Math 1 Name \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

**7-3 Analyzing Box Plots** Date\_\_\_\_\_\_\_\_

* I can calculate the 5-number summary for a set of data.
* I can describe the center and spread of a distribution.



1.

 a. What is the shape of the distribution?

 b. Estimate the five number summary. Explain what each value tells you about the hot dog prices.

Min = and means that \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_.

Q1 = and means that \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_.

Q2 = and means that \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_.

Q3 = and means that \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_.

Max = and means that \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_.

2. The following Box Plot represents the data for the number of homeruns that Mr. Pinto’s favorite baseball players hit last year.

Answer the following:

1. Describe the distribution.
2. What percent of the players hit at least 31 homeruns?
3. Why is the left whisker longer than the right whisker?

3. Use the box plots below.



 a. Make the box plot for Susan’s grades next to the letter S above.

 b. The plots for Maria and Tran have no whiskers at the upper end because. . .

 c. Why is the lower whisker on Gia’s box plot so long? *Hint: There are* ***NOT*** *more numbers in the*

 *lower whisker.*

1. The student with the most symmetrical distribution is \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_.

 The students whose distributions are skewed to the left are \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_,

 and \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_.

 e. The student with the lowest median grade is \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_.

1. The students with the biggest IQR are \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ and \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_, and the

student with the smallest IQR is \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_.

 g. Does the student with the smallest IQR also have the smallest range? \_\_\_\_\_\_\_\_\_

 h. What student(s) has/have the largest range? \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

 i. Based on the box plots, \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ has the best grades because \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

 \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_.