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06 - Standard Deviation and the Normal Model

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|  |  |  |  |  |  |  | 3S |  | 4E |  M |  P |  I |  R |  I |  C |  A |  L |  R |  U |  L |  E |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  T |  |  |  |  |  |  M |  |  O |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  A |  |  |  |  |  |  A |  |  R |  | 5P |  |  |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  N |  |  |  |  |  |  L |  |  E |  |  A |  |  |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  D |  |  |  |  |  |  P |  |  |  | 6R |  E |  S |  C |  A |  L |  I |  N |  G |  |  |  |  |
|  |  |  |  |  |  |  |  A |  | 7S |  |  |  |  R |  | 8V |  |  A |  |  |  |  |  |  |  |  |  |  |  |  |
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|  |  |  |  |  |  |  |  V |  |  A |  |  |  |  I |  | 11N |  O |  R |  M |  A |  L |  |  |  |  |  |  |  |  |  |
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|  |  |  |  |  | 12S |  T |  A |  N |  D |  A |  R |  D |  I |  Z |  E |  D |  V |  A |  L |  U |  E |  |  |  |  |  |  |  |  |
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| **Across****4.** In a Normal model, about 68% of the values within 1 standard deviation of the mean, about 95% within 2 standard deviations, and about 99.7% within 3 standard deviations.**6.** The process of multiplying each value by a constant that multiplies both the measures of position and measures of spread by that constant.**9.** center of the Normal model.**10.** Numerical attribute of a set of data.**11.** model used for certain unimodal, symmetric distributions.**12.** The value found by subtracting the mean and dividing by the standard deviation. | **Down****1.** Display to help assess whether a distribution of data is approximately Normal.**2.** Tells how many standard deviations a value is from the mean.**3.** The square root of the variance.**5.** Numerical attribute of a model.**7.** Type of Normal model with mean 0 and standard deviation 1.**8.** The sum of the squared deviations from the mean, divided by the count minus one. |