1. **Problem**

   A continuous random variable X was measured 7 times. The sorted data are shown below, along with each datum's index.

i	x
1	89.362
2	109.769
3	114.007
4	123.896
5	131.192
6	131.964
7	138.697

   The total of the measurements is 838.887.

   (a) Determine the percentile rank of the value 138.697. In other words, determine what percent of data are less than or equal to 138.697.

   (b) Determine the datum corresponding to a percentile rank of 0.571. In other words, determine x such that 57.1% 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 36 times. The sorted data are shown below.

70.001	70.002	70.003	70.034	70.038	70.044
70.084	70.096	70.119	70.120	70.150	70.308
70.562	70.594	70.623	70.654	70.676	70.782
71.117	71.546	71.594	71.695	71.910	71.959
72.291	72.447	72.601	72.611	72.688	72.734
72.769	72.810	72.924	72.966	72.971	72.971

The total of the measurements is 2567.494.

(a) Determine the percentile rank of the value 70.676. In other words, determine what percent of data are less than or equal to 70.676.

(b) Determine the datum corresponding to a percentile rank of 0.528. In other words, determine x such that 52.8% of the data are less than or equal to x.

(c) Determine the mean of the measurements.

(d) Determine the median of the measurements.