

# YEAR 9

# MATHEMATICS



**SRI KDU**  
International  
School  
SUBANG JAYA

3.2

**PROGRAMME OF STUDY - TERM 2**

## NUMBER

- Adding, subtracting, multiplying and dividing fractions and mixed numbers
- Writing numbers in SIF with positive and negative powers of 10. Rounding numbers involving decimal places and significant figures. Mental arithmetic calculations rules and routines
- Solving problems involving best value.

## ALGEBRA

- Factorising expressions, expanding and factorising quadratic expressions. Factorising involving a difference of perfect squares.
- Drawing linear graphs and drawing quadratic equations using a table of values. Solving quadratic equations graphically using points of intersection. Solving simultaneous equations by graphs.

## GEOMETRY & MEASURE

- Volume and Surface Area – converting between metric units e.g.  $\text{cm}^3$  to  $\text{m}^3$ , working out volumes and surface areas of prisms.
- Volume and surface area of cylinders.
- Introducing trigonometric ratios and using these to work out missing lengths.
- Using trigonometric ratios to work out missing angles and extending this to problems involving Pythagoras' Theorem