## Balancing Point

The balancing point of a data set is the point on a number line where the data distribution is balanced.

1. Use the instructions below to find the balancing point of the following set of numbers: 2, 3, 5, 6, 9.

Instructions:

Step 1: Drag a token and place it above each of the numbers in the set (2, 3, 5, 6, 9).

Step 2: Make sure "Find Mean" is selected.
Step 3: Click and drag the yellow triangle (fulcrum) until the green line is balanced (horizontal).

Step 4: Click on "Show Calculation" to have the computer calculate the mean.

## What do you notice?


2. Answer the following questions:
a. Use the balancing method to find the mean of each data set below:
i. $2,2,8,9,9$
ii. $1,3,4,7,8,10$
iii. $4,5,5,9,10,10$
b. Suppose a line with several tokens is balanced. What happens when you move one of the tokens to the right? To the left? Explain how this affects the mean.
c. What does the balancing point of a data set represent? Explain.

