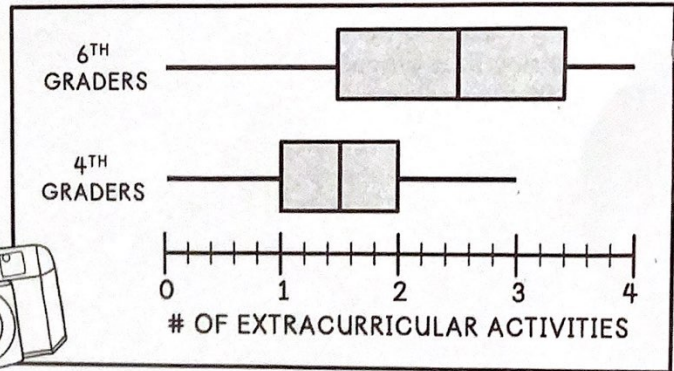
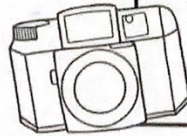


## COMPARING BOX PLOTS

Use the box plots at the right to answer questions 1-4, and then apply your understanding of box plots in question 5.

The 4<sup>th</sup> and 6<sup>th</sup> grade students at Tree Hill Elementary completed a survey on how many extracurricular activities they participate in. The data is shown in the box plots at the right.



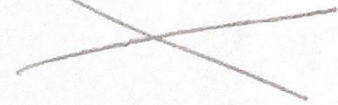
1. What is the median number of extracurricular activities for each grade?

6<sup>th</sup>: 2.5  
4<sup>th</sup>: 1.5

2. What is the difference in the spread of the data between the two grades?

$$4 - 3 = 1$$

3. Determine the variability of the number of extracurricular activities for each grade.



4. Read each of the following statements and mark them as true or false.

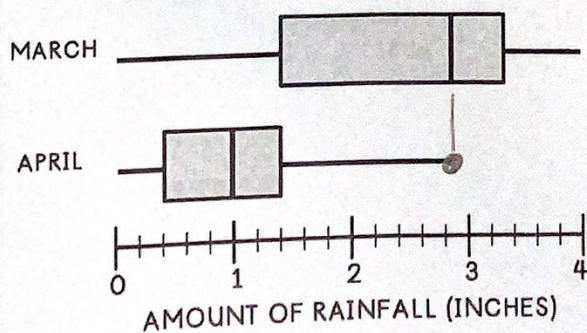
T The third quartile of the data for 4<sup>th</sup> graders is less than the third quartile of the data for 6<sup>th</sup> graders.

T The first quartile of the data for 6<sup>th</sup> graders is equal to the median of the data for 4<sup>th</sup> graders.

F The maximum number of extracurricular activities for 4<sup>th</sup> graders is greater than the maximum number of extracurricular activities for 6<sup>th</sup> graders. *3 is less than 4*

T Both grades have at least one student who does not participate in any extracurricular activities.

5. The boxplots show the amount of rainfall for the months of March and April. Which statement is represented by the data?



A. March has half the variability of April.

B. The third quartile of the data in April is greater than the first quartile of the data in March.

C. The maximum amount of rainfall in April is equal to the median amount of rainfall in March.

D. The difference in the centers of March and April is greater than 2.