

Support skills for Preview 3 Part B

In the next preview assignment and in the next class, you will need to be able to read and create dotplots.

- 1) In order to collect data for a statistics class, Malik attended a fireworks show and recorded the diameters of 20 consecutive bursts. The diameter of each burst is recorded to the nearest 50 feet in the following table:

400	350	350	400
250	450	550	450
450	400	400	500
500	350	400	600
650	250	400	350



Credit: herraez/iStock/Thinkstock

Part A: In order to create a dotplot for this data, determine the smallest number that will be represented on the number line for the dotplot. What is the largest number?

Part B: What increment should the numbers increase by on the number line? In other words, how much difference should there be between numbers? (Circle the correct answer.)

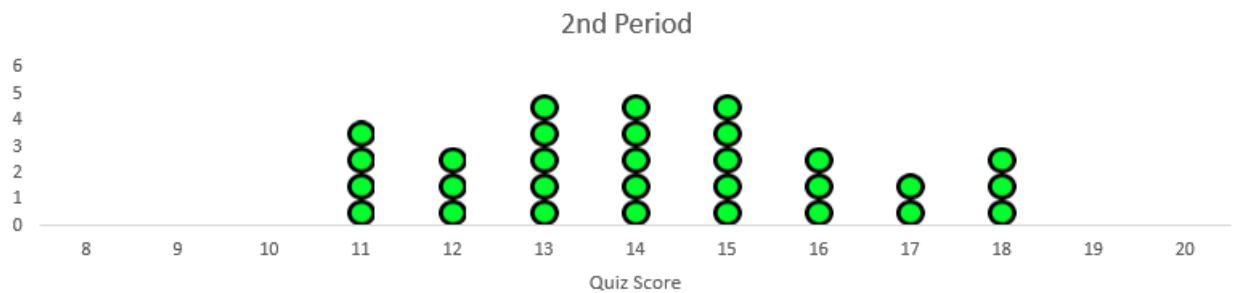
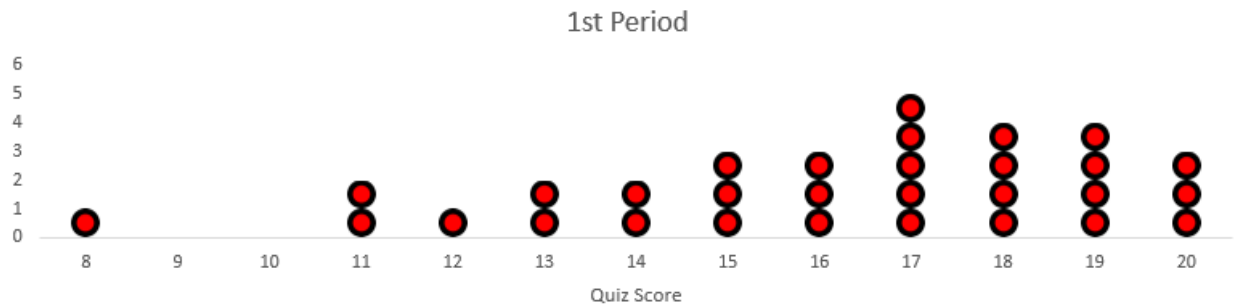
1's 10's 50's 100's 200's 500's

Part C: Use your answers to now construct a dotplot of Malik's fireworks data.

Part D: Does the data appear evenly distributed? Why or why not?

Part E: Estimate the center of the data.

2) The following scores on a 20-point quiz were recorded by a high school biology teacher in his first two periods:



Part A: Which period had the lowest score? Which period had the highest score?

Part B: Which period had the smallest variability in scores?

Part C: Without calculating, which period had the higher average? How do you know?