

Attachment one:

Example:

Given Data: 10,9,3,0,2,5,6,6,4,7

Step 1: Organize data: 0,2,3,4,5,6,6,7,9,10

Step 2: Mode: 6

Step 3: Median: 5 and 6 Since there are two middle numbers add them and divide by two.

$$\frac{5+6}{2} = 5.5$$

Step 4: Mean: $\frac{0+2+3+4+5+6+6+7+9+10}{10} = 5.2$

Step 5: Range: $10 - 0 = 10$

Step 6: Deviation: number – mean = deviation

$$0 - 5.2 = -5.2$$

$$2 - 5.2 = -3.2$$

$$3 - 5.2 = -2.2$$

$$4 - 5.2 = -1.2$$

$$5 - 5.2 = -0.2$$

$$6 - 5.2 = 0.8$$

$$6 - 5.2 = 0.8$$

$$7 - 5.2 = 1.8$$

$$9 - 5.2 = 3.8$$

$$10 - 5.2 = 4.8$$

Step 7: Variance: $\frac{(-5.2)^2 + (-3.2)^2 + (-2.2)^2 + (-1.2)^2 + (-0.2)^2 + (0.8)^2 + (0.8)^2 + (1.8)^2 + (3.8)^2 + (4.8)^2}{10 - 1}$
 $= 9.51$

Step 8: Standard deviation: $(9.51)^{1/2} = 3.08$

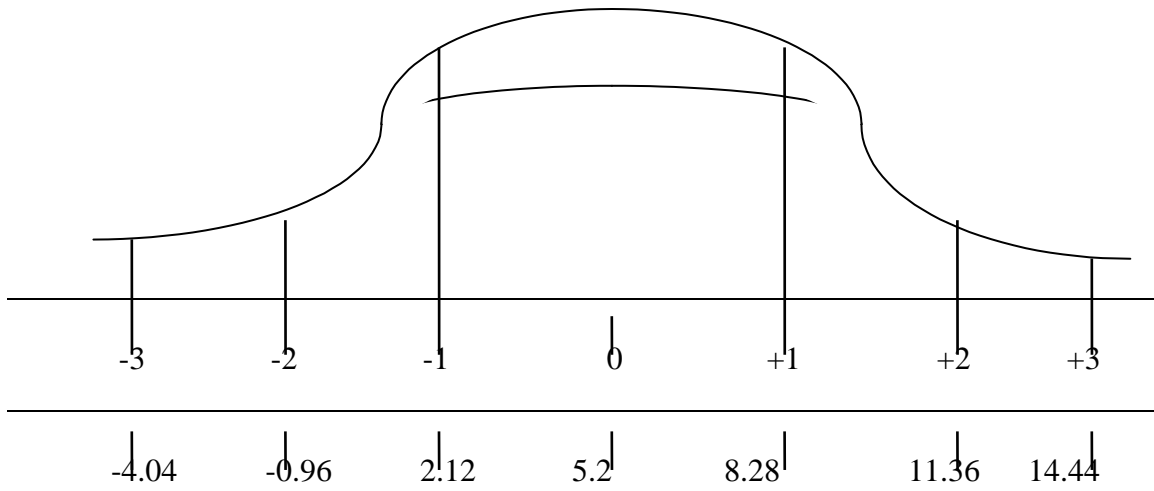
Step 9: +1 standard deviation: $5.2 + 3.08 = 8.28$
+2 standard deviation: $5.2 + 2(3.08) = 11.36$
+3 standard deviation: $5.2 + 3(3.08) = 14.44$
-1 standard deviation: $5.2 - 3.08 = 2.12$
-2 standard deviation: $5.2 - 2(3.08) = -0.96$
-3 standard deviation: $5.2 - 3(3.08) = -4.04$

Normal Distribution Curve:

Central Tendencies and Normal Distribution Curve

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Attachment two:

Central Tendencies and Normal Distribution Curve

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Worksheet:

TITLE: _____

DATA:

ORGANIZE DATA:

MODE: _____

MEDIAN: _____

MEAN: _____

RANGE: _____

DEVIATION: _____ NUMBER – MEAN:

VARIANCE: _____

STANDARD DEVIATION: _____

+1 STANDARD DEVIATION: _____

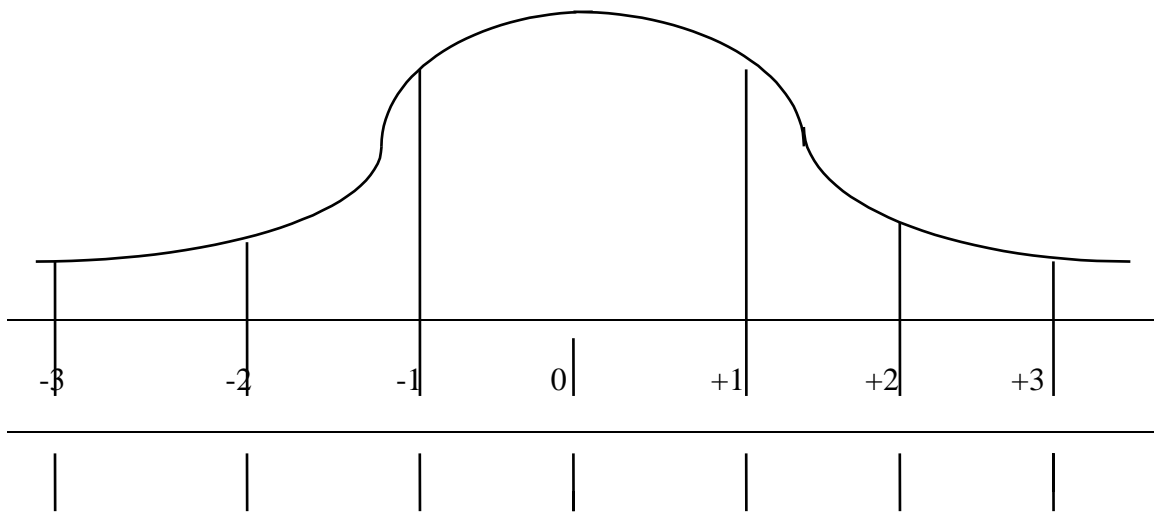
+2 STANDARD DEVIATION: _____

+3 STANDARD DEVIATION: _____

-1 STANDARD DEVIATION: _____

-2 STANDARD DEVIATION: _____

-3 STANDARD DEVIATION: _____



Attachment three:

Central Tendencies and Normal Distribution Curve

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Rubric:

Organizing data:	1 point
Mode:	1 point
Median:	1 point
Mean:	1 point
Range:	1 point
Deviation:	1 point
Variance:	1 point
Standard Deviation:	1 point
Normal Distribution Curve:	<u>2 point</u>
Total:	10 points = Excellent 9-7 points = Good 6 and below = Redo

Attachment four:

Data:

Data from Class test scores: 50, 70, 80, 75, 90, 95, 88, 77, 79, 82, 85, 79, 97, 99,
65, 67, 73, 76, 83, 92, 87, 93, 84, 81, 60