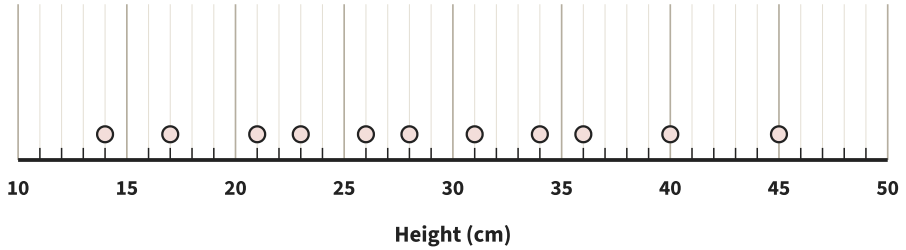
Box Plots

1 The box is the middle half. The whiskers reach the lowest and the highest.

Each dot is one plant's height. Draw a box plot for the table.

Lowest	Lower quartile	Median	Upper quartile	Highest
14	21	28	36	45



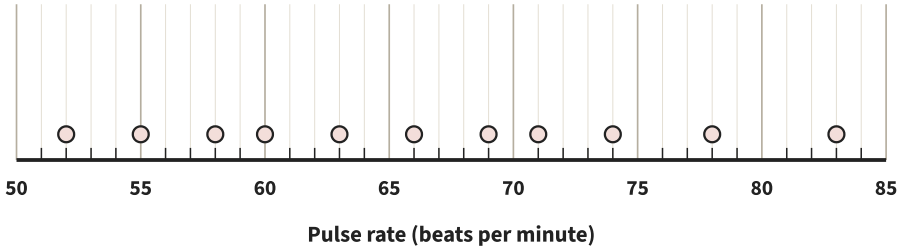
Interquartile range _____

2

The pulse rates of 11 runners, in order. Find the five values, then draw a box plot.

52, 55, 58, 60, 63, 66, 69, 71, 74, 78, 83

Lowest	Lower quartile	Median	Upper quartile	Highest



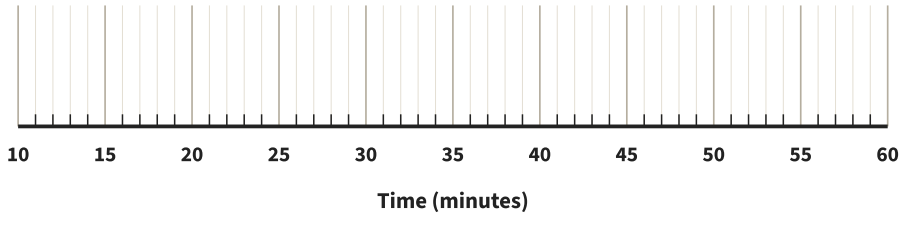
Interquartile range _____

3

The minutes 11 people spent exercising one day, in order. Find the five values, then draw a box plot.

15, 20, 22, 25, 30, 35, 38, 40, 44, 50, 58

Lowest	Lower quartile	Median	Upper quartile	Highest



Interquartile range _____

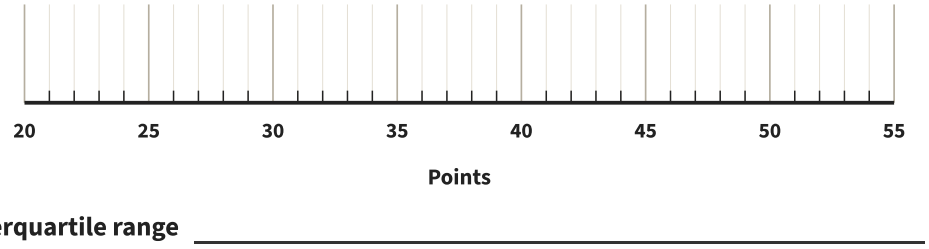
4 *Notice the change!*

The points a basketball team scored in 11 games. Find the five values, then draw a box plot.

41, 28, 35, 52, 30, 47, 33, 39, 26, 44, 37

In order _____

Lowest	Lower quartile	Median	Upper quartile	Highest



Interquartile range _____

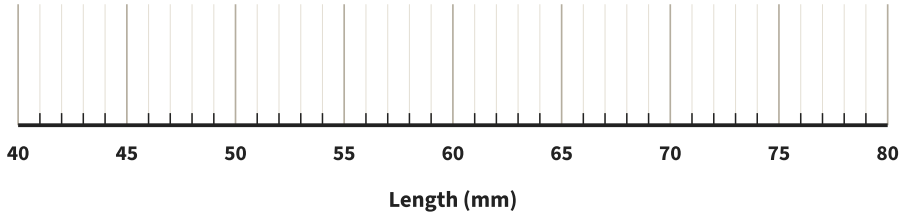
Box Plots

5

The lengths of 15 worms, in order. Find the five values, then draw a box plot.

42, 45, 47, 50, 51, 53, 55, 58, 60, 61, 64, 66, 68, 71, 76 mm

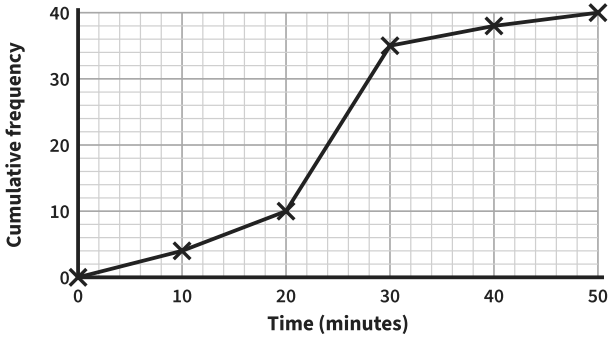
Lowest	Lower quartile	Median	Upper quartile	Highest

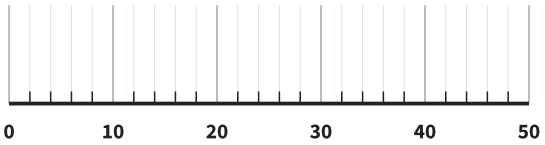


Interquartile range _____

6

The graph shows the journey times of 40 students. Draw a box plot.





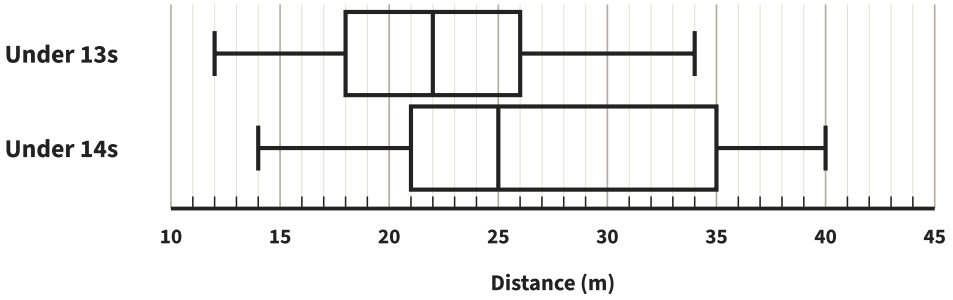
Lowest **6**, highest **48**

	How far up	Read across
Lower quartile	10	
Median		
Upper quartile		

Interquartile range _____

7

The distances two groups threw a ball. Compare the groups. Use the medians and the interquartile ranges.

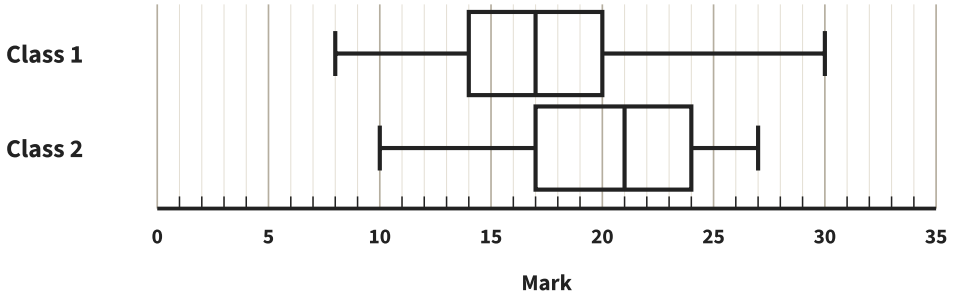


On average _____

More consistent _____

8

Two classes did a quiz. Kofi says class 1 did better, because their highest mark is higher. Explain why Kofi is wrong, then compare the classes.



Why _____

On average _____

More consistent _____

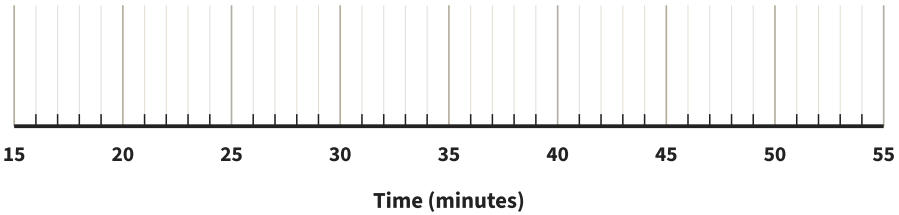
Box Plots *further practice*

9

The minutes 15 customers spent in a shop. Find the five values, then draw a box plot.

23, 41, 18, 35, 29, 52, 26, 44, 31, 38, 20, 47, 33, 27, 39

Lowest	Lower quartile	Median	Upper quartile	Highest

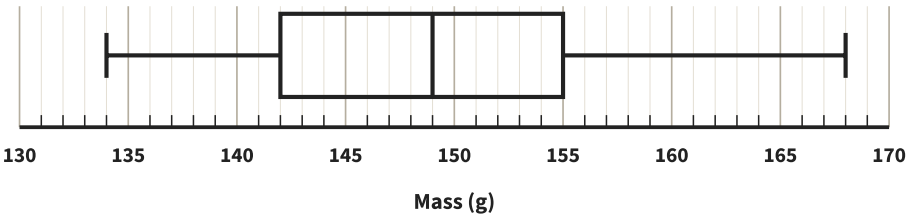


Interquartile range _____

10

The box plot shows the masses of some apples. Complete the table. Work out the interquartile range and the range.

Lowest	Lower quartile	Median	Upper quartile	Highest



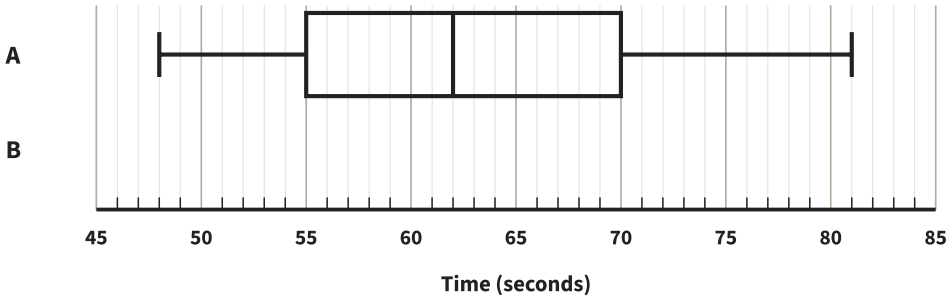
Interquartile range _____

Range _____

11

Team A's times on an obstacle course are drawn. Team B's 11 times are below. Draw team B's box plot, then compare the teams.

52, 58, 49, 61, 56, 66, 54, 59, 63, 57, 71 seconds

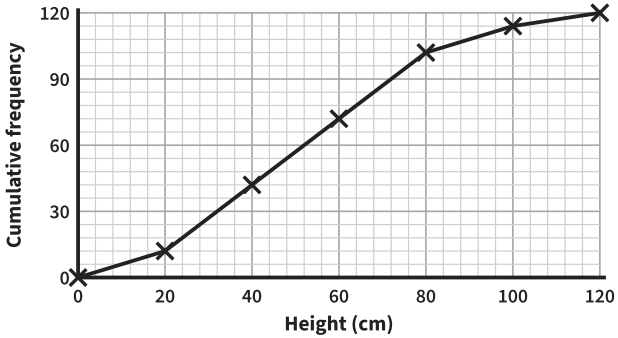


On average _____

More consistent _____

12

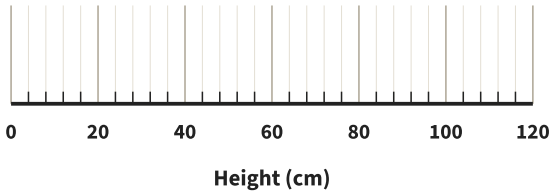
The graph shows the heights of 120 young trees. Draw a box plot.



Lowest **8**, highest **116**

	How far up	Read across
Lower quartile		
Median		
Upper quartile		

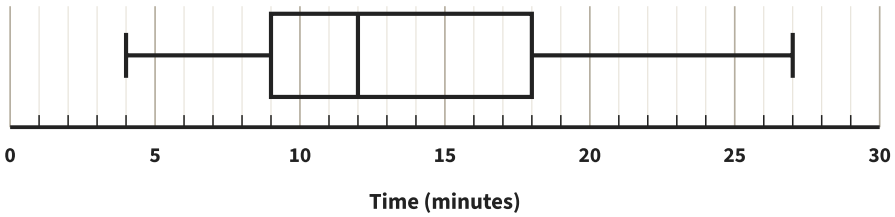
Interquartile range _____



Box Plots *further practice*

13

The box plot shows the times 60 people took to solve a puzzle.



About how many took more than 18 minutes? _____

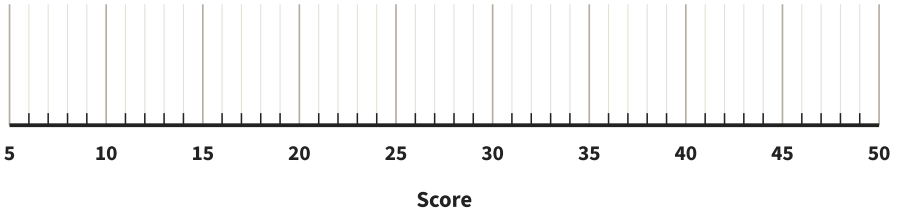
About how many took between 9 and 18 minutes? _____

14

Use the clues to draw the box plot.

The lowest value is 8. The range is 40. The median is 25.
The lower quartile is 7 less than the median. The interquartile range is 15.

Lowest	Lower quartile	Median	Upper quartile	Highest



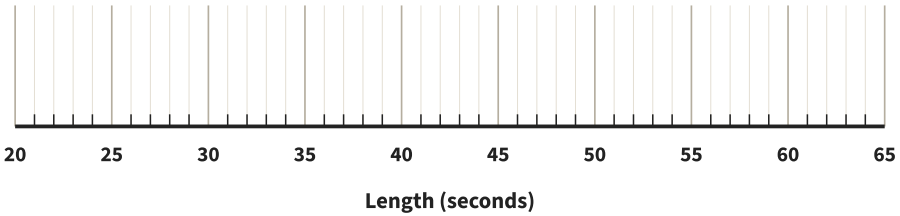
15

The stem-and-leaf diagram shows the lengths of 15 video clips. Draw a box plot.
Work out the interquartile range.

2	4 7 9
3	1 3 5 8
4	0 2 4 6 9
5	3 5
6	1

Key: 2 | 4 means 24 seconds

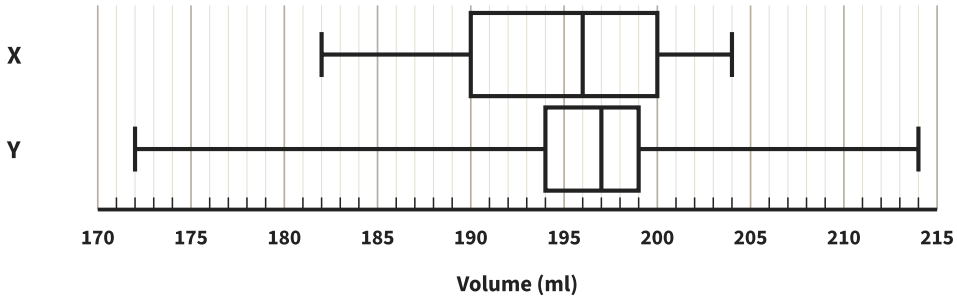
Lowest	Lower quartile	Median	Upper quartile	Highest



Interquartile range _____

16

Two machines fill cups of coffee. Maya says machine X is more consistent, because its range is smaller. Is she right? Explain.



Answer _____

Why _____