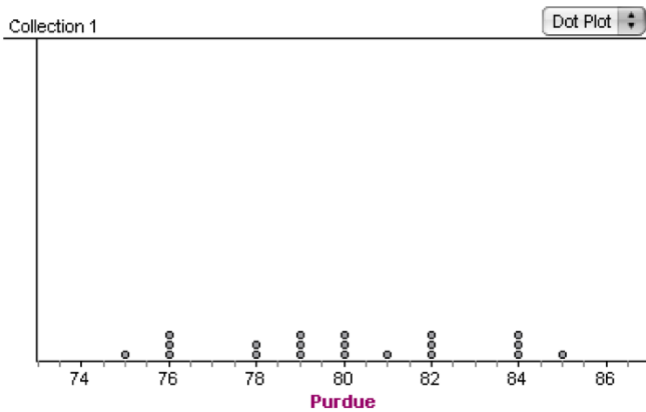


1.6: Standard Deviation

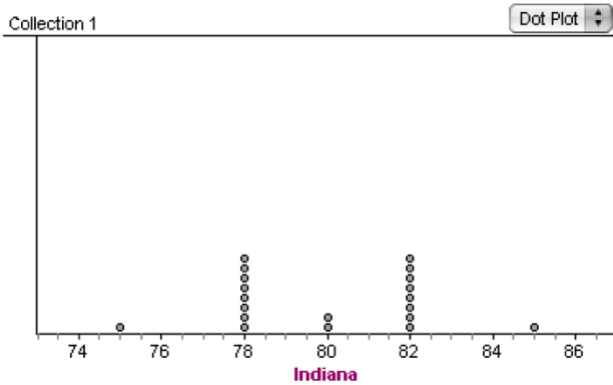
Standard Deviation	
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The dot plots represent the total points scored over 20 consecutive games for the Purdue Boilermakers and the Indiana Hoosiers in their 2017-2018 season.



Mean: _____ Range: _____

Estimated standard deviation: _____



Mean: _____ Range: _____

Estimated standard deviation: _____

Estimating the Standard Deviation:

Ten eighth grade students took an assessment to see how many words per minute they could type. The results are given below. Calculate the mean words per minute for the ten students and then estimate the standard deviation. Then type the data into fathom and see how close you were.

28, 29, 30, 31, 32, 34, 35, 35, 38, 38

Open the Fathom File titled "Estimate Mean and stddev". In this fathom file you can change the mean and standard deviation and investigate how each variable changes the histogram and box plot. Change the mean and standard deviation to large/small values and make notes on what happens to the histogram and box plot.

	Small Mean	Large Mean	Small Stddev	Large Stddev
Box Plot				
Histogram				

Creating Data Sets:

Work with a partner to create data sets with the following qualities using fathom.

1.) 14 numbers, mean is 8, standard deviation is 3

2.) 8 numbers, mean is 85, standard deviation is 1.5

3.) 10 numbers, mean is 15, standard deviation is 9