Regents Exam Questions
S.ID.A.1: Box Plots 1
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1 The accompanying diagram is an example of which type of graph?


1) bar graph
2) stem-and-leaf plot
3) histogram
4) box-and-whisker plot

2 The data set $5,6,7,8,9,9,9,10,12,14,17,17$, $18,19,19$ represents the number of hours spent on the Internet in a week by students in a mathematics class. Which box-and-whisker plot represents the data?
1)

2)

3)

4)


Name: $\qquad$

3 The students in Ms. Glenn's math class earned the grades shown below.
$65,70,70,80,80,82,88,88,90,90,95$
Which box-and-whisker plot represents these data?
1)

3)

4)


4 Using his data on annual deer population in a forest, Noj found the following information:

25th percentile: 12
50th percentile: 15
75th percentile: 22
Minimum population: 8
Maximum population: 27
Using the number line below, construct a box-and-whisker plot to display these data.

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5 The test scores from Mrs. Gray's math class are shown below.
$72,73,66,71,82,85,95,85,86,89,91,92$
Construct a box-and-whisker plot to display these data.


6 Robin collected data on the number of hours she watched television on Sunday through Thursday nights for a period of 3 weeks. The data are shown in the table below.

|  | Sun | Mon | Tues | Wed | Thurs |
| :--- | :---: | :---: | :---: | :---: | :---: |
| Week 1 | 4 | 3 | 3.5 | 2 | 2 |
| Week 2 | 4.5 | 5 | 2.5 | 3 | 1.5 |
| Week 3 | 4 | 3 | 1 | 1.5 | 2.5 |

Using an appropriate scale on the number line below, construct a box plot for the 15 values.


7 The number of songs fifteen students have on their MP3 players is:
$120,124,132,145,200,255,260,292$, $308,314,342,407,421,435,452$
State the values of the minimum, 1 st quartile, median, 3rd quartile, and maximum. Using these values, construct a box-and-whisker plot using an appropriate scale on the line below.

Name: $\qquad$

8 During the last 15 years of his baseball career, Andrew hit the following number of home runs each season.
$35,24,32,36,40,32,40,38,36,33,11,20,19,22,8$
State and label the values of the minimum, 1 st quartile, median, 3rd quartile, and maximum. Using the line below, construct a box-and-whisker plot for this set of data.

9 Using the line provided, construct a box-and-whisker plot for the 12 scores below. $26,32,19,65,57,16,28,42,40,21,38,10$


Determine the number of scores that lie above the 75th percentile.

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## Answer Section

1 ANS: 4 REF: 060220a
2 ANS: 2
The median score, 10 , is the vertical line in the center of the box.
REF: fall0709ia
3 ANS: 4 REF: 061616ia
4 ANS:


REF: 081431ia
5 ANS:


REF: 080939ia
6 ANS:
MIN: $=1 \quad Q_{1}=2$ MEDIAN $=3 \quad Q_{3}=4$ MAX $=5$


REF: 061432ai
7 ANS:
minimum is 120 , 1st quartile is 145 , median is 292 , 3 rd quartile is 407 , and maximum is 452


REF: 081034ia
8 ANS:


Min: 8, Q1: 20, Med: 32, Q3: 36, Max:
40
REF: 061439ia
9 ANS:


REF: 011337ia

