

# Interquartile Range

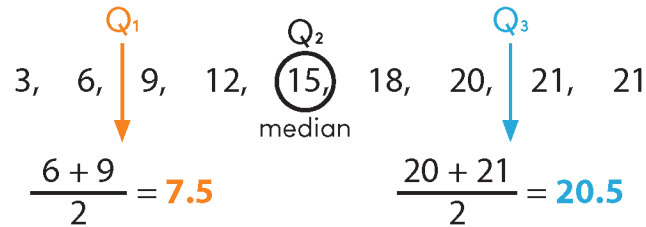


The **interquartile range (IQR)** of a data set is the difference between the third quartile and the first quartile:

$$\text{IQR} = Q_3 - Q_1$$

Let's try an example. Find the interquartile range of this data set: 3, 6, 9, 12, 15, 18, 20, 21, 21.

First, make sure your data set is in order. Then, split the data into quartiles.



Then, subtract!

$$20.5 - 7.5 = 13$$

So, the interquartile range of this data set is 13.



**Find the interquartile range of each data set. Make sure to put each data set in order first!**

11, 14, 20, 21, 24, 30, 31

IQR = 16

5, 2, 6, 15, 9, 10, 11

IQR = 6

7, 11, 12, 18, 22, 25

IQR = 11

4, 8, 25, 13, 15, 8, 15, 19, 7

IQR = 9.5

16, 35, 30, 14, 15, 16, 17, 34

IQR = 16.5

23, 19, 21, 41, 29, 37, 38, 42, 37

IQR = 17.5

3, 29, 47, 11, 25, 19, 28, 45

IQR = 22

24, 26, 41, 46, 50, 39, 22, 25, 44

IQR = 20.5