

IB DP IB Mathematics Analysis and approaches SL 2022
(IB1)

Summary

SL Chapter 7 - Correlation and Regression

| Subject | Year | Start date | Duration |
|--------------------------------------|------|-------------|----------|
| Mathematics: analysis and approaches | IB1 | Week 1, May | 1 week |

Course Part

Description

In this unit you will explore how to model the relationships between two sets of data.

Inquiry & Purpose

Inquiry / Higher Order Questions

| Type | Inquiry Questions |
|---------------|---|
| Concept-based | Does correlation always imply causation? |
| Skills-based | What is the importance of the domain of data with regards to estimating models? |

Curriculum

Aims

Appreciate how developments in technology and mathematics influence each other

Objectives

Technology: Use technology accurately, appropriately and efficiently both to explore new ideas and to solve problems.

Syllabus Content

Topic 4: Statistics and probability

SL Content

SL 4.4

Linear correlation of bivariate data.

Pearson's product-moment correlation coefficient, r .

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Scatter diagrams; lines of best fit, by eye, passing through the mean point.

Equation of the regression line of y on x .

Use of the equation of the regression line for prediction purposes.

Interpret the meaning of the parameters, a and b , in a linear regression $y = ax + b$.

SL 4.10

Equation of the regression line of x on y .

Use of the equation for prediction purposes.

ATL Skills


Approaches to Learning


Thinking


- In this unit, we will
 - set students a task which required higher-order thinking skills (such as analysis or evaluation)
 - include a reflection activity
 - make a link to TOK


Developing IB Learners

Learner Profile

 Inquirers

 Knowledgeable

 Thinkers

 Reflective