

Name: _____

Date: _____

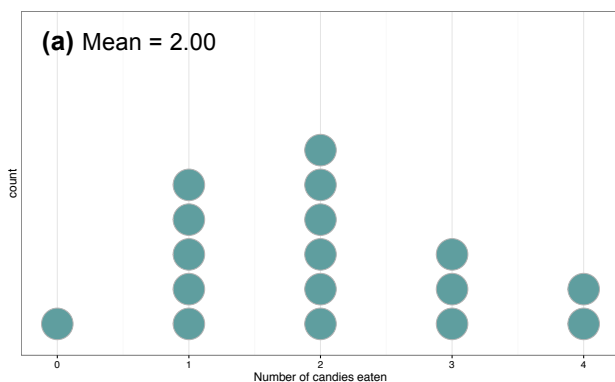
How Far Apart? (with standard deviation – SD)

Instructions:

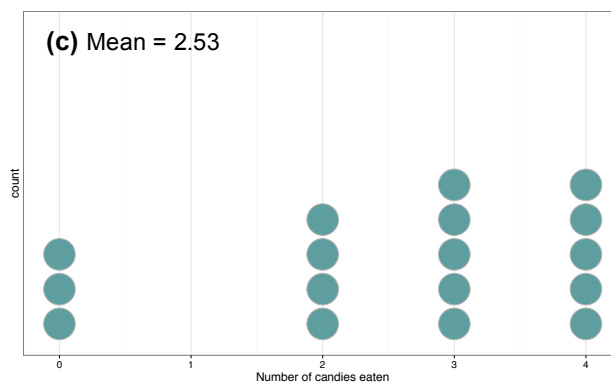
Each of the dotplots below depicts the number of candies eaten by a group of 17 high school students on different days of the week. The means are given.

Note: the plots are labeled (a) and (c) to correspond with the plots on the *Where is the Middle?* handout (LMR_2.5).

Answer questions (i) – (iii) below.



Shape: Left-Skewed Right-Skewed Symmetric



Shape: Left-Skewed Right-Skewed Symmetric

- i. Determine the shape of each distribution by circling the corresponding option below the dotplot.
- ii. Without doing any calculations - just by looking at the distributions - which one do you think will have a larger standard deviation? Why?

- iii. Calculate the standard deviation for each distribution by using the formula. Space has been provided to show your work on the following page.

$$s = \sqrt{\frac{\sum_{i=1}^n (x_i - \bar{x})^2}{n}}$$

Name: _____

Date: _____

**How Far Apart?
(with standard deviation – SD)**

Standard deviation for plot (a):

Standard deviation for plot (c):