

Drivers paid in a certain town 12 penalties in a week [EUR]:

320	1500	200	750	820	1000	900	400	4500
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Evaluate by descriptive statistics, i.e.:

- calculate mean, variance and standard deviation
- calculate upper and lower quartile, interquartile range and median;
- draw a box-and-whisker plot
- divide the data into classes and make a histogram

pokuty

1320

1500

200

1750

820

1000

900

400

4500

3100

2500

120

3100	180	120
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A sculptor has made during his lifetime 18 marble sculptures of the following heights (in meters):

6.6	7.8	6.9	12.3	7.4	8.2	7.4	11.5	6.8
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Describe his work statistically, namely

- make a histogram and frequency polygon (data divide into four intervals);
- make a box-and-whisker plot;
- calculate: arithmetic mean, geometric mean, median;
- calculate: variance, standard deviation, variance range and quartile range;
- relative standard deviation (%);
- calculate quartiles and deciles; find also 22% quantile, and 99% quantile;

sculptures

6.6  
7.8  
6.9  
12.3  
7.4  
8.2  
7.4  
11.5  
6.8  
7.2  
8.1  
7.3  
15.1  
10.8  
8.4  
1.1  
2.1  
3

7.2	8.1	7.3	15.1	10.8	8.4	1.1	2.1	3
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find outlier with the method of inner fences!

No.	concentration of Pb [ng/ml]
1	37.9
2	22.8
3	13.4
4	31.6
5	50.8
6	20.2
7	9.5
8	26.7
9	76.1
10	22.0