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	71.535
2	71.818
3	72.210
4	72.341
5	72.409
6	72.503
7	72.624
8	72.781
9	72.836
10	72.873
11	72.923

   The total of the measurements is 796.853.

   (a) Determine the percentile rank of the value 72.781. In other words, determine what percent of data are less than or equal to 72.781.

   (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 42 times. The sorted data are shown below.

80.040	80.077	80.114	80.161	80.163	80.436	80.442
80.660	80.756	80.828	80.880	80.890	80.940	80.966
81.168	81.180	81.272	81.287	81.297	81.334	81.474
81.541	81.704	81.711	81.744	81.786	81.836	81.851
82.019	82.068	82.108	82.248	82.391	82.392	82.431
82.524	82.603	82.718	82.762	82.967	83.567	84.200

The total of the measurements is 3425.536.

(a) Determine the percentile rank of the value 81.786. In other words, determine what percent of data are less than or equal to 81.786.

(b) Determine the datum corresponding to a percentile rank of 0.81. In other words, determine x such that 81% of the data are less than or equal to x.

(c) Determine the mean of the measurements.

(d) Determine the median of the measurements.