

ST107 Quantitative Methods

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Revision Document

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May 2019

Abstract

This is a review of mathematics lectures by James Abdey in Lent Term of 2019. The notes are mine fully and may not be authentic to the lecturer's as they have been modified.

The format of this material is usually recounted slide by slide but some slides may be merged together as the material fits appropriately with one another.

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1 Data Viz and Descriptive Statistics

This section covers critical points to remember for the exam.

Note 1.1: Variables

There are two types of variables considered within the course:

1. **Discrete:** thing you can count such as the number of passengers on a flight and the number of telephone calls received each day in a call centre
2. **Continuous:** things you can measure such as height, weight and time all to several decimal places

Data can also be presented in a variety of different ways such as Dot Plots, Histograms along with Stem and Leaf diagrams. All of these could be asked in the exam.

Note 1.2: Classifying Variables

There are two main ways of classifying variables:

- **Measurable:** where there is a generally recognised method of measuring the variable of interest e.g. cm for height
- **Categorical:** where no such method exists
 - *Ordinal:* categorised into a sensible order
 - *Nominal:* categorised by names