Edinburgh Napier
UNIVERSITY

Introduction to Mathematics

Tutorial

The purpose of this tutorial is to revise basic mathematics, such as matrix, probability and statistics.

Tutorials about functions are based on website: mathtutor:

http://www.mathtutor.ac.uk/functions/inroductiontofunctions

1. Introduction to functions
2. Linear functions
3. Polynomial functions
4. Exponential and logarithm function

Go through the text version.

Tutorials about statistics, probability and matrix are based on website: **Free Online Tutorials: Statistics and Matrix Algebra**

http://stattrek.com/tutorials/free-online-courses.aspx

5. Statistics and Probability
   Go to Tutorial → AP Statistics

   Begin the tutorial, and go through the following lessons, starting from lesson 1:
   1) What are variables?
   2) Populations and Samples
   3) The mean and median
   4) How to measure variability
   5) Measures of Position
   6) Data patterns in statistics
   7) What is Dotplot?
   8) Bar charts and histograms
   9) What is a scatterplot
   10) Correlation Coefficient

   Then go to Probability by clicking the main menu at the top right, select Tutorials → Probability. Begin Tutorial

   11) What is Probability?
   12) Sets and subsets
   13) What is a statistical experiment?
   14) Rules of probability
   15) How to solve probability problems

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6. Matrix
   Go to Tutorials → Matrix Algebra
   Begin the tutorial, and go through the following lessons:
   1) What is a matrix
   2) Types of matrices
   3) Matrix addition and matrix subtraction
   4) Matrix multiplication

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