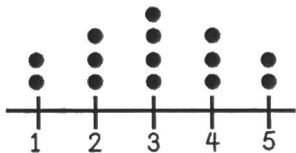
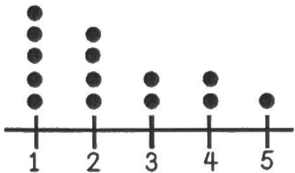
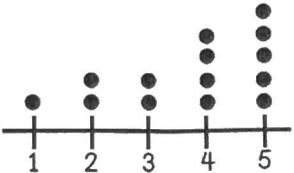
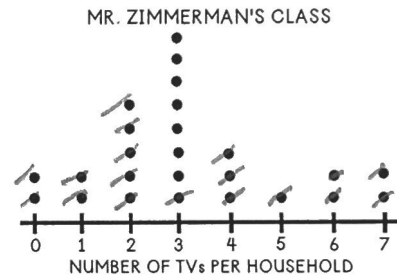
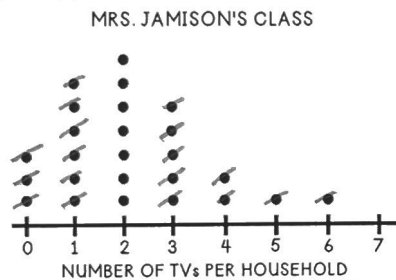


COMPARING DOT PLOTS

DOT PLOTS	<p>A dot plot displays data <u>graphically</u> using a small dot or X for each data piece.</p> <p>The data points are <u>ordered</u> from least to greatest.</p>
SHAPE	<p>Data can take on three different shapes:</p> <div style="display: flex; justify-content: space-around; align-items: flex-end; text-align: center;"> <div style="margin: 10px;">  <p>1 2 3 4 5</p> <p>SYMMETRIC</p> </div> <div style="margin: 10px;">  <p>1 2 3 4 5</p> <p>SKEWED RIGHT</p> </div> <div style="margin: 10px;">  <p>1 2 3 4 5</p> <p>SKEWED LEFT</p> </div> </div>
SPREAD	<p>The variability or spread in the data points describes how far apart the data is from one another. This can also be represented by the <u>range</u>.</p>
CENTER	<p>The median and the mean both represent the center of the data.</p> <ul style="list-style-type: none"> • When the data is skewed, then the <u>median</u> is the best representation of the data. • When the data is symmetric, then the <u>mean</u> is the best representation of the data.

The number of TVs per household for Mrs. Jamison's class and Mr. Zimmerman's class are shown below.



What is the median number of TVs in Mrs. Jamison's class?

2

What is the median number of TVs in Mr. Zimmerman's class?

3

What is the range in number of TVs per household in Mrs. Jamison's class?

$$6 - 0 = 6$$

What is the range in number of TVs per household in Mr. Zimmerman's class?

$$7 - 0 = 7$$

Mark each statement below as TRUE or FALSE.

T The range of the number of TVs per household in Mrs. Jamison's class is less than the range of the number of TVs per household in Mr. Zimmerman's class.

F The median number of TVs per household is equal in both Mrs. Jamison's class and Mr. Zimmerman's class.

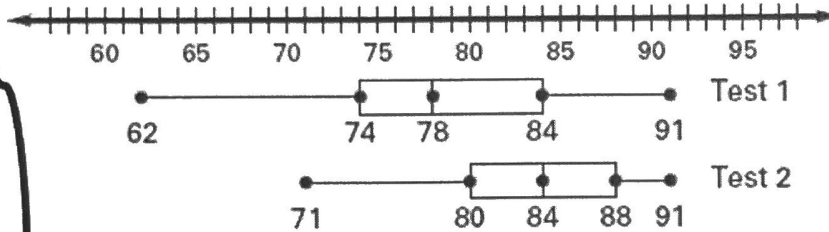
F The mode number of TVs per household for both Mrs. Jamison's class and Mr. Zimmerman's class is 3.

Looking at the data above, which class is more likely to have the higher mean (average) number of TVs? Why?

Mr. Zimmerman's. Most of the data falls higher to the right

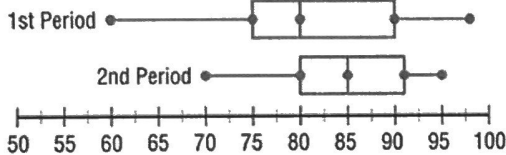
COMPARING BOX PLOTS

THESE ARE ALL THE DIFFERENT THINGS YOU CAN WRITE ABOUT WHEN IT ASKS YOU TO COMPARE THIS TYPE OF DATA DISPLAY.



- The upper quartile Q_3 are the same for both tests.
- The median for the second test is higher than the median for the first test.
- The maximum for the first test is the same as the max. for the second test.
- The scores for the 1st test are more spread out than the scores for the 2nd test.
- Both range ($91 - 62 = 29$) and the interquartile range ($84 - 74 = 10$) of the first test are greater than the range ($91 - 71 = 20$) and the interquartile range ($88 - 80 = 8$) of the second test.

Test Scores



Which period had the higher MEDIAN? 2nd

What percent of 1st period scored an 80 or above? 50%

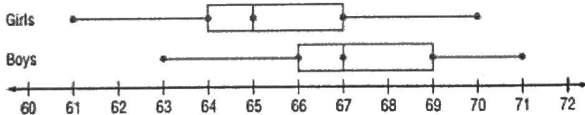
What percent of 2nd period scored an 80 or above? 75%

Which of the two classes performed better overall? Make at least two comparison statements to justify your choice.

2nd.

examples } They had a smaller range in scores.
75% vs. 50% scored an 80 or above.

Height (inches) of Girls and Boys



Make a comparison statement about the median height of girls versus boys. The median height of boys is 67" which is 2" taller than the median girl height

What percent of girls are 67 inches or less? 75%

What percent of boys are 67 inches or less? 50%