Mapping Report

Mapping Cambridge IGCSE International Mathematics (0607) to:

- Cambridge IGCSE Mathematics (0580)
- Cambridge IGCSE Mathematics (with Coursework) (0581)
- Cambridge IGCSE Additional Mathematics (0606)

Applicable to syllabuses for examination in 2010

1. Introduction

Cambridge IGCSE International Mathematics is a new syllabus that reflects the way today's students like to learn. It has been developed for schools offering an international curriculum and complements the IB curriculum, offering an assessment and certification at the end of the Middle Years Programme.

The syllabus follows the Cambridge approach which is embedded in all Cambridge mathematics syllabuses: building a solid foundation of mathematical skills and learning how to develop strategies for solving open-ended problems. However, Cambridge IGCSE International Mathematics takes this a stage further and allows students to develop and sharpen their investigation and modelling skills. It also introduces students to the use of graphical calculators – a necessary part of their study for the IB Diploma.

Feedback from schools around the world has been extremely positive, with teachers welcoming the alignment of curriculum, teaching and assessment which the syllabus offers. Students and teachers also recognised that the open-ended problem solving approach can help develop skills that can be used across the curriculum – not only in mathematics. Students highlighted that they were finding the skills they had developed very useful for their scientific studies.

1.1 Overview

The syllabuses for Cambridge IGCSE International Maths and Cambridge IGCSE Maths have many topics in common. Cambridge IGCSE International Maths has both Core and Extended Papers as does Cambridge IGCSE Maths (both with and without coursework).

Cambridge IGCSE International Maths has some topics in common with Cambridge IGCSE Additional Maths but there are several topics included in the Additional Maths syllabus that do not appear in the International Maths syllabus. This is understandable as this course is intended to be followed by students who have already achieved A*, A or B in IGCSE Maths. The Additional Maths is only offered at Extended level.

There are differences in use and make of calculators. Cambridge IGCSE International Maths has Paper 1 (core) and Paper 2 (extended) calculator free. No calculators may be used in these exams. None of the other syllabuses has this rule. A calculator may be used in all their papers. Cambridge IGCSE International Maths also specifies that the students must be in possession of a Graphical Display Calculator (GDC) for the remaining papers. Cambridge IGCSE Maths and Cambridge IGCSE Additional Maths both forbid the use of a GDC.

Cambridge IGCSE International Maths is the only course that has an Investigation task for Core level students and one investigation and one modelling task for the Extended students that are carried out under exam conditions and make up Paper 5 and Paper 6 of the programme. Cambridge IGCSE Maths with Coursework does have a coursework option but this is not carried out under exam conditions. Also, in this syllabus the coursework mark only counts towards the final grade if it benefits the student. If the student's grade would be lowered due to a poor coursework then the coursework mark is not taken into account.

1. Introduction

1.2 Aims and objectives

All of the syllabuses state their aims. The aims in the Cambridge IGCSE syllabuses are laid out in detail and discuss the appreciation of patterns, a feel for numbers, apply maths in everyday situations, apply maths in other subjects and Cambridge IGCSE International Maths also has the appreciation of the international aspect of mathematics as one of its aims.

All Cambridge IGCSE Maths syllabuses discuss the assessment objectives. The Cambridge IGCSE Maths also includes the weighting of the assessment objectives in the exam papers.

Cambridge IGCSE International Maths is the only syllabus that includes mathematical modelling to describe real life situations and use statistical techniques to explore relationships in the real world – perhaps due to the uniqueness of their Papers 5 and 6.

1.3 Assessment

The assessment methods are different in all the syllabuses. The Cambridge IGCSE International Maths is the only one with a compulsory investigation/modelling element that is tested under exam conditions. The Cambridge IGCSE has a syllabus with coursework but this is not done under exam conditions and it can be ignored if it has the effect of reducing the candidate's final grade.

Cambridge IGCSE International Maths is also the only syllabus where the candidates cannot use a calculator in their Paper 1 and Paper 2 and **must** use a GDC for the other papers.

Cambridge IGCSE Maths give Grade Descriptors for various levels of achievement.

1.4 Curriculum content

Although there is overlap in many of the syllabuses the main difference is the focus of Cambridge IGCSE International Maths on the ability of the candidates to investigate, model and solve open-ended questions. Also the fact that their students have to learn how to use and work with their GDC not only to solve routine mathematical problems but also to use it to find the properties of graphs, to find intersections of unusual graphs and to find the line of regression.

The Cambridge IGCSE Maths syllabus appears to have the less content. It is similar to the Cambridge IGCSE International Maths but there are several topics that are not covered.

The Cambridge IGCSE Additional Maths syllabus has some topics that overlap with the Cambridge IGCSE International Maths and it also has several more topics of a traditional nature.

2.1 Assessment

The weighting of the papers in both syllabuses is very different. Also Cambridge IGCSE International Mathematics has an extra paper taken under test conditions.

Cambridge IGCSE International Mathematics Cambridge IGCSE Mathematics (0580) (0607)This assessment consists of two papers. Both This assessment consists of three papers. Core and Extended level are offered. Core Paper 1 (45 minutes) Core This paper has 10-12 compulsory short response Paper 1 (1 hour) guestions worth 25% of the final mark. This paper has short answer questions and is worth No calculators allowed. 35% of the total mark. Calculator is allowed. Paper 3 (1 hour 45 minutes) Paper 3 (2 hours) This paper has 11-15 compulsory medium to This paper consists of structured questions and is extended response questions worth 60% of the worth 65% of the total mark. Calculator is allowed. final mark. GDC compulsory. Extended Paper 5 (1 hour) Paper 2 (1 hour 30 minutes) This paper contains one investigation problem and This paper has short answer questions and is worth is worth 15% of the final mark. GDC compulsory. 35% of the total mark. Calculator is allowed. **Extended** Paper 4 (2 hours 30 minutes) This paper consists of structured questions and is Paper 2 (45 minutes) worth 65% of the total mark. Calculator is allowed. This paper has 10-12 compulsory short response guestions worth 20% of the final mark. No calculators allowed. Paper 4 (2 hours 15 minutes) This paper has 11–15 compulsory medium to extended response questions worth 60% of the final mark. GDC compulsory.

Paper 6 (1 hour 30 minutes)

final mark. GDC compulsory.

This paper contains one investigation problem and one modelling problem and is worth 20% of the

2.2 Curriculum content

There is quite a lot of overlap between these two syllabuses. Both syllabuses have a few topics that do not appear in the other. However, the Cambridge IGCSE International Maths has more of a focus on the student being able to solve problems using their GDC as well as the more traditional methods whereas the Cambridge IGCSE Maths (0580) focuses mainly on the more traditional methods of solving problems.

2.2.1 Correlation between Cambridge IGCSE International Mathematics (0607) and Cambridge IGCSE Mathematics (0580)

- ✓: Cambridge IGCSE International Mathematics topics that overlap with Cambridge IGCSE Mathematics topics.
- *****: Cambridge IGCSE International Mathematics topics where there is no significant overlap with Cambridge IGCSE Mathematics topics.

| Topic | Topic | Topic | Topic | Topic | Topic | Topic | Topic | Topic | Topic | Topic |
|--------|--------|--------|-------|--------------|-------|-------|-------|-------|--------|--------|
| 1.1 ✓ | 2.1 ✓ | 3.1 ✓ | 4.1 ✓ | 5.1 ✓ | 6.1 ✓ | 7.1 ✓ | 8.1 ✓ | 9.1 ✓ | 10.1 ✓ | 11.1 🗸 |
| 1.2 🗸 | 2.2 🗴 | 3.2 ✓ | 4.2 ✓ | 5.2 ✓ | 6.2 ✓ | 7.2 ✓ | 8.2 🗴 | 9.2 ✓ | 10.2 ✓ | 11.2 🗸 |
| 1.3 🗸 | 2.3 ✓ | 3.3 🗴 | 4.3 ✓ | 5.3 ✓ | 6.3 ✓ | 7.3 ✓ | 8.3 🗸 | 9.3 ✓ | 10.3 🗴 | 11.3 🗸 |
| 1.4 🗸 | 2.4 ✓ | 3.4 × | 4.4 ✓ | 5.4 ✓ | 6.4 ✓ | 7.4 ✓ | 8.4 🗸 | 9.4 ✓ | 10.4 ✓ | 11.4 🗸 |
| 1.5 ✓ | 2.5 ✓ | 3.5 🗴 | 4.5 ✓ | 5.5 × | 6.5 ✓ | 7.5 ✓ | 8.5 ✓ | | 10.5 ✓ | 11.5 🗸 |
| 1.6 🗴 | 2.6 ✓ | 3.6 🗴 | 4.6 ✓ | 5.6 × | | 7.6 ✓ | 8.6 ✓ | | 10.6 ✓ | 11.6 🗸 |
| 1.7 ✓ | 2.7 ✓ | 3.7 ✓ | 4.7 ✓ | | | 7.7 🗴 | 8.7 ✓ | | | 11.7 ✓ |
| 1.8 ✓ | 2.8 ✓ | 3.8 🗴 | | | | 7.8 🗴 | 8.8 🗴 | | | 11.8 🗴 |
| 1.9 ✓ | 2.9 ✓ | 3.9 ✓ | | | | | | | | 11.9 🗴 |
| 1.10 × | 2.10 ✓ | 3.10 🗴 | | | | | | | | |
| 1.11 🗸 | 2.11 × | | | | | | | | | |
| 1.12 ✓ | 2.12 × | | | | | | | | | |
| 1.13 🗸 | 2.13 ✓ | | | | | | | | | |

2.2.2 The following table sets out the significant areas of overlap between the Cambridge IGCSE International Mathematics and Cambridge IGCSE Mathematics (0580)

| Cambridge IGCSE International Mathematics topic | Cambridge IGCSE International Mathematics reference | Cambridge IGCSE Mathematics (0580) |
|--|--|---|
| Topic 1 Number | 1.1 vocabulary and notation for sets of numbers 1.2 use of four operations 1.3 HCF and LCM 1.4 powers and roots | number, set notation and language the four rules number, set notation and language squares and cubes |
| | 1.5 ratio and proportion | 10 ratio, proportion, rate |
| | 1.7 equivalence between decimals, fractions, ratios and percentages | 4 vulgar and decimal fractions and percentages |
| | 1.8 percentages | 11 percentages |
| | 1.9 standard form | 6 standard form |
| | 1.11 estimation | 8 estimation 9 limits of accuracy |
| | 1.12 calculations involving time | 14 time |
| | 1.13 speed, distance, time | 17 graphs in practical situations |
| Topic 2 | 2.1 interpreting inequalities | 5 ordering |
| Algebra | 2.3 solving liner equations | 18 graphs of functions |
| | 2.4 indices | 23 indices |
| | 2.5 rearrangement | 20 algebraic representation and formulae |
| | 2.6 simultaneous linear equations | 24 solutions of equations and inequalities |
| | 2.7 expanding brackets 2.8 factorisation | 21 algebraic manipulation |
| | 2.9 simplifying algebraic fractions | 21 algebraic manipulation |
| | 2.10 solving quadratic equations | 24 solutions of equations and inequalities |
| | 2.13 variation | 10 ratio, proportion, rate |

| Topic 3 | 3.1 domain, range, mapping diagrams | 22 functions |
|---|---|---|
| Functions | 3.7 compound functions 3.9 inverse functions | 22 functions |
| Topic 4 Geometry | 4.1 vocabulary | 26 geometrical terms and relationships |
| | 4.2 symmetry | 28 symmetry |
| | 4.3 angle measurement | 27 geometrical constructions |
| | 4.4 angles round a point, straight line etc. | 29 angle properties |
| | 4.5 similarity | 26 geometrical terms and relationships |
| | 4.6 Pythagoras | 28 symmetry |
| | 4.7 circles | 28 symmetry |
| Topic 5 Transformations in two dimensions | 5.1 vector notation5.2 addition of vectors etc.5.3 magnitude of a vector | 35 vectors in two dimensions |
| | 5.4 transformations | 37 transformations |
| Topic 6 Mensuration | 6.1 units6.2 perimeter and area6.3 arc length and sector area | 13 measures 31 mensuration |
| | 6.4 surface area and volume 6.5 compound shapes | 31 mensuration |
| Topic 7 Co-ordinate geometry | 7.1 plotting points 7.2 distance between points 7.3 midpoint 7.4 gradient 7.5 parallel lines 7.6 equation of straight line | 17 graphs in practical situations 19 straight line graphs |
| Topic 8 Trigonometry | 8.1 right-angled trigonometry 8.3 four quadrants 8.4 sine rule 8.5 cosine rule 8.6 area of triangle 8.7 applications – three-figure bearings | 32 trigonometry 32 trigonometry |
| | o./ applications – tillee-ligure bealings | 32 trigonometry |

| Topic 9 Sets | 9.1 notation9.2 sets in descriptive form9.3 Venn diagrams9.4 intersection and union | 1 | number, set notation and language |
|-------------------------|---|----|-----------------------------------|
| Topic 10 Probability | 10.1 probability 10.2 expected number 10.4 combining events 10.5 tree diagrams 10.6 probability from Venn diagram | 34 | probability |
| Topic 11 Statistics | 11.1 reading and interpreting graphs 11.2 discrete and continuous 11.3 bar chart etc. 11.4 mean etc. 11.5 mean from continuous data 11.6 histograms 11.7 cumulative frequency | 33 | statistics |

3.1 Assessment

The weighting of the papers in both syllabuses is very different. Also Cambridge IGCSE International Maths has an extra paper taken under test conditions. The coursework in Cambridge IGCSE Maths with Coursework (0581) can be done at home or in class. The result of the coursework will not be taken into consideration if it lowers the grade of the student.

Cambridge IGCSE International Mathematics (0607)

This assessment consists of three papers.

Core

Paper 1 (45 minutes)

This paper has 10–12 compulsory short response questions worth 25% of the final mark.

No calculators allowed.

Paper 3 (1 hour 45 minutes)

This paper has 11–15 compulsory medium to extended response questions worth 60% of the final mark. GDC compulsory.

Paper 5 (1 hour)

This paper contains one investigation problem and is worth 15% of the final mark. GDC compulsory.

Extended

Paper 2 (45 minutes)

This paper has 10–12 compulsory short response questions worth 20% of the final mark. No calculators allowed.

Paper 4 (2 hours 15 minutes)

This paper has 11–15 compulsory medium to extended response questions worth 60% of the final mark. GDC compulsory.

Paper 6 (1 hour 30 minutes)

This paper contains one investigation problem and one modelling problem and is worth 20% of the final mark. GDC compulsory.

Cambridge IGCSE Mathematics with Coursework (0581)

This assessment consists of three papers.

Core

Paper 1 (1 hour)

This paper has short answer questions and is worth 30% of the total mark. Calculator is allowed.

Paper 3 (2 hours)

This paper consists of structured questions and is worth 50% of the total mark. Calculator is allowed.

Paper 5

Coursework worth 20% of the total mark.

Extended

Paper 2 (1 hour 30 minutes)

This paper has short answer questions and is worth 30% of the total mark. Calculator is allowed.

Paper 4 (2 hours 30 minutes)

This paper consists of structured questions and is worth 50% of the total mark. Calculator is allowed.

Paper 6

Coursework worth 20% of the total mark.

3.2 Curriculum content

There is quite a lot of overlap between these two syllabuses. Both syllabuses have a few topics that do not appear in the other. However, the Cambridge IGCSE International Maths has more of a focus on the student being able to solve problems using their GDC as well as the more traditional methods whereas the Cambridge IGCSE Maths (0581) focuses mainly on the more traditional methods of solving problems. Also, the Papers 5 and 6 in Cambridge IGCSE International Maths always count towards the final mark. This is not the case with the coursework in the Cambridge IGCSE Maths (0581).

3.2.1 Correlation between Cambridge IGCSE International Mathematics and Cambridge IGCSE Mathematics with Coursework (0581)

- ✓: Cambridge IGCSE International Mathematics topics that overlap with Cambridge IGCSE Mathematics with Coursework topics.
- *****: Cambridge IGCSE International Mathematics topics where there is no significant overlap with Cambridge IGCSE Mathematics with Coursework topics.

| Тор | ic | Тор | ic | Тор | ic | Тор | oic | Topic | Topic |
|------|----|------|----|------|----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|--------|--------|
| 1.1 | ✓ | 2.1 | ✓ | 3.1 | ✓ | 4.1 | ✓ | 5.1 | ✓ | 6.1 | ✓ | 7.1 | ✓ | 8.1 | ✓ | 9.1 | ✓ | 10.1 ✓ | 11.1 🗸 |
| 1.2 | ✓ | 2.2 | × | 3.2 | ✓ | 4.2 | ✓ | 5.2 | ✓ | 6.2 | ✓ | 7.2 | ✓ | 8.2 | × | 9.2 | ✓ | 10.2 ✓ | 11.2 ✓ |
| 1.3 | ✓ | 2.3 | ✓ | 3.3 | × | 4.3 | ✓ | 5.3 | ✓ | 6.3 | ✓ | 7.3 | ✓ | 8.3 | ✓ | 9.3 | ✓ | 10.3 🗴 | 11.3 ✓ |
| 1.4 | ✓ | 2.4 | ✓ | 3.4 | × | 4.4 | ✓ | 5.4 | ✓ | 6.4 | ✓ | 7.4 | ✓ | 8.4 | ✓ | 9.4 | ✓ | 10.4 ✓ | 11.4 ✓ |
| 1.5 | ✓ | 2.5 | ✓ | 3.5 | × | 4.5 | ✓ | 5.5 | × | 6.5 | ✓ | 7.5 | ✓ | 8.5 | ✓ | | | 10.5 ✓ | 11.5 ✓ |
| 1.6 | × | 2.6 | ✓ | 3.6 | × | 4.6 | ✓ | 5.6 | × | | | 7.6 | ✓ | 8.6 | ✓ | | | 10.6 ✓ | 11.6 ✓ |
| 1.7 | ✓ | 2.7 | ✓ | 3.7 | ✓ | 4.7 | ✓ | | | | | 7.7 | × | 8.7 | ✓ | | | | 11.7 ✓ |
| 1.8 | ✓ | 2.8 | ✓ | 3.8 | × | | | | | | | 7.8 | × | 8.8 | × | | | | 11.8 🗴 |
| 1.9 | ✓ | 2.9 | ✓ | 3.9 | ✓ | | | | | | | | | | | | | | 11.9 🗴 |
| 1.10 | × | 2.10 | ✓ | 3.10 | × | | | | | | | | | | | | | | |
| 1.11 | ✓ | 2.11 | × | | | | | | | | | | | | | | | | |
| 1.12 | ✓ | 2.12 | × | | | | | | | | | | | | | | | | |
| 1.13 | ✓ | 2.13 | ✓ | | | | | | | | | | | | | | | | |

3.2.2 The following table sets out the significant areas of overlap between the Cambridge IGCSE International Mathematics and Cambridge IGCSE Mathematics with Coursework (0581)

| Cambridge IGCSE International Mathematics topic | Cambridge IGCSE International Mathematics reference | Cambridge IGCSE Mathematics with Coursework (0581) |
|--|---|---|
| Topic 1 Number | 1.1 vocabulary and notation for sets of numbers1.2 use of four operations1.3 HCF and LCM1.4 powers and roots | number, set notation and language the four rules number, set notation and language squares and cubes |
| | 1.5 ratio and proportion | 10 ratio, proportion, rate |
| | 1.7 equivalence between decimals, fractions, ratios and percentages | 4 vulgar and decimal fractions and percentages |
| | 1.8 percentages | 11 percentages |
| | 1.9 standard form | 6 standard form |
| | 1.11 estimation | 8 estimation 9 limits of accuracy |
| | 1.12 calculations involving time | 14 time |
| | 1.13 speed, distance, time | 17 graphs in practical situations |
| Topic 2 | 2.1 interpreting inequalities | 5 ordering |
| Algebra | 2.3 solving liner equations | 18 graphs of functions |
| | 2.4 indices | 23 indices |
| | 2.5 rearrangement | 20 algebraic representation and formulae |
| | 2.6 simultaneous linear equations | 24 solutions of equations and inequalities |
| | 2.7 expanding brackets 2.8 factorisation | 21 algebraic manipulation |
| | 2.9 simplifying algebraic fractions | 21 algebraic manipulation |
| | 2.10 solving quadratic equations | 24 solutions of equations and inequalities |
| | 2.13 variation | 10 ratio, proportion, rate |

| Topic 3 | 3.1 domain, range, mapping diagrams | 22 functions |
|---|---|---|
| Functions | 3.7 compound functions 3.9 inverse functions | 22 functions |
| Topic 4 Geometry | 4.1 vocabulary | 26 geometrical terms and relationships |
| | 4.2 symmetry | 28 symmetry |
| | 4.3 angle measurement | 27 geometrical constructions |
| | 4.4 angles round a point, straight line etc. | 29 angle properties |
| | 4.5 similarity | 26 geometrical terms and relationships |
| | 4.6 Pythagoras | 28 symmetry |
| | 4.7 circles | 28 symmetry |
| Topic 5 Transformations in two dimensions | 5.1 vector notation5.2 addition of vectors etc.5.3 magnitude of a vector | 35 vectors in two dimensions |
| | 5.4 transformations | 37 transformations |
| Topic 6: Mensuration | 6.1 units6.2 perimeter and area6.3 arc length and sector area | 13 measures 31 mensuration |
| | 6.4 surface area and volume 6.5 compound shapes | 31 mensuration |
| Topic 7 Co-ordinate geometry | 7.1 plotting points 7.2 distance between points 7.3 midpoint 7.4 gradient 7.5 parallel lines 7.6 equation of straight line | 17 graphs in practical situations 19 straight line graphs |
| Topic 8 Trigonometry | 8.1 right-angled trigonometry 8.3 four quadrants 8.4 sine rule 8.5 cosine rule 8.6 area of triangle 8.7 applications – three-figure bearings | 32 trigonometry 32 trigonometry |
| | 10.7 applications tillee-ligure bealings | 1 02 trigonometry |

| Topic 9 Sets | 9.1 notation9.2 sets in descriptive form9.3 Venn diagrams9.4 intersection and union | 1 | number, set notation and language |
|-------------------------|---|----|-----------------------------------|
| Topic 10 Probability | 10.1 probability 10.2 expected number 10.4 combining events 10.5 tree diagrams 10.6 probability from Venn diagram | 34 | probability |
| Topic 11 Statistics | 11.1 reading and interpreting graphs 11.2 discrete and continuous 11.3 bar chart etc. 11.4 mean etc. 11.5 mean from continuous data 11.6 histograms 11.7 cumulative frequency | 33 | statistics |

4. Mapping against Cambridge IGCSE Additional Mathematics (0606)

4.1 Assessment

The weighting of the papers in both syllabuses is very different. Also Cambridge IGCSE International Maths has an extra paper taken under test conditions.

| Cambridge IGCSE International Mathematics (0607) | Cambridge IGCSE Additional Mathematics (0606) |
|---|--|
| This assessment consists of three papers. | This assessment consists of two papers. There is no Core level. |
| Core Paper 1 (45 minutes) This paper has 10–12 compulsory short response questions worth 25% of the final mark. | Paper 1 (2 hours) This paper has 10–12 questions of varying lengths. The total mark is 80 and it is worth 50% of the final |
| No calculators allowed. Paper 3 (1 hour 45 minutes) | mark. Paper 2 (2 hours) |
| This paper has 11–15 compulsory medium to extended response questions worth 60% of the final mark. GDC compulsory. | This paper has 10–12 questions of varying lengths. The total mark is 80 and it is worth 50% of the final mark. |
| Paper 5 (1 hour) This paper contains one investigation problem and is worth 15% of the final mark. GDC compulsory. | |
| Extended Paper 2 (45 minutes) This paper has 10–12 compulsory short response questions worth 20% of the final mark. No calculators allowed. | |
| Paper 4 (2 hours 15 minutes) This paper has 11–15 compulsory medium to extended response questions worth 60% of the final mark. GDC compulsory. | |
| Paper 6 (1 hour 30 minutes) This paper contains one investigation problem and one modelling problem and is worth 20% of the final mark. GDC compulsory. | |

4. Mapping against Cambridge IGCSE Additional Mathematics (0606)

4.2 Curriculum content

There are a few topics in common. However, the Cambridge IGCSE Additional Maths has many more topics than Cambridge IGCSE International Maths. That is to be expected as students taking this exam will already have an A*, A or B in IGCSE Maths. Most of the topics that have no overlap have already been covered in IGCSE Maths.

4.2.1 Correlation between Cambridge IGCSE International Mathematics and Cambridge IGCSE Additional Mathematics (0606)

- ✓: Cambridge IGCSE International Mathematics topics that overlap with Cambridge IGCSE Additional Mathematics topics.
- *****: Cambridge IGCSE International Mathematics topics where there is no significant overlap with Cambridge IGCSE Additional Mathematics topics.

| Тор | ic | Тор | ic | Тор | ic | Тор | ic | Тор | oic | Тор | oic | Top | oic | Тор | ic | Тор | oic | Тор | ic | Тор | ic |
|------|----|------|----|------|----|-----|----|-----|-----|-----|-----|-----|-----|-----|----|-----|-----|------|----|------|----|
| 1.1 | × | 2.1 | × | 3.1 | ✓ | 4.1 | × | 5.1 | ✓ | 6.1 | × | 7.1 | × | 8.1 | × | 9.1 | ✓ | 10.1 | × | 11.1 | × |
| 1.2 | × | 2.2 | × | 3.2 | ✓ | 4.2 | × | 5.2 | × | 6.2 | × | 7.2 | ✓ | 8.2 | × | 9.2 | ✓ | 10.2 | × | 11.2 | × |
| 1.3 | × | 2.3 | × | 3.3 | × | 4.3 | × | 5.3 | ✓ | 6.3 | ✓ | 7.3 | ✓ | 8.3 | × | 9.3 | ✓ | 10.3 | × | 11.3 | × |
| 1.4 | × | 2.4 | ✓ | 3.4 | ✓ | 4.4 | × | 5.4 | × | 6.4 | × | 7.4 | × | 8.4 | × | 9.4 | ✓ | 10.4 | × | 11.4 | × |
| 1.5 | × | 2.5 | × | 3.5 | × | 4.5 | × | 5.5 | × | 6.5 | × | 7.5 | ✓ | 8.5 | × | | | 10.5 | × | 11.5 | × |
| 1.6 | × | 2.6 | × | 3.6 | × | 4.6 | × | 4.6 | × | | | 7.6 | ✓ | 8.6 | × | | | 10.6 | × | 11.6 | × |
| 1.7 | × | 2.7 | × | 3.7 | ✓ | 4.7 | × | | | | | 7.7 | × | 8.7 | × | | | | | 11.7 | × |
| 1.8 | × | 2.8 | × | 3.8 | × | | | | | | | 7.8 | × | 8.8 | × | | | | | 11.8 | × |
| 1.9 | × | 2.9 | × | 3.9 | ✓ | | | | | | | | | | | | | | | 11.9 | × |
| 1.10 | × | 2.10 | ✓ | 3.10 | ✓ | | | | | | | | | | | | | | | | |
| 1.11 | × | 2.11 | × | | | | | | | | | | | | | | | | | | |
| 1.12 | × | 2.12 | × | | | | | | | | | | | | | | | | | | |
| 1.13 | × | 2.13 | × | | | | | | | | | | | | | | | | | | |

4. Mapping against Cambridge IGCSE Additional Mathematics (0606)

4.2.2 The following table sets out the significant areas of overlap between the Cambridge IGCSE International Mathematics and Cambridge IGCSE Additional Mathematics (0606)

| Cambridge IGCSE International Mathematics topic | Cambridge IGCSE International Mathematics reference | Cambridge IGCSE Additional Mathematics (0606) |
|--|--|--|
| Topic 2 Algebra | 2.4 indices 2.10 solution of quadratics | 4 indices and surds 3 quadratic functions |
| Topic 3 Functions | 3.1 domain, range, mappings3.2 recognising functions3.4 finding quadratics | 2 functions |
| | 3.7 compound functions3.9 inverse functions | 3 quadratic function |
| | 3.10 logarithms | 7 logarithmic and exponential functions |
| Topic 5 Transformations in two dimensions | 5.1 vector notation 5.3 magnitude of a vector | 13 vectors in two dimensions |
| Topic 6 Mensuration | 6.3 arc length, sector area | 9 circular measure |
| Topic 7 Co-ordinate geometry | 7.2 distance between two points7.3 midpoint7.5 parallel lines7.6 straight line equation | 8 straight line graphs |
| Topic 9 Sets | 9.1 set notation9.2 set description9.3 Venn diagrams9.4 intersection and union | 1 set language and notation |

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