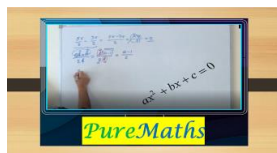


# Year 9 Mathematics – Video Content

## Semester 1



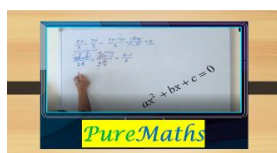
27 videos – 36 hours

Semester 1 contains the following chapters:

- **Arithmetic and Algebra – Part One** (6 videos, 8 hours)
- **Arithmetic and Algebra – Part Two** (5 videos, 6.7 hours)
- **Pythagoras theorem and Trigonometry** (8 videos, 10.8 hours)
- **Index Laws and Surds** (8 videos, 10.5 hours)

Content of each chapter is given below.

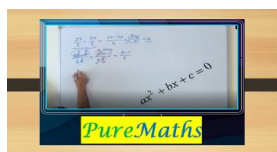
### Arithmetic and Algebra – Part One



6 videos – 8 hours

- Session 1 - **Revision of Arithmetic**. (2 videos. Part 1 – 1.7 h and Part 2 – 0.7 h)
- Session 2 - **Revision of Arithmetic. Practice 1** (1 video – 1.6 h)
- Session 3 - **Revision of Arithmetic. Practice 2** (1 video – 1.5 h)
- Session 4 - **Algebra. Rules and Examples**. (2 videos. Part 1 – 1.5 h and Part 2 – 1 h)

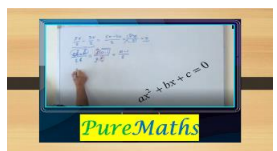
### Arithmetic and Algebra – Part Two



5 videos – 6.7 hours

- Session 5 - **Algebra. Practice 1** (1 video - 1.3 h)
- Session 6 - **Algebra. Practice 2** (1 video - 1.3 h)
- Session 7 - **Algebra. Practice 3** (1 video – 1.4 h)
- Session 8 - **Algebra. Practice 4**. (2 videos. Part 1 – 1.1 h and Part 2 – 1.6 h)

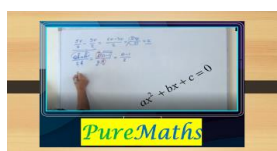
### Pythagoras Theorem and Trigonometry



8 videos – 10.8 hours

- Session 9 - **Pythagoras Theorem. Definition and Practice**. (2 videos. Part 1 – 1.3 h and Part 2 – 1.2 h)
- Session 10 - **Trigonometry. Definition. Terminology and Examples**. (1 video – 1.7 h)
- Session 11 - **Trigonometry. Further Definition. Terminology and Examples** (1 video – 1.4 h)
- Session 12 - **Trigonometry. Practice 1**. (2 videos. Part 1 – 0.8 h and Part 2 – 1.5 h)
- Session 13 - **Trigonometry. Practice 2**. (2 videos. Part 1 – 1.5 h and Part 2 – 1.4 h)

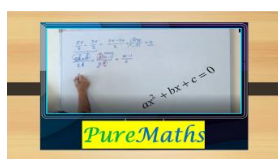
### Index Laws and Surds



8 videos – 10.5 hours

- Session 14 - **Index Law. Rules and Practice 1** (1 video – 1.2 h)
- Session 15 - **Index Law. Practice 2** (1 video – 1.3 h)
- Session 16 - **Index Law. Practice 3** (1 video – 1.8 h)
- Session 17 - **Index Law. Practice 4** (1 video – 1.4 h)
- Session 18 - **Surds. Concepts and Practice 1**. (2 videos. Part 1 – 1.4 h and Part 2 – 0.8 h)
- Session 19 - **Surds. Practice 2** (1 video – 1.1 h)
- Session 20 - **Surds. Practice 3** (1 video – 1.5 h)

## Semester 2



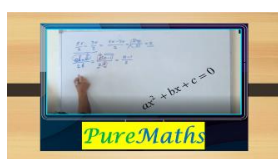
32 videos – 41.8 hours

Semester 1 contains the following chapters:

- **Linear Equation and Graph – Part One** (7 videos, 9.7 hours)
- **Linear Equation and Graph – Part Two** (11 videos, 12.8 hours)
- **Quadratic Expression. Equation and Graph – Part One** (7 videos, 11 hours)
- **Quadratic Expression. Equation and Graph – Part One** (7 videos, 8.3 hours)

Content of each chapter is given below.

### Linear Equation and Graph. Part One



7 videos – 9.7 hours

Session 21 - **Linear Equations. Concepts.** (1 video – 1.4 h)

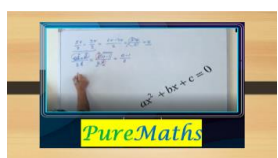
Session 22 - **Simultaneous Equations. Concepts and Practice.** (1 video – 1.6 h)

Session 23 - **Linear Equations. Practice 1** (1 video – 1.3 h)

Session 24 - **Linear Equations. Practice 2** (2 videos. Part 1 – 1.5 h and Part 2 – 1.5 h)

Session 25 - **Linear Equations. Practice 3** (2 videos. Part 1 – 1.4 h and Part 2 – 1.4 h)

### Linear Equation and Graph. Part Two



11 videos – 12.8 hours

Session 26 - **Linear Graph.** (2 videos. Part 1 – 0.7 h and Part 2 – 1.5 h)

Session 27 - **Linear Graph. Practice 1.** (2 videos. Part 1 – 1.2 h and Part 2 – 0.9 h)

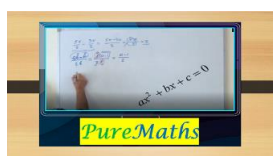
Session 28 - **Linear Graph. Practice 2** (1 video – 1.8 h)

Session 29 - **Linear Function. Practice 3.** (2 videos. Part 1 – 1.1 h and Part 2 – 1.2 h)

Session 30 - **Application of Linear Relation. Practice 1.** (2 videos. Part 1 – 1.2 h and Part 2 – 1.1 h)

Session 31 - **Application of Linear Relation. Practice 2.** (2 videos. Part 1 – 1.1 h and Part 2 – 1 h)

### Quadratic Expression, Equation and Graph. Part One



7 videos – 11 hours

Session 32 - **Factorising Quadratic Expression. Concepts and Examples.** (1 video – 1.7 h)

Session 33 - **Quadratic Equation. Concepts and Examples.** (1 video – 1.6 h)

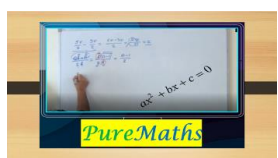
Session 34 - **Quadratic Graph (Parabola). Features. Concepts and Examples.** (1 video – 1.8 h)

Session 35 - **Quadratics. Practice 1.** (1 video- 1.5 h)

Session 36 - **Quadratics. Practice 2.** (1 video – 1.8 h)

Session 37 - **Quadratics. Practice 3.** (2 videos. Part 1 -1.4 h and Part 2 – 1.2 h)

### Quadratic Expression, Equation and Graph. Part Two



7 videos – 8.3 hours

Session 38 - **Quadratics. Practice 4.** (1 video – 1.6 h)

Session 39 - **Quadratics. Practice 5.** (2 videos. Part 1 – 1.1 h and Part 2 – 1.1 h)

Session 40 - **Algebra involving Quadratics. Practice 1.** (2 videos. Part 1 – 1.5 h and Part 2 – 0.8 h)

Session 41 - **Algebra involving Quadratics. Practice 2.** (2 videos. Part 1 – 1.7 h and Part 2 – 1.1 h)