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	20.423
2	20.554
3	21.018
4	21.349
5	21.559
6	21.941
7	22.880
8	28.054
9	29.714
10	30.135
11	34.454

   The total of the measurements is 272.081.

   (a) Determine the percentile rank of the value 21.349. In other words, determine what percent of data are less than or equal to 21.349.

   (b) Determine the datum corresponding to a percentile rank of 0.818. In other words, determine x such that 81.8% of the data are less than or equal to x.

   (c) Determine the mean of the measurements.

   (d) Determine the median of the measurements.

2. **Problem**
A continuous random variable X was measured 56 times. The sorted data are shown below.

80.064	80.109	80.417	80.476	80.532	80.728	80.962	81.088
81.552	82.149	82.321	82.533	82.851	82.892	82.978	83.077
83.172	83.261	83.651	84.035	84.135	84.756	84.997	85.139
85.313	85.351	85.490	85.612	85.665	86.043	86.110	86.254
86.729	86.794	86.833	87.035	87.228	87.251	87.652	87.773
87.863	88.104	88.164	88.227	88.255	88.439	88.578	88.613
88.806	89.014	89.143	89.310	89.343	89.555	89.573	89.676

The total of the measurements is 4781.671.

(a) Determine the percentile rank of the value 85.313. In other words, determine what percent of data are less than or equal to 85.313.

(b) Determine the datum corresponding to a percentile rank of 0.839. In other words, determine x such that 83.9% of the data are less than or equal to x.

(c) Determine the mean of the measurements.

(d) Determine the median of the measurements.