

Class 12 Algebra

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Introduction

These videos will try to cover few Class 12 Algebra course.

Source of these slides can be found at <https://github.com/shivshankardayal/Class-12-Algebra>

We will solve lots of problems and solutions will be presented as math cannot be learned without solving problems.

Syllabus

- ▶ Theory of Numbers
- ▶ General Theory of Continued Fractions
- ▶ Symmetric and Alternating Functions, Substitution
- ▶ Theory of Equations
- ▶ Complex Numbers
- ▶ Determinants and Matrices
- ▶ Arithmetic Progression
- ▶ Geometric Progression
- ▶ Harmonic Progressions
- ▶ Theorems About Progressions
- ▶ Surds and Imaginary Quantities
- ▶ Polynomials
- ▶ Quadratic Equations

- ▶ Miscellaneous Equations
- ▶ Mathematical Induction
- ▶ Binomial Theorem, Positive Integral Index
- ▶ Binomial Theorem, Any Index
- ▶ Multinomial Theorem
- ▶ Logarithm
- ▶ Exponential and Logarithmic Series
- ▶ Inequalities
- ▶ Limiting Values and Vanishing Fractions
- ▶ Convergency and Divergency of Series
- ▶ Undetermined Coefficients
- ▶ Partial Fractions
- ▶ Recurring Series
- ▶ Continued Fractions

- ▶ Indeterminate Equations of the First Degree
- ▶ Recurring Continued Fractions
- ▶ Indeterminate Equations of the Second Degree
- ▶ Summation of Series
- ▶ Infinite Products
- ▶ Permutation and Combination
- ▶ Probability