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	20.033
2	20.036
3	20.424
4	20.505
5	20.796
6	20.839
7	20.952
8	20.983
9	21.017
10	21.323
11	21.517

   The total of the measurements is 228.425.

   (a) Determine the percentile rank of the value 20.796. In other words, determine what percent of data are less than or equal to 20.796.

   (b) Determine the datum corresponding to a percentile rank of 0.909. In other words, determine x such that 90.9% 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.

31.055	31.681	31.702	31.758	31.860	31.932	32.018
32.156	32.310	32.503	32.770	32.842	32.966	32.996
33.055	33.073	33.233	33.239	33.247	33.251	33.265
33.302	33.378	33.473	33.542	33.555	33.616	33.648
33.724	33.757	33.783	33.908	34.020	34.034	34.123
34.242	34.301	34.318	34.373	34.577	34.610	34.687
34.692	34.695	34.740	34.772	34.789	34.924	34.927

The total of the measurements is 1639.422.

(a) Determine the percentile rank of the value 34.692. In other words, determine what percent of data are less than or equal to 34.692.

(b) Determine the datum corresponding to a percentile rank of 0.204. In other words, determine x such that 20.4% of the data are less than or equal to x.

(c) Determine the mean of the measurements.

(d) Determine the median of the measurements.