Answers and talk notes

Describe Data by Range and Interquartile Range

What your student is learning

Tonight we measure how spread out a data set is, using the range and the interquartile range (IQR).

Answers

Ask your student to explain before you look.

1. **B.** 17. Range = greatest − least = 20 − 3 = 17.
2. **A.** The interquartile range (IQR). The IQR, the interquartile range, measures the spread of the middle half. So the answer is: The interquartile range (IQR).
3. **C.** 18. IQR = Q3 − Q1 = 30 − 12 = 18.
4. **D.** 33. Range = 95 − 62 = 33 points.
5. **B.** 35. Range = 41 − 6 = 35.
6. **A.** 13. IQR = Q3 − Q1 = 27 − 14 = 13.

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.

When they are 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?

Try not to say

- Add the two quartiles together.
- The range and the IQR are the same thing.
- You need the mean to find the spread.