Box Plots

Find the median, lower quartile, and upper quartile of the data.

1. the amounts of juice in 12 glasses, in fluid ounces:

11, 8, 4, 9, 12, 14, 9, 16, 15, 11, 10, 7

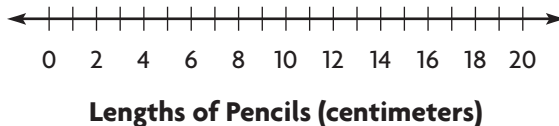Order the data from least to greatest: 4, 7, 8, 9, 9, 10, 11, 11, 12, 14, 15, 16

median: **10.5**   lower quartile: **8.5**   upper quartile: **13**

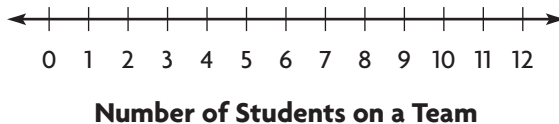**2.** the lengths of 10 pencils, in centimeters:

18, 15, 4, 9, 14, 17, 16, 6, 8, 10

median: _____   lower quartile: _____   upper quartile: _____

3. Make a box plot to display the data set in Exercise 2.

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<———|——|——|——|——|——|——|——|——|——|——|——|——>
    0   2   4   6   8  10  12  14  16  18  20
```
Lengths of Pencils (centimeters)

4. The numbers of students on several teams are 9, 4, 5, 10, 11, 9, 8, and 6. Make a box plot for the data.

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<——|——|——|——|——|——|——|——|——|——|——|——|——>
   0  1  2  3  4  5  6  7  8  9  10 11 12
```
Number of Students on a Team

Problem Solving Real World

5. The amounts spent at a gift shop today are $19, $30, $28, $22, $20, $26, and $26. What is the median? What is the lower quartile?

6. The weights of six puppies in ounces are 8, 5, 7, 5, 6, and 9. What is the upper quartile of the data?