Unit 1, Lesson 10

Measures of Center

Let's explore the relationship between measures of center and the shape of data.

10.1 Estimate: Lamp Post



How tall is the lamp post?

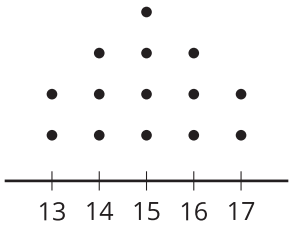
1. Record an estimate that is:

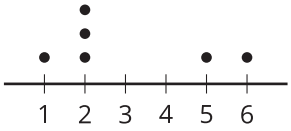
too low	about right	too high

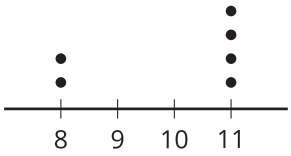
2. Explain your reasoning.

10.2 Balance Point

For each graph, estimate the balance point. The balance point is the point where you could rest the number line on your finger and it would be balanced. Draw a triangle at the point on the number line where you think the balance point is. Then calculate the mean and median for each data set.





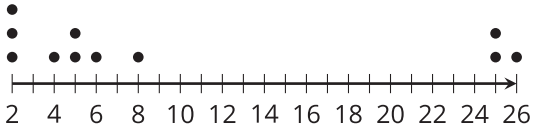


10.3 Mean vs. Median

When people join a certain gym, they are assessed on their fitness by doing several exercises. The results are given as a score between 1 and 100, and 100 represents peak fitness for the person's age. The gym claims they can improve scores for members after only 2 months.



After 2 months, 11 people are assessed again, and the number of points they improve is shown in the dot plot.



1. What is the mean improvement among these members?

2. What is the median?

3. Which measure of center is a better representation of the members' improvement? Explain your reasoning.