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	10.022
2	10.043
3	10.133
4	10.430
5	10.570
6	10.644
7	11.152
8	11.224
9	11.621
10	12.786

   The total of the measurements is 108.625.

   (a) Determine the percentile rank of the value 11.621. In other words, determine what percent of data are less than or equal to 11.621.

   (b) Determine the datum corresponding to a percentile rank of 1. In other words, determine x such that 100% 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.

97.414	99.365	100.413	102.245	103.707	107.543	108.121	109.405
109.803	112.875	112.878	113.740	113.840	114.003	114.035	114.902
114.910	114.962	115.168	116.073	116.117	116.221	116.925	117.653
117.961	118.105	118.433	118.691	119.320	120.839	121.195	121.391
122.082	122.190	122.714	122.731	123.074	123.116	125.076	125.383
126.173	127.066	127.122	127.126	127.265	127.281	127.554	127.570
128.004	128.079	128.481	128.487	129.022	129.129	129.315	129.479

The total of the measurements is 6651.772.

(a) Determine the percentile rank of the value 127.57. In other words, determine what percent of data are less than or equal to 127.57.

(b) Determine the datum corresponding to a percentile rank of 0.357. In other words, determine x such that 35.7% of the data are less than or equal to x.

(c) Determine the mean of the measurements.

(d) Determine the median of the measurements.