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	47.836
2	48.152
3	48.672
4	48.864
5	49.065
6	49.774
7	49.927
8	50.051
9	51.116
10	51.182

   The total of the measurements is 494.639.

   (a) Determine the percentile rank of the value 48.152. In other words, determine what percent of data are less than or equal to 48.152.

   (b) Determine the datum corresponding to a percentile rank of 0.7. In other words, determine x such that 70% 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 54 times. The sorted data are shown below.

50.049	50.693	50.775	50.815	51.425	51.459	51.536	51.721	51.857
51.937	52.271	52.320	52.698	52.740	52.797	52.966	53.055	53.154
53.651	53.840	53.849	54.441	54.611	54.619	54.853	54.942	55.072
55.344	55.441	55.454	55.481	55.634	55.780	56.178	56.213	56.389
56.601	56.641	56.657	57.076	57.176	57.188	57.212	57.343	57.344
57.404	57.773	57.798	58.002	58.470	59.057	59.401	59.515	59.814

The total of the measurements is 2966.532.

(a) Determine the percentile rank of the value 52.698. In other words, determine what percent of data are less than or equal to 52.698.

(b) Determine the datum corresponding to a percentile rank of 0.37. In other words, determine x such that 37% of the data are less than or equal to x.

(c) Determine the mean of the measurements.

(d) Determine the median of the measurements.