

Find quartiles and interquartile range from a cumulative frequency diagram

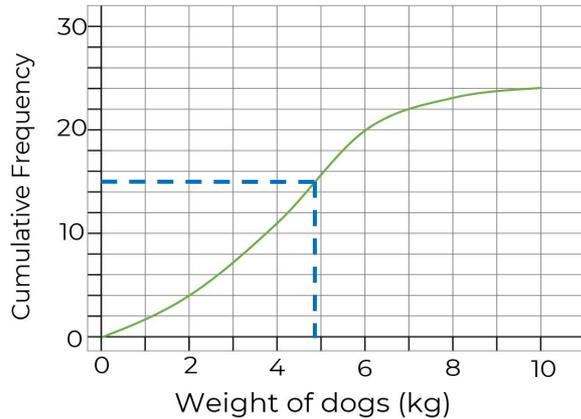
Maths

Miss Parnham



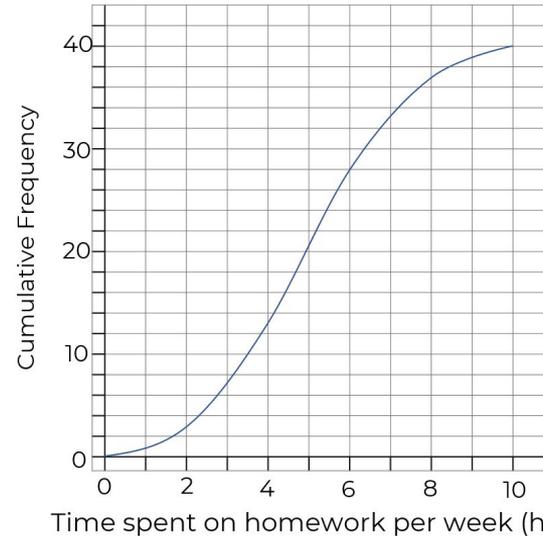
Find quartiles and interquartile range from a cumulative frequency diagram

1. Rosie has estimated the median as 4.9 kg, what mistake has she made?



Use the diagram to correctly estimate the median weight of the dogs.

2. Find the median and the upper and lower quartiles.



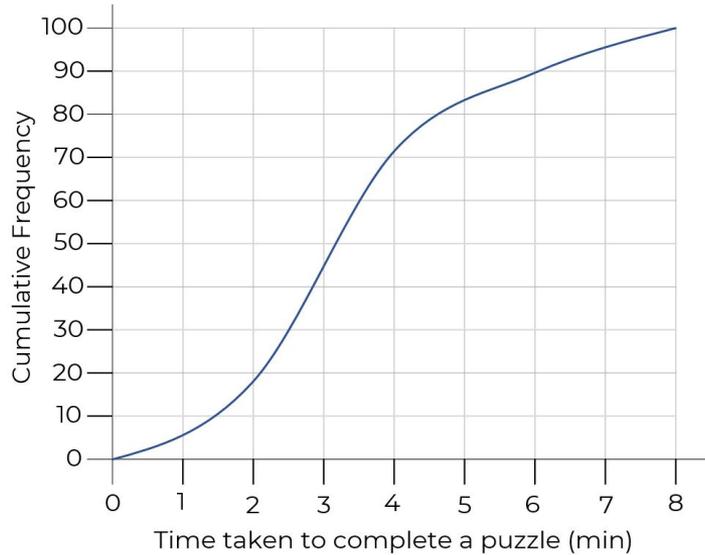
Estimate the interquartile range.



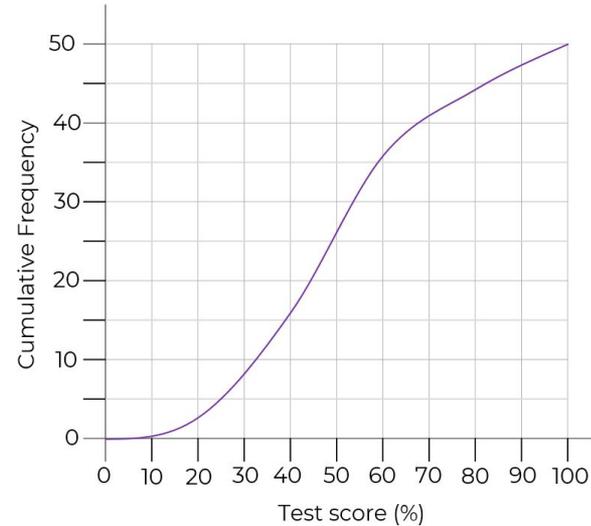
Find quartiles and interquartile range from a cumulative frequency diagram

3. A prize is awarded if a puzzle is completed in 2 minutes or less.

Estimate how many will win a prize.



4. To receive a distinction, people must score above 80%. Estimate how many people scored a distinction.

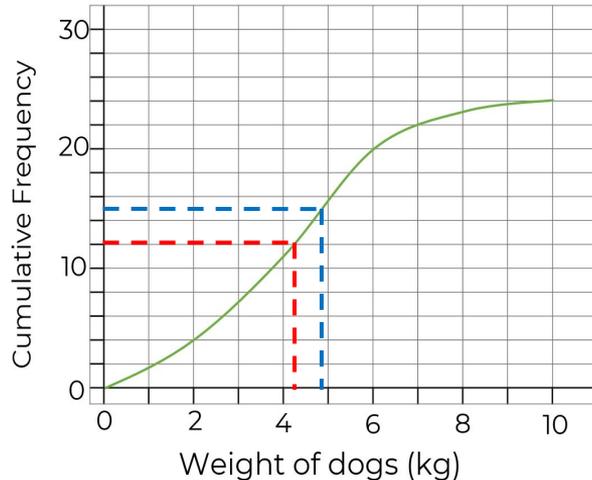


Answers



Find quartiles and interquartile range from a cumulative frequency diagram

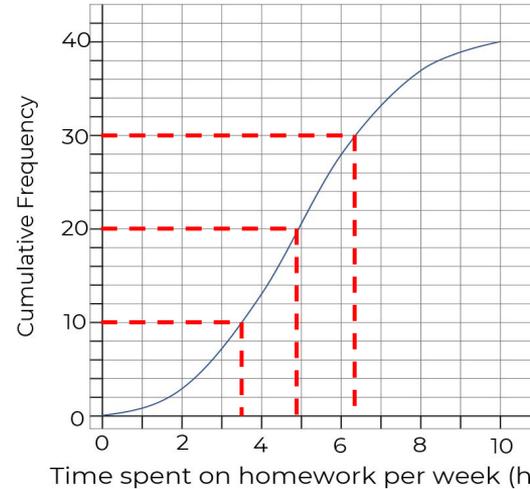
1. Rosie has estimated the median as 4.9 kg, what mistake has she made?



She has halved the scale on the y axis rather than halving the frequency to plot her line.

Use the diagram to correctly estimate the median weight of the dogs. **4.3 kg**

2. Find the median and the upper and lower quartiles.



Median
4.9 hours
UQ
6.3 hours
LQ
3.5 hours
IQR
2.8 hours

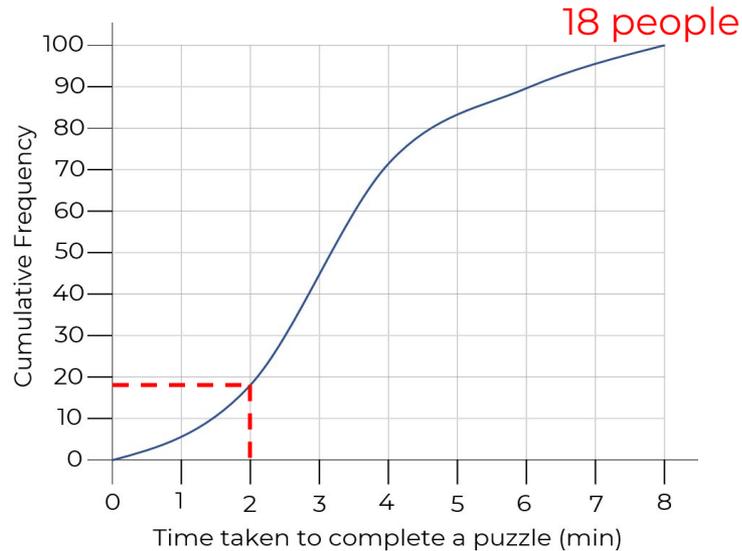
Estimate the interquartile range.



Find quartiles and interquartile range from a cumulative frequency diagram

3. A prize is awarded if a puzzle is completed in 2 minutes or less.

Estimate how many will win a prize.



4. To receive a distinction, people must score above 80%. Estimate how many people scored a distinction.

