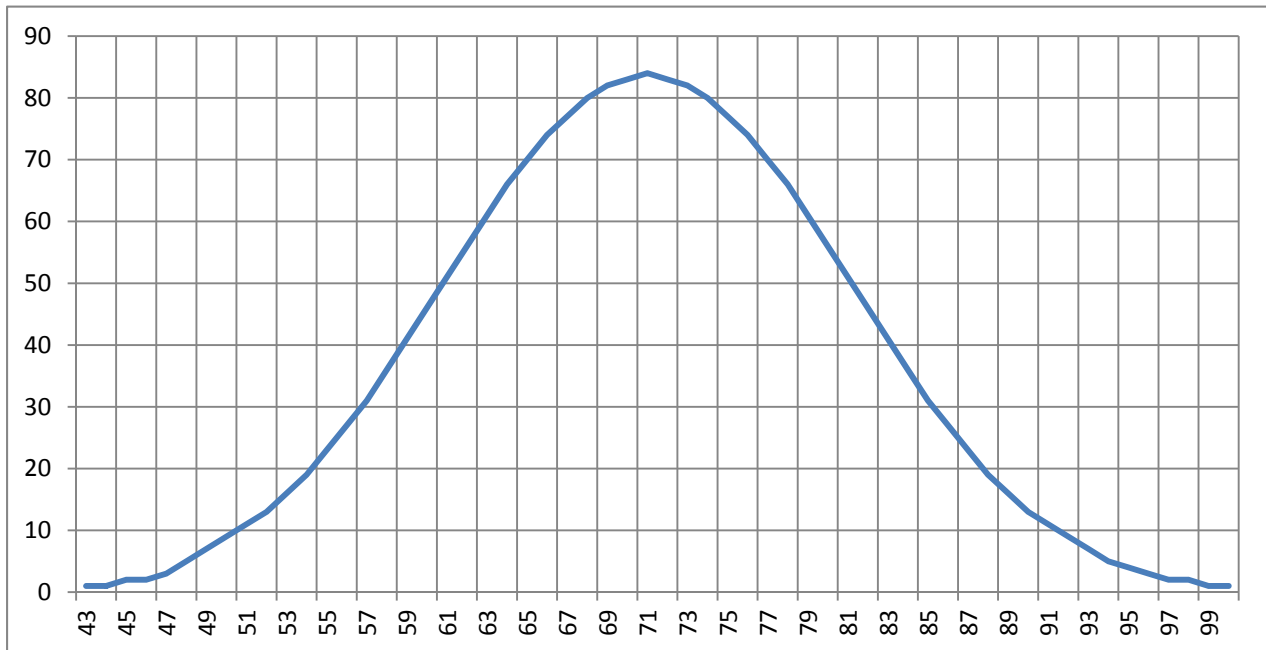


Exploring the World of Math

Name: _____ Date: _____

Normalization Data Review



1. What is the mean for this normal data curve?
a. 71.5 b. 43 c. 99 d. 85
2. What is the familiar name of a normalization curve? _____
3. What is the name of the point on the curve where the standard deviation occurs? _____
4. Indicate point P on the curve.
5. What is the standard deviation for this normal data curve?
a. 71.5 b. 10.5 c. 81.5 d. 99.5
6. What is the measurement for Q1?
a. 78.6 b. 64.4 c. 71.5 d. 71.5
7. What is the measurement for Q4?
a. 78.6 b. 64.4 c. 71.5 d. 71.5
8. If we collect 2074 data points, estimate how much data is between the standard deviation on both sides of the mean? _____
9. If we collect 2074 data points, estimate how much data is between twice the standard deviation on both sides of the mean? _____
10. If we collect 2074 data points, estimate how much data is between three times the standard deviation on both sides of the mean? _____

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11. In the set $\{0,1,2,3,4,5,6,7,8,9,10\}$, the median is
a. 0 b. 5 c. 5.5 d. 6
12. In the set $\{0,1,2,3,4,5,6,7,8,9,10\}$, the mode is
a. 0 b. 5 c. 7 d. none
13. In the set $\{0,1,2,3,4,5,6,7,8,9,10\}$, the range is
a. 0 to 10 b. 5 c. 7 d. 2
14. Another word for mean is
a. nice b. average c. median d. mode

15. Label the process for computing the standard deviation from 1 to 5

	Compute the square root of the added sums divided by the number of data points
	Find the mean of the data points
	Add up all the sums of the squared differences of data points minus the mean
	Square the difference of each data point minus the mean
	Divide the added squared differences by the number of data points

16. Compute the mean and standard deviation for the following set.

$\{1,3,5,8,12,9,7,4,2,1\}$

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Review: Weighted Average

17. Captain Debra Smith is arranging for security during the football championship game in her city. She is preparing the risk assessment for her team. She rates each category from 1 to 5 with 5 being the most prepared. Contingency planning is weighted at 15%. Training of personnel is rated at 25%. Environmental conditions are weighted at 10%. Timing for the event is rated at 30% and the level of supervision is rated at 20%. Circle the area of security with the lowest score and is our area of the most concern.

Category	Securing the area prior to game	Bomb detection and disposal	Quick Reaction Team	Aviation Support and Transportation
Planned	4	3	5	3
Trained	3	3	4	4
Environment	2	2	1	3
Time to complete	5	4	3	3
Supervision	4	4	3	5
Weighted Score				