**Which Graph has the Larger Standard Deviation?**

You will find 15 pairs of graphs on the next pages. The mean for each graph () is given to the left of each dotplot.

**Discuss the Following Questions**

1. Indicate whether one of the graphs has a larger standard deviation than the other or if the two graphs have the same standard deviation.
2. Try to identify the characteristics of the graphs that make the standard deviation larger or smaller.

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| --- | --- | --- | --- |
| 1. |  | A μ = 3.33  B μ = 2.57 | A has a larger standard deviation than B  B has a larger standard deviation than A  Both graphs have the same standard deviation |
| 2. |  | A μ = 3.33  B μ = 2.33 | A has a larger standard deviation than B  B has a larger standard deviation than A  Both graphs have the same standard deviation |
| 3. |  | A μ = 3.67  B μ = 0.33 | A has a larger standard deviation than B  B has a larger standard deviation than A  Both graphs have the same standard deviation |
| 4. |  | A μ = 2.56  B μ = 2.50 | A has a larger standard deviation than B  B has a larger standard deviation than A  Both graphs have the same standard deviation |
| 5. |  | A μ = 2.50  B μ = 2.50 | A has a larger standard deviation than B  B has a larger standard deviation than A  Both graphs have the same standard deviation |
|  |  |  |  |
| 6. |  | A μ = 2.50  B μ = 2.50 | A has a larger standard deviation than B  B has a larger standard deviation than A  Both graphs have the same standard deviation |
| 7. |  | A μ = 2.00  B μ = 2.00 | A has a larger standard deviation than B  B has a larger standard deviation than A  Both graphs have the same standard deviation |
| 8. |  | A μ = 2.00  B μ = 1.93 | A has a larger standard deviation than B  B has a larger standard deviation than A  Both graphs have the same standard deviation |
|  |  |  |  |
| 9. |  | A μ = 2.00  B μ = 1.93 | A has a larger standard deviation than B  B has a larger standard deviation than A  Both graphs have the same standard deviation |
| 10. |  | A μ = 5.86  B μ = 5.43 | A has a larger standard deviation than B  B has a larger standard deviation than A  Both graphs have the same standard deviation |
| 11. |  | A μ = 5.64  B μ = 5.43 | A has a larger standard deviation than B  B has a larger standard deviation than A  Both graphs have the same standard deviation |
|  |  |  |  |
| 12. |  | A μ = 5.48  B μ = 5.33 | A has a larger standard deviation than B  B has a larger standard deviation than A  Both graphs have the same standard deviation |
| 13. |  | A μ = 5.00  B μ = 8.29 | A has a larger standard deviation than B  B has a larger standard deviation than A  Both graphs have the same standard deviation |
| 14. |  | A μ = 3.38  B μ = 6.15 | A has a larger standard deviation than B  B has a larger standard deviation than A  Both graphs have the same standard deviation |
|  |  |  |  |
| 15. |  | A μ = 3.38  B μ = 5.86 | A has a larger standard deviation than B  B has a larger standard deviation than A  Both graphs have the same standard deviation |