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	106.466
2	111.215
3	114.053
4	123.235
5	124.523
6	125.213
7	133.573
8	142.283
9	144.129
10	148.700

   The total of the measurements is 1273.39.

   (a) Determine the percentile rank of the value 144.129. In other words, determine what percent of data are less than or equal to 144.129.

   (b) Determine the datum corresponding to a percentile rank of 0.4. In other words, determine x such that 40% 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 25 times. The sorted data are shown below.

105.369	105.935	106.389	109.280	111.145
115.456	116.357	116.597	116.709	117.071
117.657	117.696	117.707	118.344	118.795
119.272	119.489	119.620	121.749	123.415
124.244	124.569	125.523	126.228	140.168

The total of the measurements is 2954.784.

(a) Determine the percentile rank of the value 119.489. In other words, determine what percent of data are less than or equal to 119.489.

(b) Determine the datum corresponding to a percentile rank of 0.56. In other words, determine x such that 56% of the data are less than or equal to x.

(c) Determine the mean of the measurements.

(d) Determine the median of the measurements.