 1086.883.

   (a) Determine the percentile rank of the value 11.431. In other words, determine what percent of data are less than or equal to 11.431.

   (b) Determine the datum corresponding to a percentile rank of 0.214. In other words, determine x such that 21.4% of the data are less than or equal to x.

   (c) Determine the mean of the measurements.

   (d) Determine the median of the measurements.