Name_____ Date_____ Period_____

LESSON 2-5 · SESSION 1 · PREREQUISITE PRACTICE B · SKILL 1 OF 2

Find Q1 and Q3

Builds on Lesson 2-4 Session 1 · 6.SP.B.4

TODAY'S LESSON	Camp hikes give seven distances. You need Q1 and Q3 before you find the IQR.
YOU NEED TO	Find the middle of the lower half and of the upper half. **You will use it in Practice Form A, problems 1 and 3.**

STEPS TO FOLLOW

use these same steps on every problem

1. **Order** the data and find the median.
2. Split into a **lower** half and an upper half.
3. Q1 = middle of the lower half. **Q3** = middle of the upper.

WATCH ME

the steps in action

Find Q1 and Q3 for 12, 5, 20, 9, 15, 25, 18.

Step 1 5, 9, 12, 15, 18, 20, 25. The median is 15.

Step 2 Lower half: 5, 9, 12. Upper half: 18, 20, 25.

Step 3 Q1 = 9. Q3 = 20.

Answer **Q1 = 9, Q3 = 20**

TRY IT WITH HELP

fill in each step

1. Find Q1 and Q3 for 2, 4, 5, 8, 11, 13, 16.

Step 1 The median is _____.

Step 2 Lower half: _____.

Step 3 Q1 = _____. Q3 = _____.

2. Find Q1 and Q3 for 10, 15, 20, 25, 30, 35.

Step 1 The median is _____.

Step 2 Lower half: _____.

Step 3 Q1 = _____. Q3 = _____.

YOUR TURN

use the steps on your own

3. Each list is in order. Write Q1 and Q3.

a. 3, 6, 9, 12, 15, 18, 21, 24 _____

b. 1, 1, 2, 4, 6, 7 _____

c. 20, 24, 26, 31, 33 _____

d. 41, 44, 46, 50, 53, 57, 60, 62, 65 _____

Read Box Plot Values

Builds on Lesson 2-4 Session 2 · 6.SP.B.4

TODAY'S LESSON	In problem 8 you read two box plots to find each snack bar's range and IQR.
YOU NEED TO	Read min, Q1, Q3, and max from a box plot, then subtract. **You will use it in Practice Form A, problems 7 and 8.**

STEPS TO FOLLOW

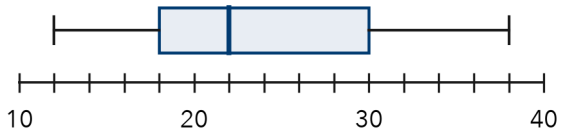
use these same steps on every problem

1. Read the whisker **ends**: min and max.
2. Read the box **edges**: Q1 and Q3.
3. **Subtract**: range = max − min. IQR = Q3 − Q1.

WATCH ME

the steps in action

Find the range and the IQR.



Step 1 Min 12, max 38.

Step 2 Q1 18, Q3 30.

Step 3 Range 38 − 12 = 26. IQR 30 − 18 = 12.

Answer **range 26, IQR 12**

TRY IT WITH HELP

fill in each step

4. Whiskers go from 10 to 45. The box goes from 20 to 35.

Step 1 Min = _____. Max = _____.

Step 2 Q1 = _____. Q3 = _____.

Step 3 Range = _____. IQR = _____.

5. Whiskers go from 104 to 140. The box goes from 116 to 132.

Step 1 Min = _____. Max = _____.

Step 2 Q1 = _____. Q3 = _____.

Step 3 Range = _____. IQR = _____.

YOUR TURN

use the steps on your own

6. Find the range and the IQR.

a. Min 5, Q1 10, Q3 20, Max 30: _____

b. Min 12, Q1 20, Q3 26, Max 41: _____

c. Min 0, Q1 15, Q3 40, Max 60: _____

d. Min 50, Q1 58, Q3 71, Max 90: _____

READY CHECK

a problem like the one in today's lesson

7. A box plot shows 11, 14, 16, 19, 62. What is the IQR?

A 51 **B** 5 **C** 3 **D** 16

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