

1. Problem

A continuous random variable X was measured 6 times. The sorted data are shown below, along with each datum's index.

i	x
1	92.036
2	92.560
3	94.195
4	94.230
5	95.002
6	99.254

The total of the measurements is 567.277.

- Determine the percentile rank of the value 92.56. In other words, determine what percent of data are less than or equal to 92.56.
- 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 .
- Determine the mean of the measurements.
- Determine the median of the measurements.

2. Problem

A continuous random variable X was measured 36 times. The sorted data are shown below.

10.638	14.290	14.941	17.053	17.935	21.014	25.684	29.387	37.748
42.040	48.787	52.886	54.673	54.913	56.175	58.544	60.929	62.632
62.762	62.765	64.381	64.802	65.863	69.335	70.369	71.346	71.729
75.620	83.258	86.121	93.010	95.162	102.952	106.691	107.033	107.873

The total of the measurements is 2141.341.

- (a) Determine the percentile rank of the value 48.787. In other words, determine what percent of data are less than or equal to 48.787.
- (b) Determine the datum corresponding to a percentile rank of 0.694. In other words, determine x such that 69.4% of the data are less than or equal to x .
- (c) Determine the mean of the measurements.
- (d) Determine the median of the measurements.