

Modeling Activity

(Use with Lesson 3-7)

Finding Means

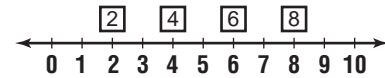
Materials: yardstick  and triangle or balance , pennies 

The mean of a set of numbers has a physical interpretation. You can model the mean with a number line by trying to “balance” a set of numbers on it.

Activity 1: Find the mean of the numbers 2, 4, 6, and 8.

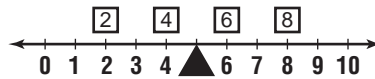
► Set the yardstick on the triangle and have a classmate hold each end.

► Place each set of pennies at the appropriate places on the number line.



► Imagine that the yardstick is a see-saw. Move the triangle until the yardstick balances.

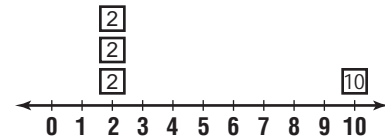
► The mean is the point on the number line at which the see-saw balances. In this case, the mean is 5.



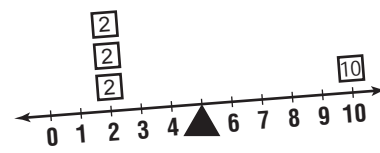
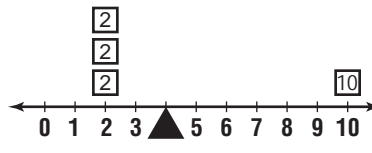
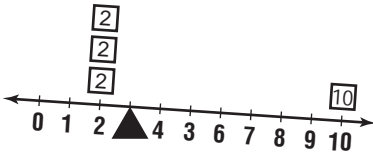
Activity 2: Find the mean of the numbers 2, 2, 2, and 10.

► Set the yardstick on the triangle and have a classmate hold each end.

► Place each set of pennies at the appropriate places on the number line.



► If you place the balance point at 3, the see-saw tips to the right. If you place the balance point at 5, the see-saw tips to the left. The see-saw balances at 4. Therefore, the mean is 4.



MODEL

Use a number line to find the mean of each set.

1. 1, 3, 7, 9 **5**

2. 1, 1, 3, 5, 5 **3**

3. 4, 8, 8, 8 **7**

4. 2, 5, 5, 5, 8 **5**

5. 0, 0, 0, 2, 8 **2**

6. 3, 3, 3, 9, 9, 9 **6**

WRITE

Add the numbers in the set and divide by the number of numbers in the set.

7. Explain how to find the mean of a set of numbers without using a number line.