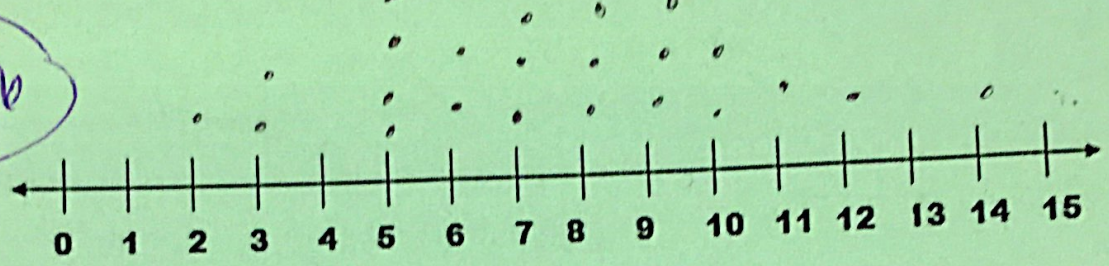
#2 Dot plots

Data Set: n=26 that is the # of data points

5 10 7 3 8 6 12 8 9 7 7 2 11
5 9 3 5 14 9 7 5 8 10 8 6 7

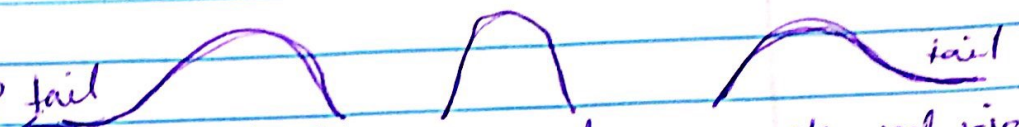
2, 3, 3, 5, 5, 5, 5, 6, 6, 7, 7, 7, 7, 7, 8, 8, 8, 8, 9, 9, 9, 10
10
11
12
14

n=26



* number must be equally spaced

Shape: tail



this graph is slightly skewed right

Outliers: this data has no outliers

Center: Median: 7
mean: 7.3 $= \frac{\Sigma}{n} = \frac{\text{Sum}}{n}$

Spread: range: 2 to 14
14 − 2 = 12

2, 4, 5, 5, 6, 6, 6, 7, 7, 7, 7, 8, 8, 9, 10, 10, 11, 12, 14, 15

Analysis of Dot Plots

Gavin has been working on his free throw shots and has been trying to see how many he can make in a row. He started keeping some stats on how well he was doing. The data is listed below.

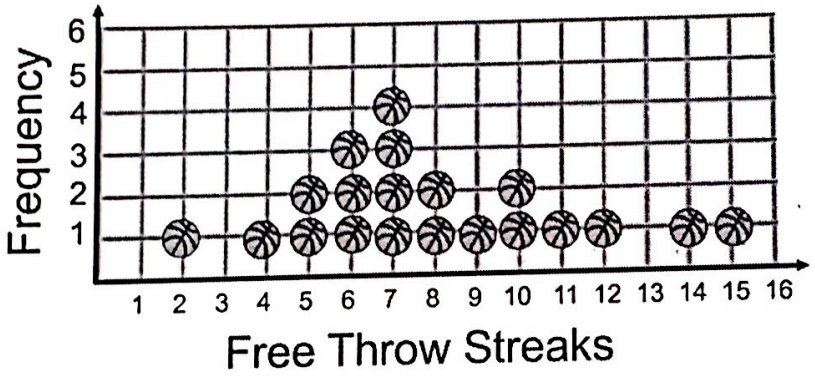
Gavin's Free Throw Streaks									
2	5	7	6	14	4	11	6	8	10
7	5	7	6	8	15	10	12	7	9

mode: 7
median: 7
mean: 7.95
range: 13

e. Find the mean, median, mode, and range for all of his streaks.

f. Which do you think best represents how well Gavin normally does at free throws? Explain why. median or mode, they are the same

g. A pictograph is one way to display data. It can show how often a score occurs, or its *frequency*. The pictograph below displays the free throw streaks of Gavin's first few rounds of play. Use the data distribution to answer the questions below:



v. How many streaks did Gavin have that had at least 8 in a row? 9

vi. How many streaks did Gavin have that had less than 7 in a row? 7

vii. How many streaks did Gavin have where he made 6 free throws in a row? 3

viii. What percent of Gavin's streaks were greater than 10 in a row? 4

h. Gavin's friend Jimmy has also been working on his free throws. His data is listed in the next table. Create a pictograph like the one for Gavin that can display Jimmy's data.

Jimmy's Free Throw Streaks									
5	7	4	11	9	8	10	6	6	7
9	12	9	8	10	8	5	9	13	5