S.ID.A.1: Dot Plots
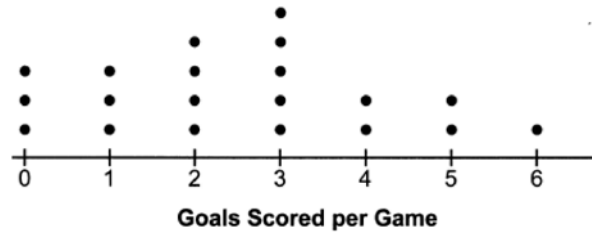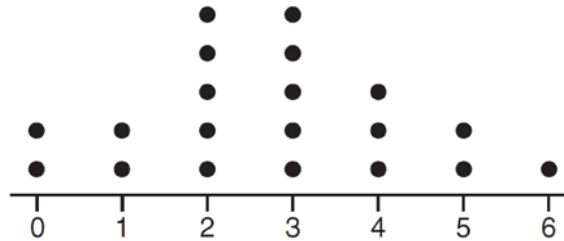
1   The dot plot below shows the number of goals Jessica scored in each lacrosse game last season.
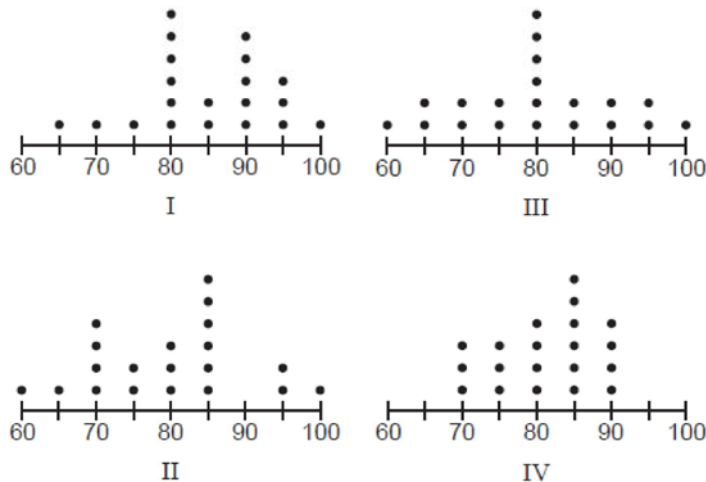

Goals Scored per Game

Which statement about the dot plot is correct?
1)   mean > mode
2)   mean = median
3)   mode = median
4)   median > mean

2   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.

3   The dot plots below represent test scores for 20 students on a math test.
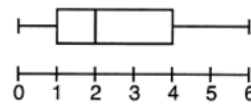

The mode for this math test is 80 and the median is 85. Which dot plot correctly represents this data?
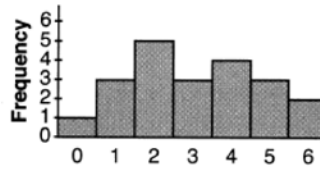1)   I
2)   II
3)   III
4)   IV

4   Different ways to represent data are shown below.

I

II

III
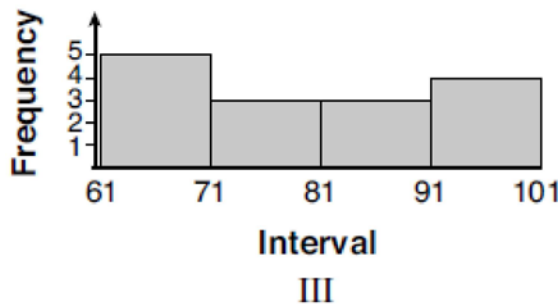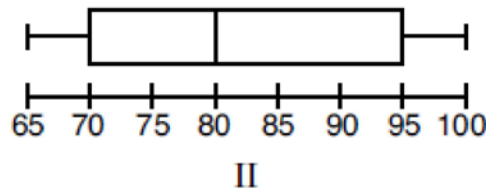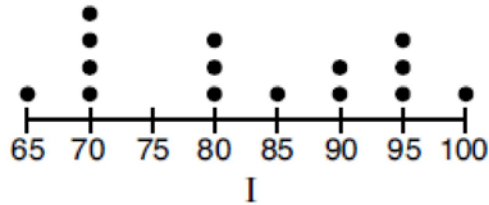
Which data representations have a median of 2?
1)   I and II, only
2)   I and III, only
3)   II and III, only
4)   I, II, and III

5   Given the following data set:

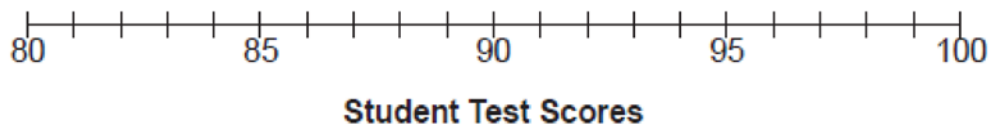$$65, 70, 70, 70, 70, 80, 80, 80, 85, 90, 90, 95, 95, 95, 100$$

Which representations are correct for this data set?

I

II

III

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

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

85	96	92	82	90
90	88	95	85	88
90	87	96	82	85
92	96	85	92	87

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

Student Test Scores

State the median test score for the data set.

S.ID.A.1: Dot Plots
Answer Section

1 ANS: 2

mean: $\dfrac{3(0) + 3(1) + 4(2) + 5(3) + 2(4) + 2(5) + 1(6)}{3 + 3 + 4 + 5 + 2 + 2 + 1} = \dfrac{50}{20} = 2.5$, mode: 3, median: $\dfrac{2 + 3}{2} = 2.5$

REF: 062416ai

2 ANS: 3

median = 3, IQR = $4 - 2 = 2$, $\bar{x} = 2.75$. An outlier is outside the interval $[Q_1 - 1.5(IQR), Q_3 + 1.5(IQR)]$.

$[2 - 1.5(2), 4 + 1.5(2)]$
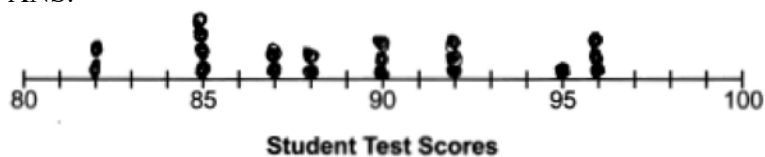
$[-1,7]$

REF: 061620ai

3 ANS: 1   REF: 012516ai

4 ANS: 1   REF: 082210ai

5 ANS: 4   REF: 012022ai

6 ANS:

Student Test Scores   89

REF: 012425ai