

# Stat 2153 - Statistical Methods

Quiz #3 - 2008.02.11

Solutions

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The following is a list of scores from the first HW assignment, rounded to the nearest whole number.

Scores from first HW assignment									
95	70	85	95	80	100	95	100	95	85
100	95	100	100	95	95	100	90	80	95
100	78	74	70	87	83	100	100	100	83
100	100	87	100	100	91	91	100	100	91
96	100	60	92	92	76	96	100	88	100
100	56	92	96	100	96	76	76	100	92
88	92	100							

1. What are the minimum and maximum values?

Minimum value is 56. Maximum value is 100.

2. Compute  $Q_1$ ,  $Q_2$  and  $Q_3$ .

$Q_1 = 87$ ,  $Q_2 = 95$ ,  $Q_3 = 100$ .

3. What is the IQR for this set of data?

The IQR is  $Q_3 - Q_1 = 100 - 87 = 13$ .

4. Find the percentile corresponding to the score of 90.

From the table (in ordered fashion) we see that 90 is the 20th score. So we have

$$\text{percentile of 90} = \frac{19}{63} \approx 30.16.$$

Rounding to the nearest whole number gives 30.