1. **Problem**

   A continuous random variable X was measured 10 times. The sorted data are shown below, along with each datum's index.

i	x
1	70.070
2	70.302
3	70.659
4	70.679
5	71.067
6	71.204
7	71.477
8	71.551
9	72.056
10	72.467

   The total of the measurements is 711.532.

   (a) Determine the percentile rank of the value 72.056. In other words, determine what percent of data are less than or equal to 72.056.

   (b) Determine the datum corresponding to a percentile rank of 0.3. In other words, determine x such that 30% 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 30 times. The sorted data are shown below.

70.435	71.095	72.354	73.316	74.134	74.202
76.263	76.879	77.837	77.950	78.256	79.734
81.312	84.558	88.444	88.770	89.462	90.960
91.539	94.113	95.990	100.747	101.468	102.049
103.356	109.683	111.850	124.776	124.888	129.250

The total of the measurements is 2715.67.

(a) Determine the percentile rank of the value 76.879. In other words, determine what percent of data are less than or equal to 76.879.

(b) Determine the datum corresponding to a percentile rank of 0.867. In other words, determine x such that 86.7% of the data are less than or equal to x.

(c) Determine the mean of the measurements.

(d) Determine the median of the measurements.