1. **Problem**
   A continuous random variable X was measured 8 times. The sorted data are shown below, along with each datum's index.

i	x
1	38.254
2	40.337
3	47.983
4	53.644
5	56.347
6	59.701
7	64.538
8	65.309

   The total of the measurements is 426.113.

   (a) Determine the percentile rank of the value 65.309. In other words, determine what percent of data are less than or equal to 65.309.

   (b) Determine the datum corresponding to a percentile rank of 0.625. In other words, determine x such that 62.5% of the data are less than or equal to x.

   (c) Determine the mean of the measurements.

   (d) Determine the median of the measurements.

2. **Problem**
A continuous random variable X was measured 72 times. The sorted data are shown below.

90.013	90.034	90.110	90.125	90.129	90.226	90.342	90.497	90.603
90.722	90.733	90.864	91.089	91.848	91.892	91.961	92.097	92.128
92.742	92.934	93.098	93.913	93.924	94.543	94.671	94.932	95.271
95.538	95.647	95.689	95.722	96.075	96.129	96.168	96.466	96.796
97.898	98.733	99.022	99.038	99.039	99.434	100.767	100.972	101.114
101.136	101.271	101.440	101.525	101.712	102.237	102.282	104.182	104.301
105.108	105.561	105.893	106.402	106.841	108.141	108.278	108.322	109.069
109.240	109.285	109.351	109.505	109.700	109.756	109.762	109.765	109.795

The total of the measurements is 7111.548.

(a) Determine the percentile rank of the value 109.795. In other words, determine what percent of data are less than or equal to 109.795.

(b) Determine the datum corresponding to a percentile rank of 0.5. In other words, determine x such that 50% of the data are less than or equal to x.

(c) Determine the mean of the measurements.

(d) Determine the median of the measurements.