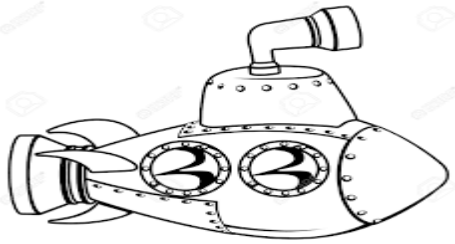


9.5 (pg. 420) Mean Absolute Deviation



Another *Measure of Variation* is the **mean absolute deviation**(MAD). This is an average of how much data values differ from the mean.

Finding the Mean Absolute Deviation **(MAD)**

Step 1: Find the mean of the data

Step 2: Find the distance between each data value and the mean.

Step 3: Find the sum of the distances in Step 2

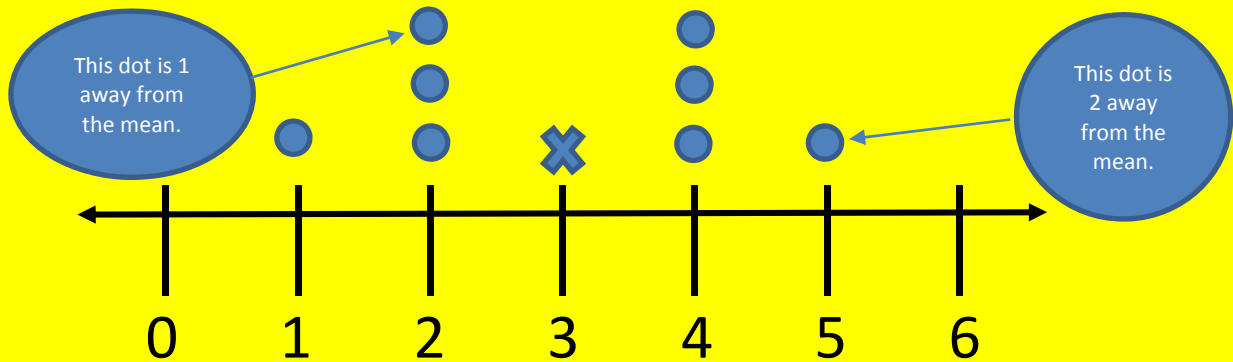
Step 4: Divide the sum in Step 3 by the total number of data values.



Example: 1 2 2 2 4 4 4 5

Step 1: Mean = 3 (24/8)

Step 2: You can use a dot plot to organize the data.



Step 3: $2+1+1+1+1+1+1+2=10$

Step 4: The mean absolute deviation is $10 \div 8 = 1.25$