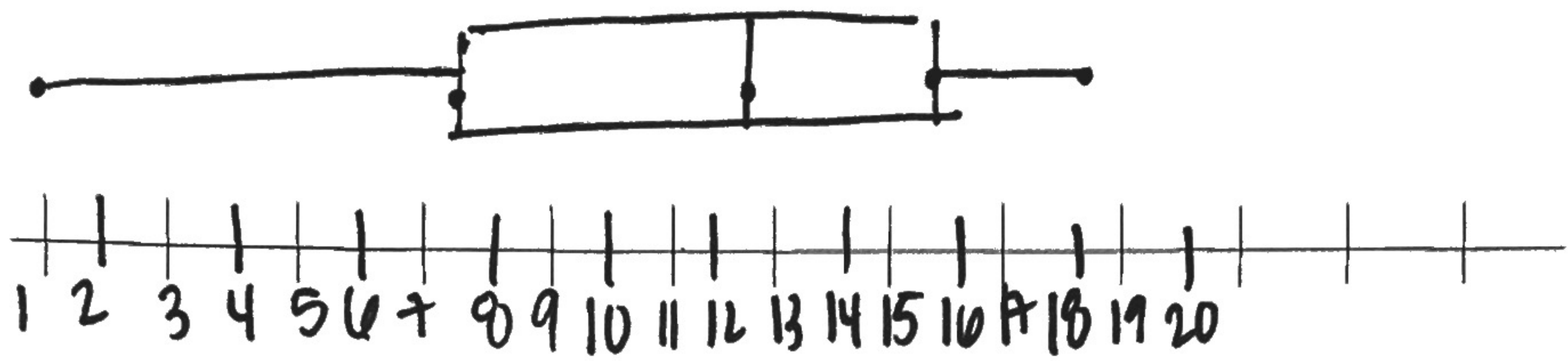


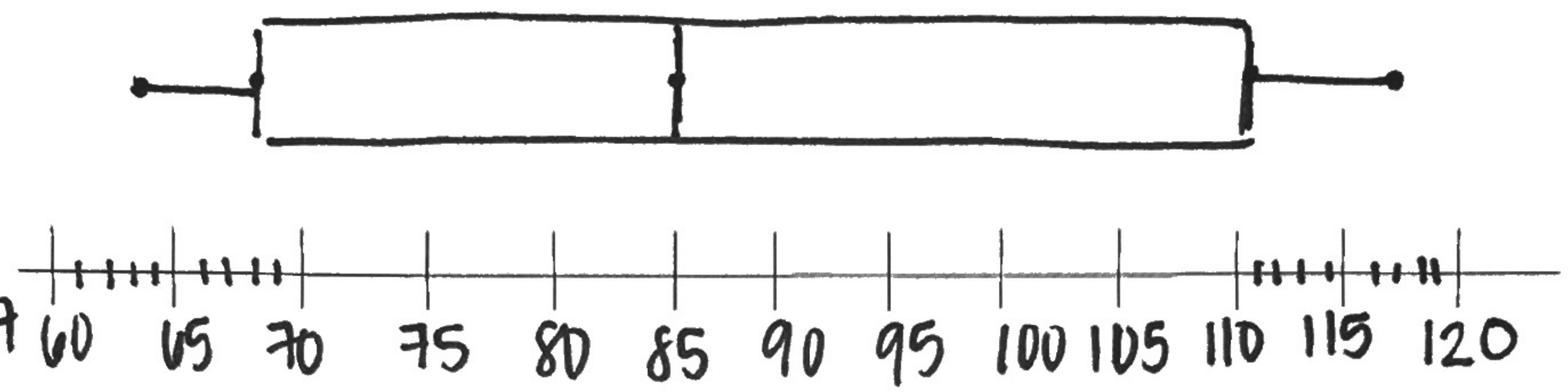
1. Create a box and whisker plot using this data: 14, 6, 13, 17, 1, 12, 9, 18. Show all your work when finding the Five Number Summary.

min = 1
 Q1 = 7.5
 med = 12.5
 Q3 = 15.5
 max = 18

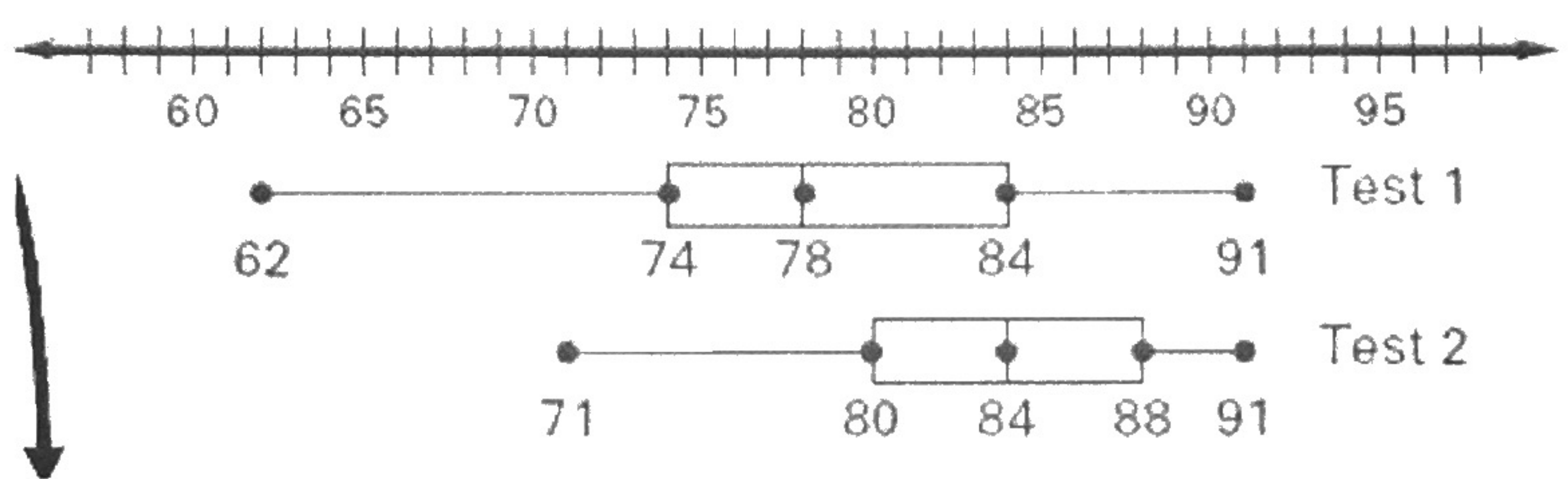


2. Create a box and whisker plot using this data: 77, 99, 112, 85, 117, 68, 63. Show all your work when finding the Five Number Summary.

min = 63
 Q1 = 68
 med = 85
 Q3 = 112
 max = 117



3. The box-and-whisker plots below show a class' test scores for two tests. What conclusions can you make?



The maximums are the same for both tests.

The median for the second test is greater than the median for the first test.

The Q3 for the first test is the same as the median for the second test.

The scores for the test 1 are more spread out than the scores for the test 2.

What is the Five Number Summary for Test 1? Test 2?

Test 1
 min = 62 Q1 = 74 med = 78 Q3 = 84 max = 91

Test 2
 min = 71 Q1 = 80 med = 84 Q3 = 88 max = 91

Find the range AND interquartile range for both tests. Which test had a higher range of scores? A higher interquartile range? Explain what this means.

test 1
 range = 29
 IQR = 10

test 2
 range = 20
 IQR = 8

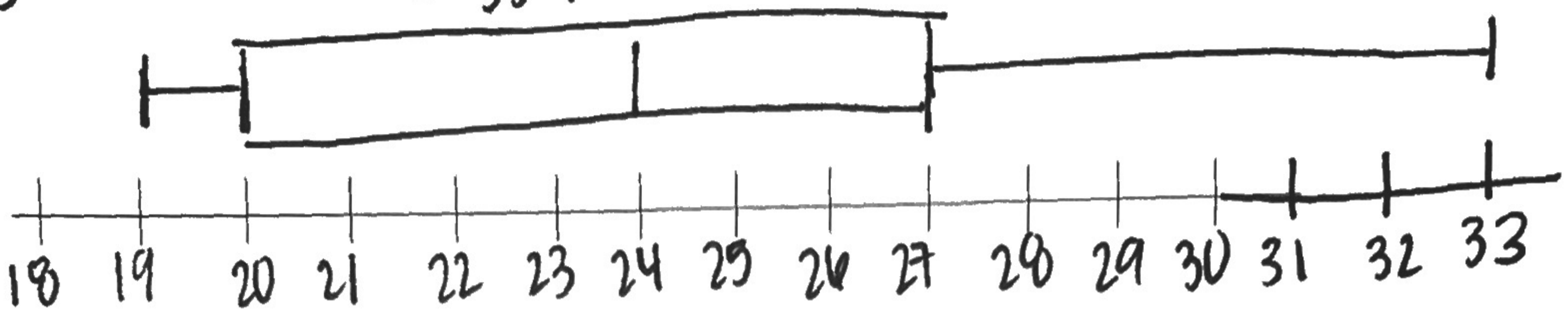
test 1 has a higher range and IQR meaning the data is more spread out.

4. For the following data, calculate the desired information. Then, create box-and-whisker plot
 19, 27, 19, 24, 21, 20, 23, 29, 25, 26, 33

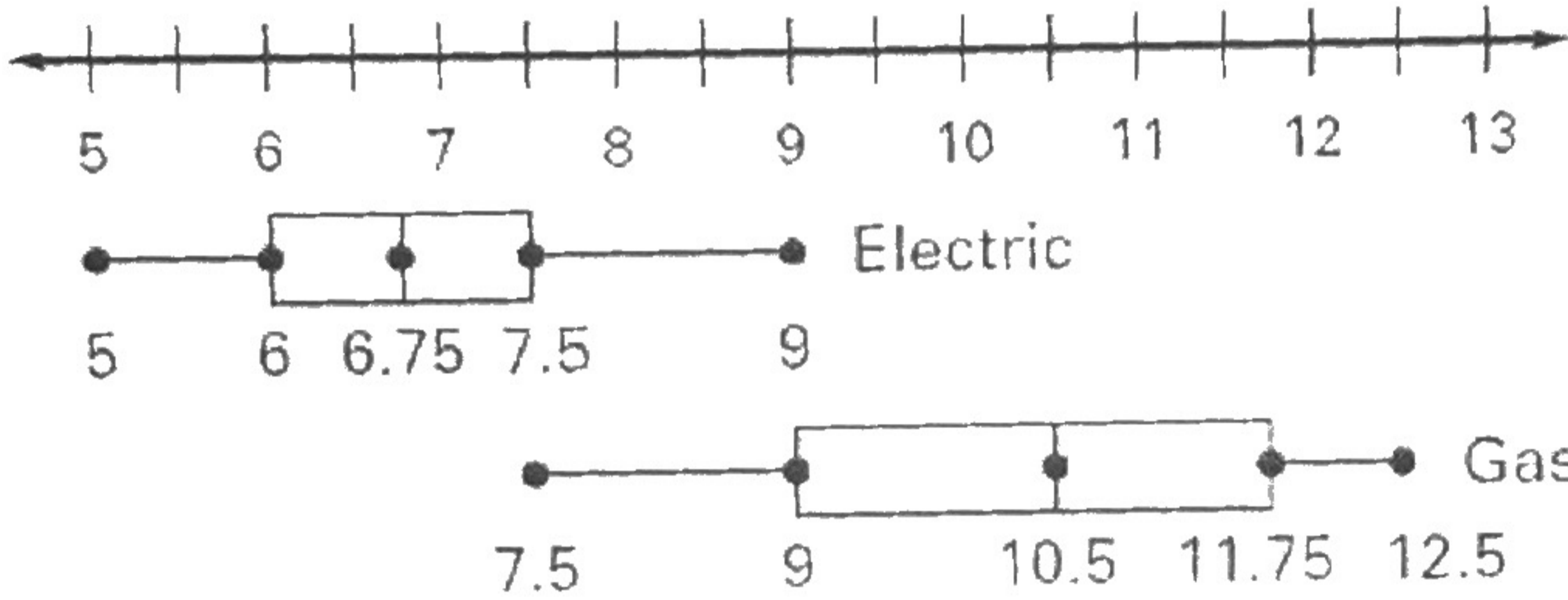
Order the numbers from least to greatest:

Minimum: 19 Lower Quartile: 20 Median: 24 Upper Quartile: 27

Maximum: 33 Range: $33 - 19 = 14$ Interquartile Range: $27 - 20 = 7$



5. The box-and-whisker plots show the weights of electric handheld power blowers and gasoline handheld power blowers.



med = 6.75
 range = 4
 IQR = 1.5

med = 10.5
 range = 2.75
 IQR = 5

a) Compare the median, range, and interquartile range for the two types of blowers.

med and IQR larger for the gas blower; range is larger for the electric blower.

b) About what percent of electric blowers are less than 7.5 pounds?

75%

c) About what percent of gasoline blowers are more than 10.5 pounds?

50%

d) Which type of blower would you say is the "lighter" blower? Explain.

the electric blower.
 It has 100% of its data below 9 where as the gas blower only has 25% of its data below 9.