



SCUOLA INTERNAZIONALE EUROPEA STATALE
“ALTIERO SPINELLI”

e-mail: tops270001@istruzione.it
[http: www.istitutoaltierospinelli.com](http://www.istitutoaltierospinelli.com)

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SCUOLA SECONDARIA DI SECONDO GRADO

Matematica

Indicazioni per l'accesso alla classe terza linguistico IGCSE: contenuti minimi

Libro di testo di riferimento: David Rayner, complete mathematics for Cambridge IGCSE fifth edition, Oxford University Press

Number

Fractions, decimals, recurring numbers, mixed numbers. Number facts. Arithmetic and quadratic sequences. Approximations (rounding, decimal places, significant figures). Ratio and proportion. Foreign exchange. Percentages, simple interest, compound interest.

Algebra 1 & 2 Formulae: substitution. Brackets and simplifying. Linear equations. Problems solved by linear equations. Factorising. Quadratic equations. Problems solved by quadratic equations. Simultaneous equations. Problems solved by simultaneous equations. Non-linear simultaneous equations. Algebraic fractions. Indices.

Geometry

Fundamental results. Polygons. Parallel lines. Pythagoras' theorem. Circle theorems. Line symmetry. Rotational symmetry.

Statistics

Data display. Mean, median, mode. Scatter graphs. Box-and-whisker plots. Cumulative frequency. Histograms.

Sets and transformations

Reflections

Sets. Logical problems

Probability

Simple probability. Exclusive and independent events. Tree diagrams. Probability from Venn diagrams.

Conditional probability

Coordinate geometry and graphs

Length and midpoint of a line segment. Gradients. The form $y=mx+c$. Parallel and perpendicular lines. Plotting curves. The parabola: x and y intercept, finding the vertex by completing the square.