

1.

Dr. Wittgenstein is researching the time it takes for people to fall asleep at night. In his lab, he records the time it takes each of his subjects to fall asleep, in minutes, and compiles the data set shown below.

~~{22, 8, 10, 14, 25, 95, 32, 7, 14, 20, 18, 10, 22, 7, 27, 16}~~

Identify the following:

Smallest #

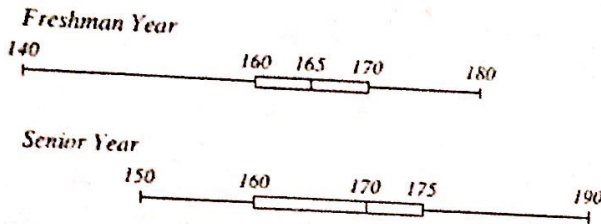
Min: 7 Q_1 : 14 Median: $\frac{18+19}{2} = 18.5$ Mean: 22.875

7, 8, 10, 14, 14, 16, 17, 18, 19, 20, 22, 22, 25
 $\frac{14+14}{2} = 14$
 $\frac{22+25}{2} = 23.5$

Q_3 : 23.5 Max: 95 IQR: 9.5 Range: _____
 biggest # $Q_3 - Q_1 = 23.5 - 14$
 $95 - 7 = 88$

2.

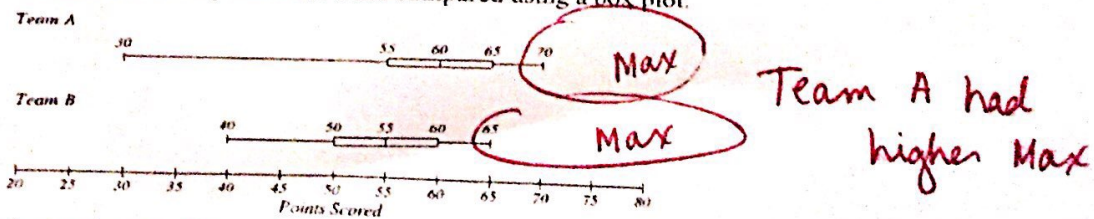
Senior and freshman year amount of time spent on homework was compared in minutes and the results displayed in the boxplot below.



- A) For the Freshman, what percentage of freshman spent between 160 and 170 minutes on homework? 25 75
- B) For the Freshman, 25% of the data is below what value? 160 $75 - 25 = 50\%$
left edge of box
- C) For the Seniors, what is the range of the data? 190 - 150 = 40
largest - smallest
- D) Which year (Senior or Freshman) represents 50% of the data is 165 or less? Freshman - middle of box
- E) What value for Seniors represents 75% or less of the data?
right edge of box so 175

3.

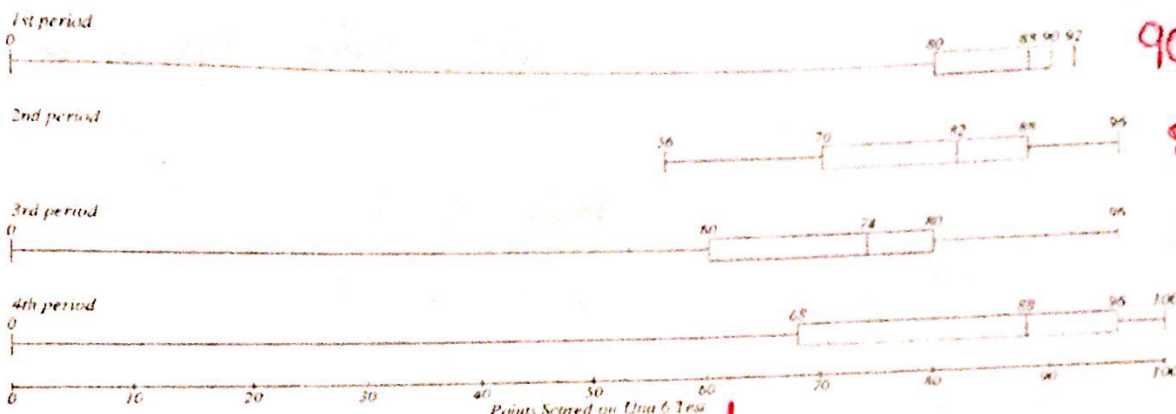
Team A and Team B scored points and were compared using a box plot.



Compare the maximum values, and identify who had the higher maximum.

4. The data below are the last 6 Unit Test Scores:

right edge - left edge
IQR =



$90 - 80 = 10$

$88 - 70 = 18$

$80 - 60 = 20$

$96 - 68 = 28$

right edge of box

Which class had the lowest Q_3 ? 3rd period

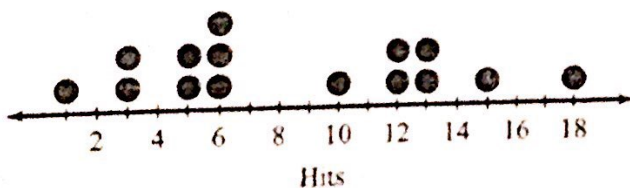
Which class had the highest IQR? 4th period IQR = 28

Which class had the highest minimum value? 2nd period : 56

5. Find the mode for each data set.

Occurs the most

Hits in a Round of Hacky Sack



A) 4

B) 5 and 8

C) 6

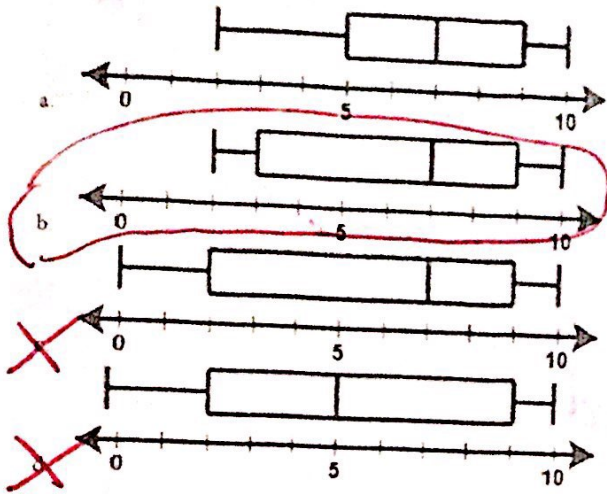
D) 13

6.

Consider the following Ordered Data Set.

2, 3, 5, 7, 9, 10

Which is a correct box and whisker plot of the data above?



Data Type in the 7 #

2nd Data Option 2

Min = 2

Q1 or LQ = 3

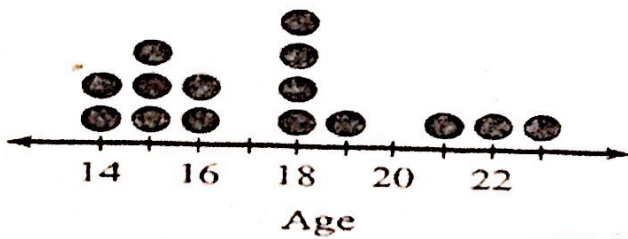
Median = 7

Q3 or UQ = 9

Max = 10

Use the below dot plot to answer the following questions.

Age at First Job



7. What is the mean of the above dot plot?

$\bar{x} = 17.46$

$\frac{14+14+15+15+15+16+16+18+18+18+18+19+21+22+23}{15}$

8. What is the center of the above dot plot?

in middle 18

14, 14, 15, 15, 15, 16, 16, 18, 18, 18, 19, 21, 22, 23

9. What is the spread of the above dot plot?

Range = biggest # - smallest # = 23 - 14 = 9

10. How many people are represented on the above dot plot.

$2+3+2+4+1+1+1+1 = 15$

11. How many people were at least 18 when they started their first job?

$\geq 4+1+1+1+1 = 8 \text{ people}$