Homework (Online Learning Day 4)

Name: _____ **Date:** _____

1. Malika and Adrian prepared containers of potato salad at a deli. Each container was supposed to have a mass of one pound. The manager selected a random sample of containers prepared by each employee to check the mass of each container. The results are shown in the table below.

MASS OF EACH CONTAINER

Malika's Containers (pounds)	Adrian's Containers (pounds)
1.10	1.30
1.08	1.21
1.05	0.79
0.95	0.90
0.98	0.88

Which inference is *best* supported by these data?

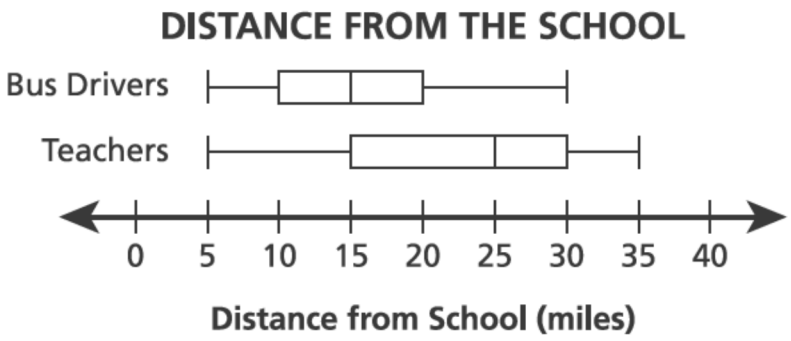
A. Malika will produce more containers with a mass of exactly one pound than Adrian will.

B. Adrian will produce more containers with a mass of exactly one pound than Malika will.

C. Most of Malika's containers will have a mass closer to one pound than most of Adrian's containers.

D. Most of Adrian's containers will have a mass closer to one pound than most of Malika's containers.

2. A principal gathered data about the distance, in miles, that his teachers and bus drivers live from the school. The box plots below show these data.



Based on the box plots, which statement is true?

A. The interquartile range of the distances for the bus drivers is twice the interquartile range of the distances for the teachers.

B. The range of the distances for the teachers is twice the range of the distances for the bus drivers.

C. The interquartile range of the distances for the bus drivers is 5 miles less than the interquartile range of the distances for the teachers.

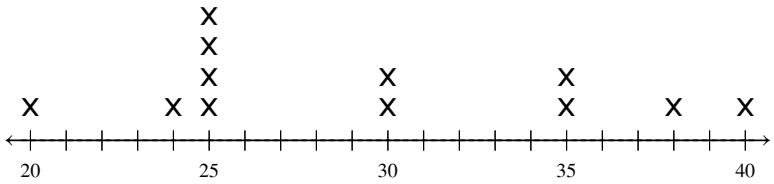
D. The range of the distances for the teachers is 5 miles less than the range of the distances for the bus drivers.

3. Laticia randomly selected 25% of the seventh-grade students in her school and asked them their favorite season. Of the students surveyed, 51 chose summer as their favorite season. Based on the data, what is the most reasonable prediction of the number of seventh-grade students in her school who would choose summer as their favorite season?

A. 15 B. 75 C. 150 D. 200

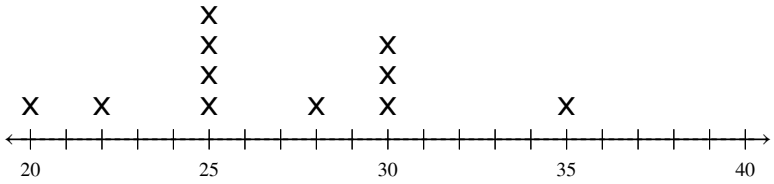
4. An electronic sign that showed the speed of motorists was installed on a road. The line plots below show the speeds of some motorists before and after the sign was installed.

BEFORE SIGN INSTALLATION



Speed (miles per hour)

AFTER SIGN INSTALLATION



Speed (miles per hour)

Based on these data, which statement is true about the speeds of motorists after the sign was installed?

A. The mean speed and the range of the speeds of the motorists decreased.

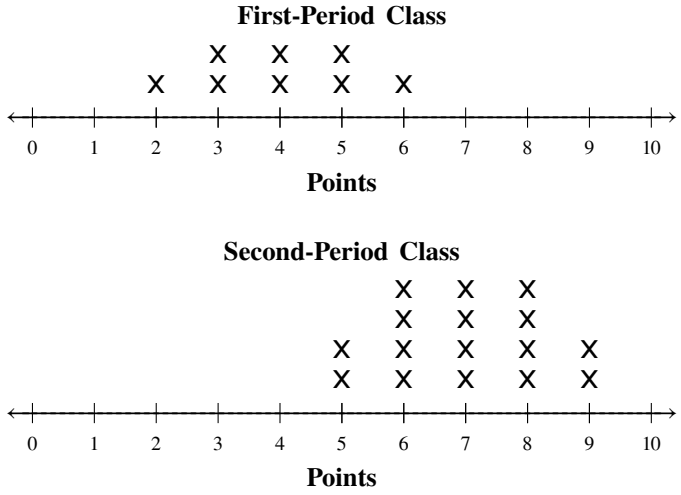
B. The median speed and the range of the speeds of the motorists increased.

C. The mean speed of the motorists decreased and the range of the speeds increased.

D. The median speed of the motorists increased and the range of the speeds decreased.

5. Ms. Andrews made the line plots below to compare the quiz scores for her first-period math class and her second-period math class. She gave the same quiz to each class.

QUIZ SCORES



What conclusion can Ms. Andrews make about the performance of her first- and second-period classes?

A. The first-period class had a higher median score than the second-period class.

B. The second-period class scores had a higher mean than the first-period class scores.

C. The first-period class scores had a greater range than the second-period class scores.

D. The second-period class scores had a greater mean absolute deviation than the first-period class scores.