S.ID.A.1: Dot Plots

1 The dot plot shown below represents the number of pets owned by students in a class.

Which statement about the data is not true?
1) The median is 3.
2) The interquartile range is 2.
3) The mean is 3.
4) The data contain no outliers.

2 Different ways to represent data are shown below.

Which data representations have a median of 2?
1) I and II, only
2) I and III, only
3) II and III, only
4) I, II, and III
3. Given the following data set:

65, 70, 70, 70, 80, 80, 80, 85, 90, 90, 95, 95, 95, 100

Which representations are correct for this data set?

1) I and II  
2) I and III, only  
3) II and III, only  
4) I, II, and III

4. Student scores on a recent test are shown in the table below.

<table>
<thead>
<tr>
<th>Score</th>
<th>85</th>
<th>96</th>
<th>92</th>
<th>82</th>
<th>90</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>90</td>
<td>88</td>
<td>95</td>
<td>85</td>
<td>88</td>
</tr>
<tr>
<td></td>
<td>90</td>
<td>87</td>
<td>96</td>
<td>82</td>
<td>85</td>
</tr>
<tr>
<td></td>
<td>92</td>
<td>96</td>
<td>85</td>
<td>92</td>
<td>87</td>
</tr>
</tbody>
</table>

On the number line below, create a dot plot to model the data.

State the median test score for the data set.
S.ID.A.1: Dot Plots
Answer Section

1 ANS: 3
median = 3, IQR = 4 − 2 = 2, \(x\) = 2.75. An outlier is outside the interval \([Q_1 - 1.5(IQR), Q_3 + 1.5(IQR)]\).
\([2 - 1.5(2),4 + 1.5(2)]\)
[-1,7]

REF: 061620ai

2 ANS: 1 REF: 082210ai

3 ANS: 4 REF: 012022ai

4 ANS:

![Student Test Scores Dot Plot]

REF: 012425ai