

What has changed in MYP 5 Extended

Material added:

- Linear equations has been added for revision.
- Power equations have been added to Chapter 8 (Surds and other radicals). This is necessary for Pythagoras' theorem, formulae, and similarity, but is rarely mentioned in school curricula.
- Chapter 11 (Measurement) has been added, since measurement is now studied in all DP courses.
- Chapter 16 (Simultaneous equations) has been added, meaning they are now studied at MYP 4 and 5, rather than MYP 3 and 4 in the old editions.
- Expectation has been added to Chapter 21 (Probability).
- “Finding a quadratic function” has been added to Chapter 25 (Quadratic functions). This will provide an introduction to modelling for students taking the Applications courses in DP.

Material removed:

- The “Transformation geometry” chapter has been removed. Instead, transformation are considered in the context of functions in Chapter 24 (Relations and functions). This is essential for how students understand general functions for DP courses.
- The distance from a point to a line has been removed from Chapter 13 (Coordinate geometry).
- Radian measure has been removed from Chapter 27 (Advanced trigonometry), as this is only mentioned under “Enrichment” in the MYP Framework.
- 3-dimensional vectors have been removed from Chapter 30 (Vectors), as there is plenty of important 2-dimensional vector work students can do to prepare for DP.
- The “Circles and ellipses” chapter has been removed.

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Material that has been restructured:

- The “Algebraic expansion and factorisation” chapter has been split into Chapter 2 (Algebra: expansion) and Chapter 3 (Algebra: factorisation). This allows for a more careful treatment since students have progressed more slowly with this in MYP 3 and 4.
- The “Sets and Venn diagrams” chapter has been split into Chapter 4 (Sets) and Chapter 7 (Venn diagrams). This allows students to use their linear equations work from Chapter 6 to solve problems involving Venn diagrams.
- The “Coordinate geometry” chapter has been split into Chapter 13 (Coordinate Geometry) and Chapter 14 (Straight lines). This will provide a more complete treatment of both topics.
- Chapter 15 (Linear programming) has been moved into the printed book, flowing on directly from Coordinate geometry and Straight lines.
- The circle problems in the Pythagoras chapter have been moved into the appropriate sections of Chapter 18 (Circle geometry). This avoids the need to list the circle theorems twice.
- Compound interest and depreciation have been moved from the “Exponential functions and logarithms” chapter to a “Sequences in finance” section in Chapter 25 (Number sequences). This is consistent with what is done in the DP courses.
- The “Inequalities” chapter has been removed, with the linear inequalities work moved to Chapter 6 (Linear equations and inequalities), the sign diagrams moved to Chapter 24 (Relations and functions), and the quadratic inequalities moved to Chapter 25 (Quadratic functions).

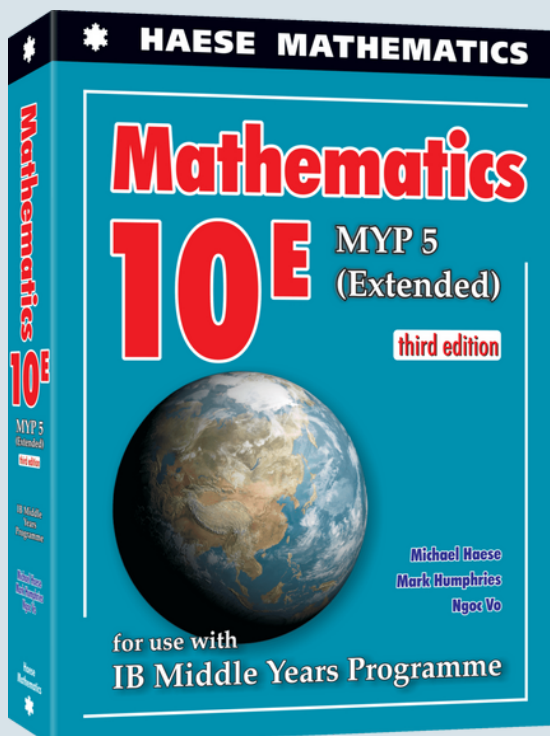


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Other notes:

- In Chapter 12 (Quadratic equations), we consider quadratic equations with $\Delta < 0$ in preparation for either HL course (marked blue), and the sum and product of roots in preparation for Analysis HL (marked green).
- The later online chapters have been included with an eye to the Diploma courses that lie ahead.
 - Chapter 30 (Vectors) is preparation for either of the HL courses. It will be marked blue like our Core Topics HL book.
 - Chapter 31 (Matrices) is preparation for Applications HL. It will be marked purple like our Applications HL book.
 - Chapters 32 (Polynomials) and 33 (Counting and probability) are preparation for Analysis HL. It will be marked green like our Analysis HL book.



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