

Mathematics – Year 11 - Higher

Topic	Resources
Cubic graphs Reciprocal graphs Exponential graphs Trigonometric graphs Real life graphs Gradients Areas under graphs Equation of a circle	https://www.piximaths.co.uk/transformations-of-graphs https://www.piximaths.co.uk/transformations-of-graphs https://www.piximaths.co.uk/transformations-of-graphs https://www.piximaths.co.uk/transformations-of-graphs https://www.piximaths.co.uk/real-life-graphs https://www.piximaths.co.uk/gradients https://www.piximaths.co.uk/areas-under-graphs https://www.piximaths.co.uk/equations-of-circles
Circle theorems	https://www.piximaths.co.uk/circle-theorems
Changing the subject of formula Algebraic fractions Rationalising surds Proof	https://www.piximaths.co.uk/changing-subject-of-a-formula https://www.piximaths.co.uk/algebraic-fractions https://www.piximaths.co.uk/surds https://www.piximaths.co.uk/rationalising-the-denominator https://www.piximaths.co.uk/proof
Vectors Geometric proof	https://www.piximaths.co.uk/vectors https://www.piximaths.co.uk/proof
Growth and decay Rates of change in graphs Functions	https://www.piximaths.co.uk/growth-and-decay https://www.piximaths.co.uk/rates-of-change https://www.piximaths.co.uk/functions
Recap work from year 9	Place Value

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Four operations
Powers and roots
Factors and multiples
Prime factor decomposition
HCF & LCM
Rounding
Reciprocals
Standard form
Indices
Surds
Simplifying Expressions
Substitution
Expanding - brackets
Factorising - brackets
Solving linear equations
Sequences
Inequalities
Simple proof
Two way tables
Stem and leaf diagrams
Bar charts
Pie charts
Scatter graphs
Averages and range
Fractions
Percentages
Proportion
Ratio
Angles and lines
Parallel lines
Triangles & quadrilaterals
Congruence & similarity
Polygons - angles in
Pythagoras
Trigonometry
Equation of a straight line
Real life graphs

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Linear graphs
Quadratic, kinematic, cubic graphs
Equation of a circle
Rates of change
Area under graphs

Recap year 10 work

Solving quadratic equations
Inequalities
Simultaneous equations
Probability
Tree diagrams
Similarity & congruence in 2D and 3D
Sine rule
Cosine rule
Pythagoras in 3D
Trigonometry in 3D
Trigonometric graphs
Accuracy and bounds
Frequency diagrams
Histograms
Averages from
grouped data
Cumulative frequency
graphs
Box plots
Scattergraphs
Time series graphs