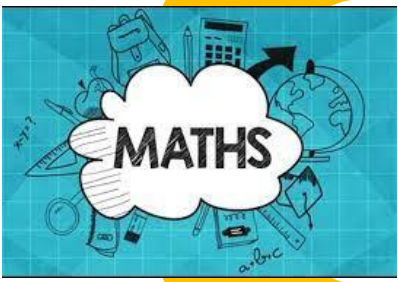


YEAR 11



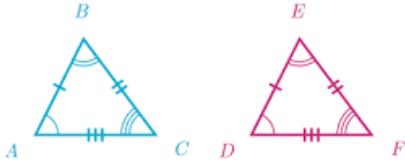
St. Aldhelm's Academy



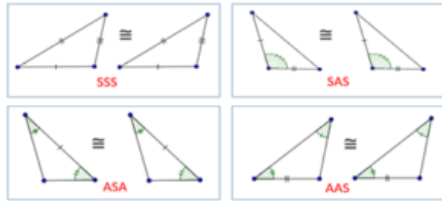
GCSE



End of year Exams (Three GCSE Papers)

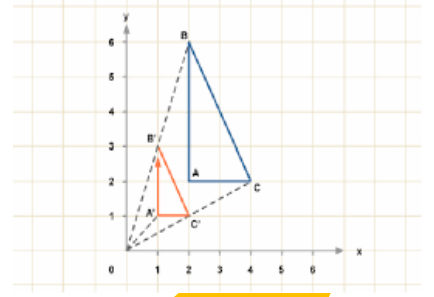


Unit 12: Similarity and Congruency



Understand SSS, SAS, ASA and RHS

Understand the effect of the enlargement of shapes

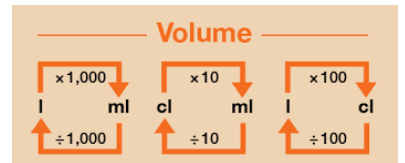


Enlarge shapes using positive and negative scale factors

Unit 8: Transformations

Understand the similarity of triangles and other plane shapes

Be able to prove 2 shapes are similar



Describe translations, rotations and reflections

Unit 9: Solving Quadratics and inequalities

Upper and lower bounds

Draw straight line graphs for real life situations

Problem solving including converting volumes.

Find the volume and surface area of 3D shapes

Perform translations, rotations and reflections in all 4 quadrants

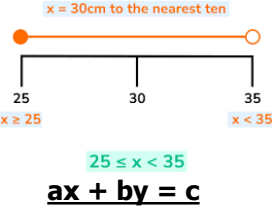
Error intervals

Find the gradient of a line from a graph

Find the gradient of a line from an equation

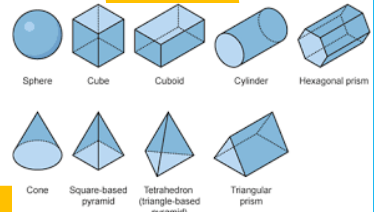
Form equations of complex shapes

Calculate the area and perimeter of various shapes including compound shapes



Unit 7: Volume and SF

Find area and perimeter of circles, sectors and arcs.



Identify when lines are parallel or perpendicular from a point

Problem solving using linear functions or gradients

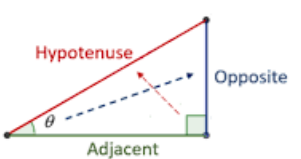
Identify properties of triangles and quadrilaterals

Identify angles in parallel lines

Distinguish between regular and irregular polygons

Convert between metric units

Right Angle Trigonometry



SOH Sin theta = Opposite / Hypotenuse
CAH Cos theta = Adjacent / Hypotenuse
TOA Tan theta = Opposite / Adjacent

Trigonometry

Theorem of Pythagoras

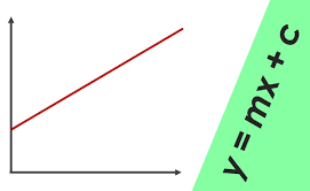
Calculate missing angles in triangles and quadrilaterals

Ratios

RATIOS 3:7

Convert between fractions, percentages and decimals

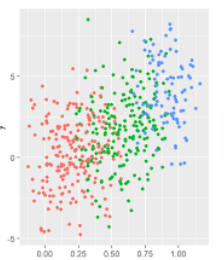
Unit 6: Graphs y = mx + c



Calculating internal and external angles of Regular and Irregular polygons

Unit 5: Angles and Trigonometry

Percentage of a quantity and percentage increases and decreases



Changing the Subject of the formula

Distinguish between expressions, equations, formulae and identities

Unit 3: Data and Averages

Unit 4: FDP and Ratio

Two-way tables

Scatter graphs

Factorising quadratics And difference of squares

Index Laws

Simplify Surds

Substitute numbers into a formula

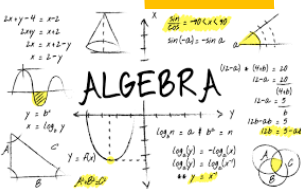
Write fractions in simplest form

Arithmetic sequences and quadratic sequences

Mean, median and mode

Frequency tables using different types of data

Unit 2: Algebra



Index Laws formulas: a^m * a^n = a^(m+n), a^m / a^n = a^(m-n), (a^m)^n = a^(m*n), a^-n = 1/a^n, a^0 = 1

Simplify Surds formulas: sqrt(a) * sqrt(b) = sqrt(ab), sqrt(a) / sqrt(b) = sqrt(a/b), sqrt(a) * sqrt(a) = a, sqrt(a) * sqrt(b) = sqrt(ab), a/sqrt(b) = a*sqrt(b)/b

Simplify surds

Estimate Calculations

Simplifying expressions

Standard Form

Standard Form

Positive Power = Large Number 4.3 x 10^6 = 4 300 000

Negative Power = Small Number 2.1 x 10^-3 = 0.021

Find common factors and multiples

Write numbers in index notation and recognise powers.

Add, Subtract, multiply and Divide Decimals

Unit 1: Number



YEAR 10

welcome