**Informal Inferences about Two Populations**

**Goal:** The goal of this activity is for students to compare to samples from two different populations. They will make inferences based on what they find from their dot plot.

**Materials:** This worksheet and a pencil.

**Directions:** This activity can be done individually or in a group. Have the students go through and work on the questions one at a time. After they have completed the worksheet ask them to share their answers with the class.

You want to determine the mean height of the tenth grade girls and boys at the high school. You randomly sample 15 boys and 15 girls. Below are their heights (in inches)

|  |  |
| --- | --- |
| Boys | Girls |
| 67.1 | 62.9 |
| 65.3 | 60.1 |
| 69.0 | 64.2 |
| 66.5 | 60.5 |
| 67.2 | 64.2 |
| 70.2 | 65.8 |
| 68.3 | 61.8 |
| 69.4 | 59.7 |
| 68.6 | 62.9 |
| 65.2 | 63.0 |
| 66.7 | 62.8 |
| 64.3 | 58.5 |
| 66.8 | 59.9 |
| 68.2 | 60.0 |
| 69.5 | 65.4 |

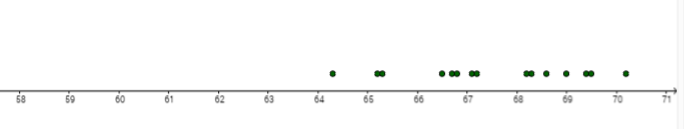
1. Find the mean height for the girls and boys (Round to the nearest tenth).

**Boys: 67.5**

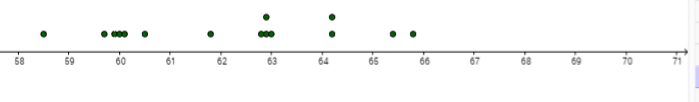
**Girls: 62.1**

1. Create a dot plot for each group.

Boys



Girls



1. Compare the dot plots. What do you notice? What inferences can you make about this data?

**The heights of the boys tend to be more to the right (taller) than the girls. An inference might be that the average height of boys at this age are more than the average height of girls or boys are taller than girls.**