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	20.149
2	20.683
3	20.754
4	20.783
5	20.865
6	20.916
7	21.611
8	21.633
9	21.890
10	22.627

   The total of the measurements is 211.911.

   (a) Determine the percentile rank of the value 20.754. In other words, determine what percent of data are less than or equal to 20.754.

   (b) Determine the datum corresponding to a percentile rank of 0.6. In other words, determine x such that 60% 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 40 times. The sorted data are shown below.

80.004	80.107	80.123	80.124	80.159	80.162	80.188	80.227
80.294	80.341	80.347	80.505	80.532	80.562	80.629	80.639
80.649	80.660	80.743	80.836	80.871	80.975	81.001	81.013
81.039	81.085	81.458	81.524	81.662	81.700	81.744	81.759
81.952	82.038	82.054	82.097	82.493	82.667	82.869	83.252

The total of the measurements is 3243.084.

(a) Determine the percentile rank of the value 81.013. In other words, determine what percent of data are less than or equal to 81.013.

(b) Determine the datum corresponding to a percentile rank of 0.775. In other words, determine x such that 77.5% of the data are less than or equal to x.

(c) Determine the mean of the measurements.

(d) Determine the median of the measurements.