**MYP Extended Math**

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In order to be ready for the MYP Extended Math course, you should be familiar with the following topics.

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|  | Function Families and Transformations | * Shapes of Parent Functions
* Equations of Parent Functions
* Transformations of Parent Function Graphs
* Characteristics of Parent Functions
* Connections Between the Graph, Equation, and Verbal Descriptions of Parent Functions
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| Radical Expressions, & Rational Exponents | * Simplify Radical Expressions
* Operations on Radical Expressions
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|  | [Factoring](https://docs.google.com/document/d/15OoEBkgyE9wfdHZwrbnQsIyGXAxpzSGc_7SGAfAlgRw/preview) | * Factor Polynomials in One or Two Variables
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| [Quadratic Functions](https://docs.google.com/document/d/14y1FDFG3TbHsxLxgXzpWqOnS6L-tLbu-TUrO0SlRxGU/preview) | * Solve Quadratic Equations
* Transform Quadratic Functions
* Characteristics of Quadratic Functions
* Connections Between the Graph, Equation, Table, and Verbal Descriptions of Quadratic Functions
* Relationships Among Solutions, Zeros, x-intercepts, and Factors of a Quadratic Expression
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|  | [Rational Expressions & Equations](https://docs.google.com/document/d/1u-nqMrM-gAvzx1hhTRIlfcKykv8wxVa3HHbrPQ6HW4Y/preview) | * Characteristics of Rational Functions
* Connections Between the Graph, Equation, Table, and Verbal Descriptions of Rational Functions
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| Inverses & Composition of Functions  | * Determine the Inverse of a Function
* Determine Compositions of Functions
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| [Exponential & Logarithmic Functions](https://docs.google.com/document/d/1fiemKqFYBEKRfvF48r9WfpllFmoljt9uA1Rti0xEj6o/preview) | * Transform Exponential and Logarithmic Functions
* Characteristics of Exponential and Logarithmic Functions
* Connections Between the Graph, Equation, Table, and Verbal Descriptions of Exponential and Logarithmic Functions
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|  | [Sequences & Series](https://docs.google.com/document/d/1QAuOyNozkcXjjMT-yhoBABHARXGTo8xMpkDrwJ7Zp_g/preview) | * Solve Problems with Arithmetic and Geometric Sequences and Series
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| [Statistics](https://docs.google.com/document/d/1rygo2ZxSw1b4BfRAhk6e5H-euGnrMYqus_q9vll1Dl8/preview) | * Solve Problems with a Curve of Best Fit
* Solve Problems Involving Normal Distributions
* Solve Problems using Permutations and Combinations
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|  | Right Triangles | * The Pythagorean Theorem
* Special Right Triangles
* Trigonometric Ratios
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