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	33.679
2	35.069
3	35.944
4	37.691
5	37.952
6	38.171
7	38.771
8	39.091
9	39.555
10	39.705

   The total of the measurements is 375.628.

   (a) Determine the percentile rank of the value 39.555. In other words, determine what percent of data are less than or equal to 39.555.

   (b) Determine the datum corresponding to a percentile rank of 0.1. In other words, determine x such that 10% 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 70 times. The sorted data are shown below.

10.002	10.003	10.005	10.010	10.025	10.030	10.041	10.043	10.053	10.086
10.090	10.194	10.269	10.388	10.430	10.459	10.495	10.516	10.572	10.606
10.621	10.631	10.654	10.656	10.684	10.727	10.769	10.776	10.810	10.820
10.822	10.895	11.004	11.104	11.450	11.543	11.593	11.612	11.640	11.707
11.725	11.733	11.783	11.814	11.867	11.878	11.921	11.923	12.011	12.024
12.109	12.334	12.338	12.365	12.368	12.427	12.430	12.589	12.613	12.771
12.784	12.793	12.858	12.913	12.927	12.944	12.961	12.968	12.970	12.971

   The total of the measurements is 796.947.

   (a) Determine the percentile rank of the value 10.631. In other words, determine what percent of data are less than or equal to 10.631.

   (b) Determine the datum corresponding to a percentile rank of 0.786. In other words, determine x such that 78.6% of the data are less than or equal to x.

   (c) Determine the mean of the measurements.

   (d) Determine the median of the measurements.