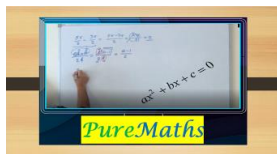


# Year 11 Mathematical Methods 1 & 2 – Video Content

## Unit 1



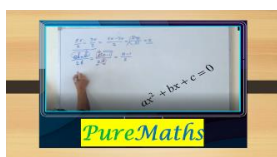
35 videos – 49.3 hours

Unit 1 contains the following chapters:

- **Linear Equations and Graphs** (7 videos, 10.4 hours)
- **Quadratic Polynomial. Quadratic Equations & Graphs** (9 videos, 12.5 h)
- **Cubic Polynomial. Cubic Equations and Graphs** (6 videos, 7.2 hours)
- **Functions, Relations and Transformations of Graphs** (6 videos, 9.8 h)
- **Exponential & Log. Equations & Graphs – Part One** (7 videos. 9.4 h)

Content of each chapter is given below.

### Linear Equations and Graphs



7 videos – 10.4 hours

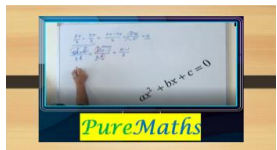
Session 1 - **Linear Equations. Concepts and Practice.** (1 video – 1.6 h)

Session 2 - **Linear Simultaneous Equations.** (2 videos. Part 1 – 1.6h and Part 2 – 1.7h)

Session 3 - **Linear relation - Straight line graph.** (1 video – 1.6h)

Session 4 - **Linear Relation. Practice.** (3 vid. Part 1 – 1.7h, Part 2 – 1.1h and Part 3 – 1.1h)

### Quadratic Polynomial. Quadratic Equations and Graphs



9 videos – 12.5 hours

Session 5 - **Factorising Quadratic Polynomial and Solving Quadratic Equations**  
(2 videos. Part 1 – 1.7h and Part 2 – 1.6 h)

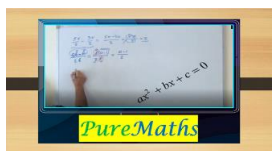
Session 6 - **Quadratic Function (Parabola). Features and Examples.**  
(2 videos. Part 1 – 1.5h and Part 2 – 1.1h)

Session 7 - **Quadratics - Practice 1.** (1 video – 1.5h)

Session 8 - **Quadratics - Practice 2.** (2 videos. Part 1 – 1.4h and Part 2 – 1.0h)

Session 9 - **Quadratics - Practice 3.** (2 videos. Part 1 – 1.3h and Part 2 – 1.4h)

### Cubic Polynomial. Cubic Equations and Graphs



6 videos – 7.2 hours

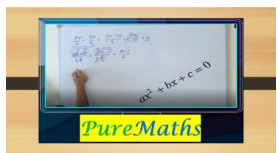
Session 10 - **Cubic Polynomial** (2 videos. Part 1 – 1.0h and Part 2 – 1.1h)

Session 11 - **Cubic Equations.** (1 video – 1.2h)

Session 12 - **Cubic Functions.** (2 videos. Part 1 – 1h and Part 2 – 1h)

Session 13 - **Cubic Equations and Functions. Practice.** (1 video – 1.9h)

### Functions. Relations and Transformation of Graphs



6 videos – 9.8 hours

Session 14 - **Functions and Relations.** (1 video – 1.5h)

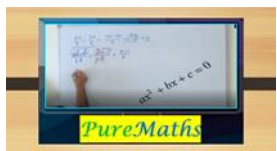
Session 15 - **Transformation of graphs.** (1 video – 1.5h)

Session 16 - **Transformation of graphs – Practice.** (1 video – 1.8h)

Session 17 - **Transformations of graphs. Exam Style Questions.**  
(2 videos. Part 1 – 1.4 h, and Part 2 – 2 h)

Session 18 - **Polynomial (Quadratic and Cubic) Equations and functions - Exam style Questions** (1 video 1.6h)

### Exponential and Logarithmic Equations and Graphs – Part One



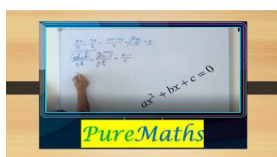
7 videos – 9.4 hours

Session 19 - **Index and Log Laws.** (3 videos. Part 1 – 1.6h, Part 2 – 1.3h and Part 3 – 1h)

Session 20 - **Exponential and Logarithm Equations - Concepts and Examples.** (1 vid. 1.6h)

Session 21 - **Exponential Equations. Practice.** (3 videos. Part 1 – 1.6h, Part 2 – 1h and Part 3 – 1.3h)

## Unit 2



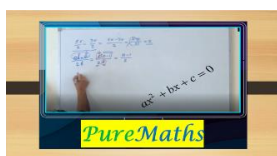
31 videos – 43.5 hours

Unit 2 contains the following chapters:

- **Exponential and Log. Equations and Graphs – Part Two** (4 videos, 6.5 h)
- **Trigonometry** (8 vid. 11.9 hrs)
- **Differentiation, Integration and Application – Part One** (7 videos, 9.3 h)
- **Differentiation, Integration and Application – Part Two** (6 videos, 7.7 h)
- **Differentiation, Integration and Application – Part Three** (6 vid. 8.1 h)

Content of each chapter is given below.

### Exponential and Logarithmic Equations and Graphs – Part Two



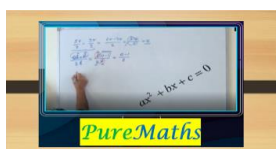
4 videos – 6.5 hours

Session 22 - *Logarithmic Equations. Practice.* (1 video – 1.8h)

Session 23 - *Exponential and Logarithmic Functions.* (1 video – 1.8h)

Session 24 - *Exponential and Logarithmic Equations and Functions. Practice*  
(2 videos. Part 1 – 1.4h and Part 2 – 1.5h)

### Trigonometry



8 videos – 11.9 hours

Session 25 - *Trigonometry - Ratios Unit Circle and Exact Values.* (1 video – 1.6h)

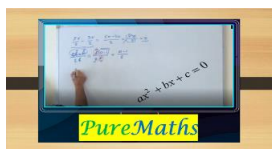
Session 26 - *Trigonometric Functions.* (1 video – 1.5h)

Session 27 - *Trigonometric Equation.* Concepts and Examples.  
(2 videos – Part 1 – 1.5h and Part 2 – 1h)

Session 28 - *Trigonometry. Practice 1* (2 videos. Part 1 – 1.5h and Part 2 – 1.4h)

Session 29 - *Trigonometry. Practice 2* (2 videos. Part 1 – 1.5h and Part 2 – 1.9h)

### Differentiation and Integration and their Application – Part One



7 videos – 9.3 hours

Session 30 - *Rate of change. Definitions and Examples.* (2 videos. Part 1 – 1.3 h and Part 2 - 0.9 h)

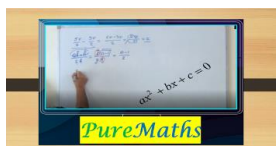
Session 31 - *Differentiation. Theory. Concepts and Examples.* (1 video – 1.6h)

Session 32 - *Differentiation. Practice 1* (1 video – 1.7h)

Session 33 - *Differentiation Practice 2* (2 videos. Part 1 – 1.1h and Part 2 – 1.3h)

Session 34 - *Further differentiation. Product. Quotient and Chain rule.* (1 video – 1.4h)

### Differentiation and Integration and their Application – Part Two



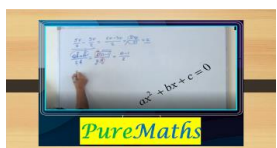
6 videos – 7.7 hours

Session 35 - *Application of Differentiation. Theory. Concepts and Examples*  
(2 videos. Part 1 – 1.1h and Part 2 – 1.5h)

Session 36 - *Application of Differentiation. Practice 1.* (2 videos. Part 1 – 1.6 h and Part 2 – 1.2 h)

Session 37 - *Application of Differentiation. Practice 2.* (2 videos. Part 1 – 1.2 h and Part 2 – 1.2 h)

### Differentiation and Integration and their Application – Part Three



6 videos – 8.1 hours

Session 38 - *Application of Differentiation. Exam questions.*  
(2 videos. Part 1 – 1.1h and Part 2 – 1.3h)

Session 39 - *Integration and Application of Integration. Rules. Concepts. Examples.*  
(2 videos. Part 1 – 1.6h and Part 2 – 1.2h)

Session 40 - *Application of Integration. Practice.* (2 videos. Part 1 – 1.6h, Part 2 – 1.3h)