Name:_____ Date:_____

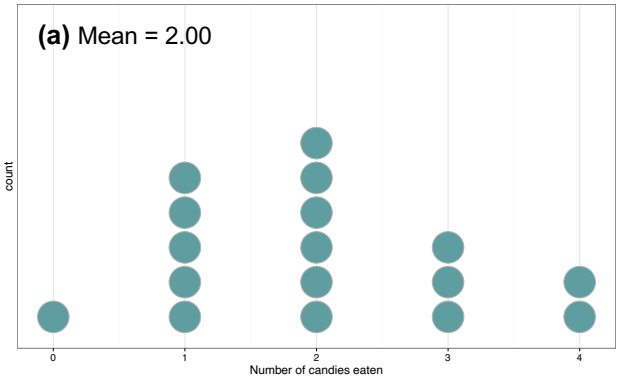
How Far Apart?
(with standard deviation – SD)

Instructions:

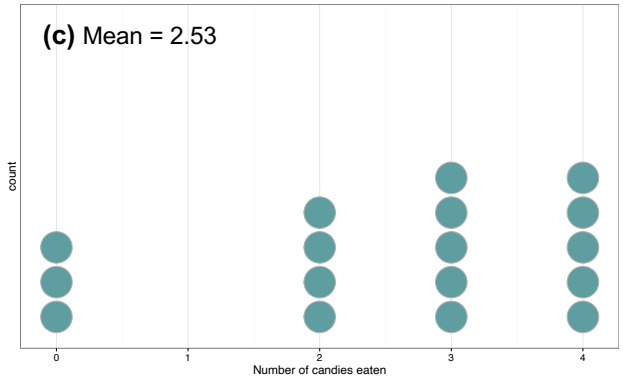
Each of the dotplots below depicts the number of candies eaten by a group of 17 high school students on different days of the week. The means are given.

Note: the plots are labeled (a) and (c) to correspond with the plots on the *Where is the Middle?* handout (LMR_U2_L3_B).

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):