Math Worksheet for 6th Grade

Interquartile range (IQR)

Name: Due Date: Teacher: Parent Sign:

1. Find the median and range of: 3, 5, 7, 9, 11.
2. Find the median and range of: 12, 15, 14, 18, 10, 20.
3. The set 4, 7, x, 15, 18 has a median of 13. Find x.
4. Find the median and range of: 2, 3, 5, 9, 14, 17.
5. The range of a set is 18 and the smallest number is 3. What is the largest number?
6. Find the median and range of: 5, 7, 11, 11, 13, 16, 19.
7. Find the median and range of: 2, 4, 6, 8, 10, 12, 14, 16.
8. Give one possible set of five numbers with median 20 and including the numbers 18 and 25.
9. Find the median and range of: 7, 8, 9, 10, 11.
10. Find the median and range of: 13, 17, 13, 15, 19.
11. For 2, 4, 6, 8, 10, 12 find Q1, median, Q3 and IQR.
12. For 3, 5, 7, 9, 11 find Q1, median, Q3 and IQR.
13. For 10, 12, 14, 16, 18, 20, 22, 24 find Q1, median, Q3 and IQR.
14. For 5, 5, 7, 8, 9, 10, 12 find Q1, median, Q3 and IQR.
15. For 1, 2, 3, 4, 5, 6, 7, 8, 9 find Q1, median, Q3 and IQR.
16. For 14, 16, 18, 20, 22 find Q1, median, Q3 and IQR.
17. For 4, 8, 15, 16, 23, 42 find Q1, median, Q3 and IQR.
18. For 20, 22, 24, 26, 28, 30, 32, 34, 36, 38 find Q1, median, Q3 and IQR.
19. For 0, 0, 1, 1, 2, 3 find Q1, median, Q3 and IQR.
20. For 33, 35, 39, 42, 45 find Q1, median, Q3 and IQR.
21. For 6, 6, 7, 8, 9, 10, 12, 13 find Q1, median, Q3 and IQR.
22. For 2, 3, 5, 7, 11, 13, 17 find Q1, median, Q3 and IQR.
23. For 40, 42, 44, 46, 48, 50 find Q1, median, Q3 and IQR.
24. For 1, 4, 6, 8, 9, 12, 14, 15, 18 find Q1, median, Q3 and IQR.
25. For 100, 105, 110, 115, 120 find Q1, median, Q3 and IQR.
26. For 9, 14, 14, 15, 16, 19, 21, 22 find Q1, median, Q3 and IQR.
27. For 7, 12, 13, 13, 14, 18, 20 find Q1, median, Q3 and IQR.
28. For 55, 60, 65, 70, 75, 80 find Q1, median, Q3 and IQR.
29. For 2, 5, 9, 10, 11, 14, 18, 20, 22, 25 find Q1, median, Q3 and IQR.
30. For 31, 33, 35, 37, 39 find Q1, median, Q3 and IQR.
31. A class of 9 students scored: 72, 75, 78, 81, 83, 85, 87, 90, 95. Find the median and IQR.
32. Weekly temperatures (degC): 12, 15, 16, 16, 18, 20, 22. Find median, Q1, Q3, IQR.

33. Pumpkin weights (kg): 2.5, 3.0, 3.5, 4.0, 4.5, 5.0, 6.0. Find median, Q1, Q3, IQR.
34. Race finish times (minutes): 22, 24, 24, 25, 26, 28, 30, 31. Find Q1, median, Q3, IQR.
35. Monthly rainfall (mm): 40, 45, 50, 55, 60. Find Q1, median, Q3, IQR.
36. Books read by students: 0, 1, 2, 3, 4, 5, 10. Find median and IQR.
37. Test scores: 88, 90, 91, 92, 94, 95. Find the IQR.
38. Heights (cm): 120, 122, 125, 130, 135, 140, 142, 145, 150. Find Q1, median, Q3, IQR.
39. A box plot shows Q1 = 10, median = 15 and Q3 = 22. What is the IQR and what does it tell you?
40. Students' ages: 10, 11, 11, 12, 12, 12, 13, 13, 14, 15. Find Q1, median, Q3 and IQR.
41. Give one set of five whole numbers with median 10 and range 8.
42. The dataset 3, 7, 9, x, 15 has Q1 = 5. Find x (assume whole numbers and sorting in the usual way).
43. The five numbers 4, 6, x, 10, 12 have IQR = 6. Give one possible value of x (explain briefly).
44. Add one number to 2, 3, 5, 7 so that the IQR of the 5-number set is 4. What number do you add?
45. A five-number summary is Min = 10, Q1 = 14, Median = 18, Q3 = 22, Max = 30. What is the IQR?
46. For 5, 7, 9, 11, 13, 15, 17 find Q1, median, Q3 and IQR.
47. If Q3 = 80 and IQR = 12, how high must a score be to be considered an outlier above Q3 using the 1.5xIQR rule?
48. Ages: 9, 10, 10, 11, 11, 12, 13, 14, 15, 16. Is age 30 an outlier using the 1.5xIQR rule? Explain.
49. Construct one set of eight integers that has Q1 = 5, median = 8, Q3 = 12.
50. A data set has Min = 2, Q1 = 8, Q3 = 20, Max = 26. What is the IQR? Which values lie in the middle 50