Name_____ Date_____ Period_____

LESSON 2-6 · SESSION 2 · PRACTICE · FORM B

Comparing Distributions

Learning target – I can compare two distributions using the median and the interquartile range together. · 6.SP.B.5d

REMEMBER

- **Median** = center: which group is typically higher or lower?
- **IQR** = spread: which group is more **consistent** (smaller IQR)?
- Use **both** to decide. Ask what is better here: a shorter wait or a higher score?

WORKED EXAMPLE

Line 1: median 8 min, IQR 7. Line 2: median 13 min, IQR 12.

Step 1 Center: 13 − 8 = 5, so Line 1 is typically 5 min shorter.

Step 2 Spread: 7 < 12, so Line 1 is steadier.

Answer **Join Line 1: shorter and steadier**

WORDS **center** *(centro)* · **spread** *(dispersión)* · **distribution** *(distribución)*

PRACTICE

show your work · label units

1. Two Lunch Booths. Wait times (min). Booth 1: 4, 6, 8, 9, 11, 13, 16. Booth 2: 1, 3, 10, 14, 15, 17, 21.

Hint *Lower median = shorter wait. Smaller IQR = steadier.*

	Median	Q1	Q3	IQR
Booth 1				
Booth 2				

Which to join_____

2. Two Bean Plots. Plot A lengths (cm): 8, 10, 12, 14, 15, 17, 18. Plot B: 4, 9, 13, 14, 19, 22, 26.

a. Median A: __ **b.** IQR A: __ **c.** Median B: __ **d.** IQR B: __

3. Two Months. Month 1: median 210 sales, IQR 15. Month 2: median 190, IQR 45.

a. Typically higher: ____

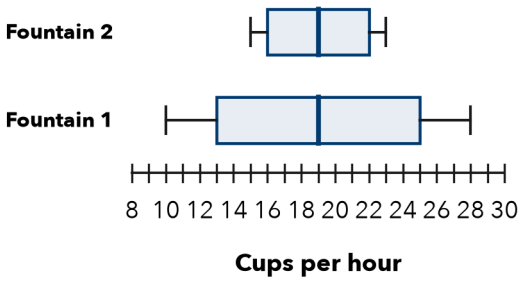
b. Steadier: ____

4. Rosa's Claim. Set E: median 72, IQR 28. Set F: median 68, IQR 7. Rosa says Set E wins in every way. Is Rosa right?

Hint *A higher median says nothing about spread.*

☐ Right ☐ Not right

5. Two Fountains. The box plots show cups served per hour.



Hint *Read the box edges for Q1 and Q3.*

a. Median of 1: _____

b. IQR of 1: _____

c. Median of 2: _____

d. IQR of 2: _____

e. Compare them:

6. Coach's Choice. Team 1: median 61 points, IQR 6. Team 2: median 66, IQR 25. The coach wants the team most likely to score close to its usual total.

☐ Team 1 ☐ Team 2

Why_____

7. Two Stores. Store R: median 38 sales, IQR 14. Store S: median 33, IQR 5. Write a comparison that uses both measures.

_____

_____

8. Two Study Methods. Method 1 quiz scores: median 85, IQR 20. Method 2: median 81, IQR 5.

a. Higher typical score: _____

b. More dependable (use both IQRs): _____

c. Pick one method for the whole class. Argue using both measures.

Show your work.

FIND THE ERROR

explain the mistake, then fix it

9. Lucia's Work. Lucia wrote: "Group 1 has the larger median, so Group 1 must have the larger IQR too." Explain the mistake.

_____

_____

TEST PRACTICE

choose the best answer

10. Medians of 48 and 55 differ by –

A 7 **B** 103 **C** 8 **D** 55

11. Group 1: median 12 cm, IQR 3 cm. Group 2: median 12 cm, IQR 9 cm. Which is more consistent?

A Group 1

B Group 2

C They are the same

D Cannot tell

SELF-CHECK CODE *find your answer · copy its letter into that problem's box · spell a math word*

Month 1 **I**	**Month 2** **Z**	**18** **X**	**Method 1** **S**	**12** **A**	**Booth 1** **M**	**13** **D**	**6** **N**	**Booth 2** **Q**	**7** **E**

#1	#2b	#2d	#3a	#5b	#5d	#8a

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