

Grade 12 Math of Data Management

MDM4U

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December 1, 2025

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Chapter 2

Normal Distribution

2.1 Normal Distributions

2.1.1 Definitions

Definition 2.1.1 (Normal Distribution)

The properties of normal distributions can be described as this:

1. Graphical displays are mound-shaped histograms that are also **Bell-Shaped**
 2. The MEAN, MEDIAN and MODE fall on the line of symmetry
 3. Denoted by the notation $X \sim N(\mu, \sigma^2)$ where μ is the mean and σ is the standard deviation
 4. Modelled by a **NORMAL CURVE** where the curve passes through the midpoint of the top of each bar of the histogram of the data.
 5. The standard normal curve has a mean of 0 and a standard deviation of 1
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