T1-14 Number: _____ Name: _____ Period: _____ Score: _____

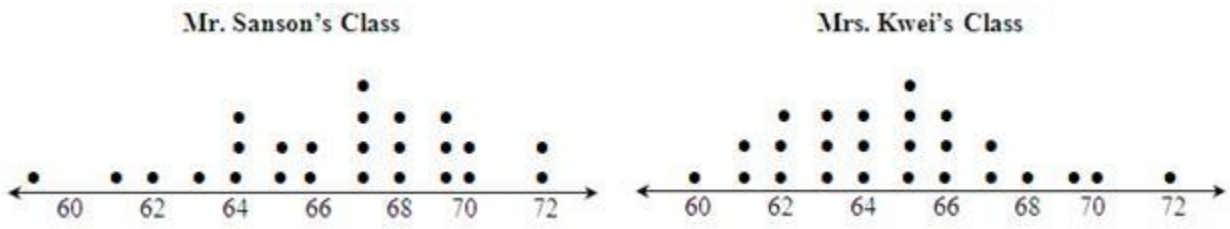
For questions 1-3, determine if the sample is representative and explain all of your thinking.

1. A survey was conducted to study the average cost of a cell phone bill in Utah.
   Population: Cell phone users in Utah
   Sample: People with an iphone were randomly selected from several cities in Utah.

2. A study was conducted to track the movement of grizzly bears in Yellowstone.
   Population: Grizzly Bears in Yellowstone
   Sample: Scientists randomly tag, release, and track 50 grizzly bears in Yellowstone.

3. A survey was conducted to determine the how effective shoe salesmen are at helping customers.
   Population: Shoe salesmen in the US.
   Sample: All salesmen who sell Nike brand shoes.

4. Class scores for Mr. Sanson's class and Mrs. Kwei's class are shown in the dot plots below.



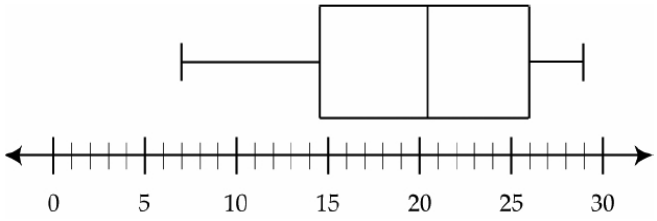
   Find the **median**, **range**, and **IQR** for each of the classes:

   Mr. Sanson's Class
   Median: _____
   Range: _____
   IQR: _____

   Mrs. Kwei's Class
   Median: _____
   Range: _____
   IQR: _____

5. Which class had more consistent scores (less variation)? How can you tell? Explain all of your thinking.

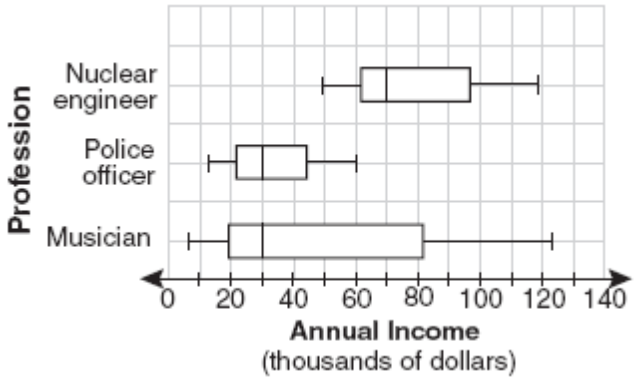
The accompanying box-and-whisker plot represents the cost, in dollars, of **twelve** CD's.



6. How many CD's cost less than $14.50? How do you know?

7. How many CD's cost between $14.50 and $26.00? How do you know?

The accompanying box-and-whisker plots can be used to compare the annual income of three professions.



8. Which profession has the highest median income?

9. Which profession has the most consistent income? How can you tell? Explain using proper vocabulary.

10. Which profession has the highest variance? Why do you think that is?