Describe Data by Range and Interquartile Range

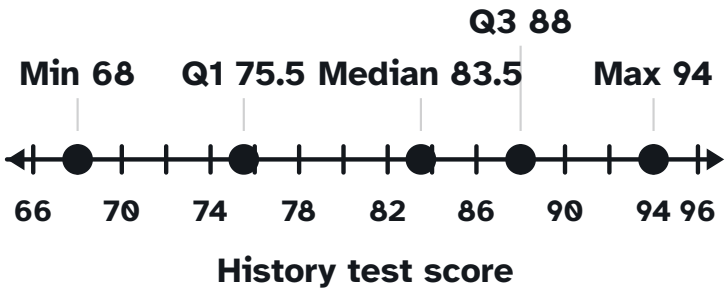
Describe how spread out data is with the range and the interquartile range.

Name _____ **Date** _____

Tonight's spark

A teacher posts 20 history test scores. The lowest is 68. The highest is 94. How many points apart are the lowest and the highest scores?

Make a guess first: is the gap more than 20 points or less?



Our class model: two measures of spread

Try it

Work it out on paper. Write one answer on each line.

1 **What is the range of 3, 8, 14, 20?**

A. 23 **B.** 17 **C.** 20 **D.** 6

My answer _____

2 **Which measure tells how spread out the middle half of the data is?**

A. The interquartile range (IQR) **B.** The range **C.** The median **D.** Q1

My answer _____

3 **Q1 = 12 and Q3 = 30. What is the IQR?**

A. 42 **B.** 30 **C.** 18 **D.** 21

My answer _____

4 **Quiz scores range from a low of 62 to a high of 95. What is the range?**

A. 157 **B.** 95 **C.** 23 **D.** 33

My answer _____

5 **A box plot shows least 6, Q1 14, median 20, Q3 27, greatest 41. What is the range?**

A. 13 **B.** 35 **C.** 41 **D.** 21

My answer _____

6 **The same box plot shows least 6, Q1 14, median 20, Q3 27, greatest 41. What is the IQR?**

A. 13 **B.** 35 **C.** 7 **D.** 27

My answer _____

Talk about it

Is the range a place on the number line, or a distance?

Home mission

Ask each person at home how many minutes they need to get ready. Find the longest time and the shortest time. How far apart are they? That distance is the range.

If we get stuck, ask

- What are the least and greatest values?
- Where does the box start and end?
- Is your IQR less than or equal to your range?

Do it on a screen

Scan or type the link. Same lesson, with hints.

eduwonderlab.com/lessons/2-5/homework.html

How did it feel? (optional)

Tricky Getting there Got it