

# Summarizing Data Distributions

For 1 through 5 use the data set below.

Mr. Hansen’s physical education class did a long jump competition. Each person jumped 3 times, and wrote their best long jump (in inches).

84, 80, 80, 76, 79, 82, 89, 72, 76, 78,  
80, 85, 110, 79, 77, 79, 81, 79, 80, 81, 72, 83

1. Make a box plot for the data.



2. a What is the mean? The median? \_\_\_\_\_  
 b What are the first and third quartiles? \_\_\_\_\_  
 c What is the interquartile range? \_\_\_\_\_

3. Describe the shape of the data distribution.

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4. **Writing to Explain** Which would be the preferable measure of center, the median or the mean? Explain.

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5. Would the median or the mean be more affected if a long jump of 140 inches was added to the data? Explain how you know.

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\_\_\_\_\_

6. Which is the best representation of the center of this data set?

- |                 |                 |
|-----------------|-----------------|
| <b>A</b> 2 fish | <b>C</b> 4 fish |
| <b>B</b> 3 fish | <b>D</b> 5 fish |

