Name_____ Date_____ Period_____

LESSON 2-3 · SESSION 2 · PREREQUISITE PRACTICE B · SKILL 1 OF 2

Find Quartiles and IQR

Builds on Lesson 2-5 Session 1 · 6.SP.B.5c

TODAY'S LESSON	In problem 2 you find the median, Q1, Q3, and IQR of each carrot plot.
YOU NEED TO	Find Q1, Q3, and the IQR of a data set. **You will use it in Practice Form A, problems 1 and 2.**

STEPS TO FOLLOW

use these same steps on every problem

1. **Order** the data. Find the median.
2. Find the **quartiles**: the middle of each half.
3. **IQR** = Q3 − Q1.

WATCH ME

the steps in action

Find the IQR of 12, 15, 17, 20, 22, 26, 30.

Step 1 The median is 20.

Step 2 Lower half 12, 15, 17: Q1 = 15. Upper half 22, 26, 30: Q3 = 26.

Step 3 IQR = 26 − 15 = 11.

Answer **11**

TRY IT WITH HELP

fill in each step

1. Find the IQR of 5, 8, 12, 14, 16, 20, 25.

Step 1 The median is _____.

Step 2 Q1 = _____. Q3 = _____.

Step 3 IQR = _____.

2. Find the IQR of 2, 4, 6, 8, 10, 12, 14, 16.

Step 1 The median is _____.

Step 2 Q1 = _____. Q3 = _____.

Step 3 IQR = _____.

YOUR TURN

use the steps on your own

3. Each list is in order. Find the IQR.

a. 1, 3, 5, 7, 9, 11, 13 _____

b. 10, 14, 15, 18, 20, 25, 30 _____

c. 40, 42, 45, 50, 52, 58, 60 _____

d. 6, 7, 9, 12, 13, 15 _____

Compare Spread With IQR

Builds on Lesson 2-5 Session 2 · 6.SP.B.5c

TODAY'S LESSON	In problem 6 the coach wants the team with the smaller IQR. It scores closer to its usual total.
YOU NEED TO	Use the IQR to tell which group is more consistent. **You will use it in Practice Form A, problems 6 and 8.**

STEPS TO FOLLOW

use these same steps on every problem

1. Find each group's **IQR**.
2. **Compare** the IQRs.
3. The **smaller** IQR is more consistent.

WATCH ME

the steps in action

Class P has an IQR of 14. Class Q has an IQR of 6. Which is more consistent?

Step 1 P: 14. Q: 6.

Step 2 6 < 14.

Step 3 Q has the smaller IQR.

Answer **Class Q**

TRY IT WITH HELP

fill in each step

4. Team 1: Q1 = 26, Q3 = 34. Team 2: Q1 = 15, Q3 = 40.

Step 1 IQR 1 = _____. IQR 2 = _____.

Step 2 _____ < _____

Step 3 More consistent: Team _____.

5. Store A has an IQR of 21. Store B has an IQR of 9.

Step 1 A: _____. B: _____.

Step 2 _____ < _____

Step 3 More consistent: Store _____.

YOUR TURN

use the steps on your own

6. Write the IQR of the more consistent set.

a. IQR 9 or 15: _____ **b.** IQR 20 or 12: _____ **c.** IQR 4 or 7: _____

d. IQR 30 or 31: _____ **e.** IQR 18 or 6: _____ **f.** IQR 11 or 25: _____

READY CHECK

a problem like the one in today's lesson

7. Which IQR shows the most consistent data?

A IQR 15 **B** IQR 3 **C** IQR 9 **D** IQR 22

CHECK YOURSELF ☐ I can do this on my own ☐ I need a little help ☐ I have a question about #____