1. **Problem**
   A continuous random variable X was measured 12 times. The sorted data are shown below, along with each datum's index.

i	x
1	100.188
2	102.144
3	105.357
4	109.973
5	110.173
6	110.833
7	110.878
8	110.962
9	111.204
10	112.994
11	113.408
12	114.585

   The total of the measurements is 1312.699.

   (a) Determine the percentile rank of the value 111.204. In other words, determine what percent of data are less than or equal to 111.204.

   (b) Determine the datum corresponding to a percentile rank of 0.833. In other words, determine x such that 83.3% 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 63 times. The sorted data are shown below.

20.841	21.559	21.682	21.854	22.073	22.249	22.278	23.644	24.073
24.228	25.340	25.343	25.410	25.630	25.653	25.801	26.013	26.042
26.120	26.388	26.545	26.616	27.039	27.407	27.590	27.610	27.967
28.967	29.038	29.413	29.812	30.388	30.630	30.952	31.294	31.626
32.083	32.178	32.683	32.738	32.892	33.115	33.141	33.198	33.848
34.002	34.649	34.755	35.153	35.272	35.913	36.180	36.485	36.615
37.817	37.909	37.910	37.978	38.490	38.718	39.124	39.482	39.717

The total of the measurements is 1907.16.

(a) Determine the percentile rank of the value 22.249. In other words, determine what percent of data are less than or equal to 22.249.

(b) Determine the datum corresponding to a percentile rank of 0.762. In other words, determine x such that 76.2% of the data are less than or equal to x.

(c) Determine the mean of the measurements.

(d) Determine the median of the measurements.