



MYP Mathematics

Parent and student course guide

MYP-4 and MYP-5 | Standard and Extended pathways

Understand the idea. Explain the reasoning. Use mathematics with confidence.

THE STUDY AT HILLVIEW MYP MATHEMATICS

STARTING 23 SEPTEMBER 2026

CONCEPTUAL UNDERSTANDING	GUIDED PRACTICE	INDEPENDENT THINKING
Connect ideas across examples, diagrams, symbols, and real situations.	Practise with support, feedback, and questions chosen for a clear purpose.	Choose a strategy, explain the reasoning, and check whether the answer makes sense.

QUICK FACT	DETAIL	QUICK FACT	DETAIL
Age guide	Usually 14-16	Class size	Up to 6 students
MYP-4 Standard	Monday, Wednesday and Friday	MYP-5 Standard	All five classes recommended
Extended pathway	All five classes recommended	Friday class	2:30-3:45 for assessment and feedback

01 Is this course right for my child?

A focused MYP Mathematics programme for students who want to understand ideas, explain their reasoning, and apply mathematics with increasing independence.

The programme is designed for MYP-4 and MYP-5 students usually aged 14-16. It can support students who are building fluency, strengthening gaps, preparing for MYP assessment, or ready for more depth through an Extended pathway.



Students who may benefit

A student may be...	At Hillview, they will...
Looking for clearer explanations	Move between examples, diagrams, symbols, and context so the meaning behind a method is easier to see.
Losing confidence on unfamiliar questions	Start with guided examples, then practise selecting a representation or first step with feedback.
Preparing for MYP assessment	Build accuracy, communication, investigation, real-life application, and the stamina to complete a full response.
Ready for more challenge	Connect ideas, generalise patterns, adapt strategies, and explain why a method or conclusion works.

What students should be able to do

By the end of MYP-4	By the end of MYP-5
Interpret graphs, solve unfamiliar multi-step problems with a clear method, explain a generalisation, model a real situation, and check whether an answer is sensible.	Choose and adapt strategies for unfamiliar problems, connect equations, tables, and graphs, justify conclusions, communicate complete solutions, and evaluate whether a model fits its context.

What makes the approach useful

- Concepts come before procedures, so students can explain what a method is doing and when it is useful.
- Practice is chosen to strengthen a specific skill: accuracy, reasoning, investigation, application, or communication.
- Feedback identifies a clear next step: correct, practise, revisit, or extend.
- Small classes create room for questions and one-to-one guidance while students work.



The four MYP Mathematics criteria

KNOWING AND UNDERSTANDING	INVESTIGATING PATTERNS	COMMUNICATING	APPLYING MATHEMATICS IN REAL-LIFE CONTEXTS
Use mathematical knowledge, terminology, and techniques accurately, and make connections between ideas.	Explore relationships, identify patterns, make conjectures, and justify generalisations.	Organise and present mathematical information clearly, using appropriate notation, representations, and explanations.	Select and use mathematics to solve problems, interpret results, and evaluate whether conclusions make sense.

These are the official MYP Mathematics criterion names. Hillview classwork and assessments provide evidence for teaching and feedback; they are not, by themselves, official IB grades.

02 Pathways and attendance

Standard and Extended are connected pathways. Monday and Wednesday build the shared foundation; Tuesday and Thursday add depth, challenge, tailored practice, or revision; Friday brings the cycle together through assessment and feedback.

The weekly attendance model

Student pathway	Days and purpose	Recommendation and if a session is missed
MYP-4 Standard	Monday and Wednesday, 3:30-4:45: Standard foundation and practice. Friday, 2:30-3:45: shared feedback and next target.	Recommended: 3 classes. Contact Hillview after an absence and complete the missed core practice or agreed catch-up.



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Student pathway	Days and purpose	Recommendation and if a session is missed
MYP-5 Standard	Monday and Wednesday: Standard foundation. Tuesday and Thursday: complementary depth, tailored practice, or foundational revision. Friday: feedback and next target.	Recommended: all 5 classes. Tuesday and Thursday do not automatically place a student on Extended. Agree a catch-up plan if unavailable.
MYP-4 Extended	Monday and Wednesday: Standard foundation. Tuesday and Thursday: Extended depth and challenge. Friday: feedback and next target.	Recommended: all 5 classes. If a session is missed, Hillview will identify the priority work to complete.
MYP-5 Extended	Monday and Wednesday: Standard foundation. Tuesday and Thursday: Extended depth and challenge. Friday: feedback and next target.	Recommended: all 5 classes. If a session is missed, Hillview will identify the priority work to complete.

What the five-class route means

The five weekly classes are connected, not repeated. MYP-5 Standard students may use Tuesday and Thursday for deeper work, one-to-one guidance, tailored practice, or revision of foundational concepts. Students on an Extended pathway use those sessions for greater depth, abstraction, reasoning, and application. Attending Tuesday and Thursday does not by itself change a student's pathway.

The five-class pattern gives students more chances to ask questions, make thinking visible, practise independently, and receive feedback while the learning is still fresh.

How pathways are reviewed

At regular review points, classwork and assessments are used to decide what each student should practise next. A change between Standard and Extended is discussed with the student and family and agreed with Hillview. It is a learning decision, not a status label.



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DIMENSION	STANDARD PATHWAY	EXTENDED PATHWAY
Core emphasis	Secure and apply essential ideas.	Secure ideas, then connect, generalise, and transfer them.
Question demand	Familiar and moderately unfamiliar problems.	Less familiar, multi-step, and strategically demanding problems.
Investigation	Identify patterns and explain observations.	Form conjectures, test cases, and justify generalisations.
Application	Use a suitable method in a clear context.	Select, adapt, and evaluate a model in a less structured context.
Readiness	Build confidence and consistency.	Develop fluency, stamina, and independence for higher-demand assessment.

03 A typical week at Hillview

Each class has a clear role, so students know when they are learning something new, practising it, connecting it to other ideas, and preparing to work independently.

Day	Time	Main focus	What students do
Monday	3:30-4:45	Standard foundation	Understand the week's core idea through explanation, examples, representations, and guided practice.
Tuesday	3:30-4:45	Depth or targeted practice	Extend a Standard idea, investigate, receive one-to-one guidance, or revise a foundation. Extended students take on deeper challenge.
Wednesday	3:30-4:45	Core practice	Make the method reliable through practice, application, quick checks, and correction.
Thursday	3:30-4:45	Deepen or targeted practice	Solve unfamiliar problems, connect ideas, explain strategic choices, or complete tailored practice.
Friday	2:30-3:45	Assessment and feedback	Gather evidence, receive guidance, correct errors, reflect on the response, and set the next target.



Inside a 75-minute class

Part of the class	Time	What happens
Short review	0-10 minutes	Students recall recent or earlier learning through quick questions and identify what needs attention.
Explain and connect	10-25 minutes	The teacher makes an idea clear through examples, diagrams, representations, and worked steps.
Investigate or practise	25-45 minutes	Students explore a pattern or solve carefully chosen questions with prompts and checks for understanding.
Independent application	45-65 minutes	Students work through varied questions, including an unfamiliar or multi-step problem.
Reflect and close	65-75 minutes	Students correct an error, explain a decision, or record the next practice target.

The balance changes as students grow

Early in a pathway, students receive more modelling, guided examples, and support with each step. Later, they take more independent decisions, work across mixed topics, manage time, explain their reasoning, and check the quality of their own solutions.

1 Build understanding	2 Develop the method	3 Apply and explain	4 Reflect and improve
See the idea through examples and representations.	Practise with prompts, feedback, and purposeful repetition.	Use the idea in modelling, investigation, and unfamiliar contexts.	Analyse the response, correct misconceptions, and set a next target.



04 Progress, feedback, and parent support

Assessment is used to decide what each student should practise next, not simply to record what has already happened.

The progress cycle

1 Find the starting point	2 Make the mathematics clear	3 Check understanding	4 Plan the next step
A friendly baseline conversation and short tasks show what is secure and where support is needed.	Teaching uses explanations, examples, diagrams, representations, and worked steps to make ideas easier to follow.	Classwork, short review questions, investigations, modelling tasks, and MYP-style assessments show what students can do independently.	The next lesson or practice set is adjusted: correct, revisit, strengthen, or extend.

How students see progress

- Short retrieval questions and classwork show which ideas are secure and which need another explanation.
- Topic tasks look at accuracy, clear communication, and whether a student can use an idea in a new question.
- Investigations and modelling tasks show how students identify patterns, make claims, use mathematics in context, and justify conclusions.
- Friday practice develops timing, stamina, correction, and the ability to complete a full response independently.
- A personal improvement record turns feedback into a small, specific action for the next week.

How families can help

- Support consistent attendance, especially when a student is following the five-class route.



- Protect a small, regular time for assigned practice and review between classes.
- Ask your child to explain the first step, draw a representation, estimate, or check an answer rather than doing the mathematics for them.
- Ask what the next practice target is, rather than focusing only on a mark or grade.
- Contact Hillview early if a student is anxious, falling behind, or no longer finding the current pathway productive.

Parent communication

Families receive progress updates at agreed review points. Updates can highlight what is improving, what is recurring, and what support will have the greatest effect at home. Hillview confirms the communication method and frequency at enrolment.

05 Practical information

The details below are designed to help families decide whether the programme is a good fit and prepare for a strong start.

What to bring

- A calculator, notebook, and the materials assigned for the current unit.
- The student's current school topics or course outline, if available.
- Recent school assessments or questions that the student found difficult, if they would help the starting conversation.

Before the first class

Please share the student's year group, current MYP topics, preferred pathway, goals, and weekly availability. The first meeting includes a friendly conversation and short baseline tasks so the starting point is clear.

Information	Details
Age guide	Usually 14-16
Year groups	MYP-4 and MYP-5
Class size	Up to 6 students; maximum total enrolment is 6



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Information	Details
Course start	23 September 2026
Standard attendance	MYP-4: Monday, Wednesday, and Friday. MYP-5: all five classes recommended.
Extended attendance	MYP-4 and MYP-5 Extended: all five classes recommended.
MYP criteria	Knowing and understanding; Investigating patterns; Communicating; Applying mathematics in real-life contexts
Assessment context	Hillview uses class evidence to guide teaching and feedback. School-based MYP assessment, official grades, and eAssessment entry are managed by the school.
Fees and payment	Contact Hillview for current MYP fees, payment arrangements, and available places.
Location	The Study at Hillview, Opp. Beaconhouse Newlands
Contact	WhatsApp: +92-3122253056
Missed classes	Contact Hillview and agree the priority catch-up work.

MYP eAssessment is an optional externally assessed route. The school decides entry, registration, subjects, and final requirements under current IB arrangements. Hillview prepares students for the habits and skills the assessment requires but does not enter students or award official IB grades.

06 Illustrative course map

Six broad units give the year a clear arc. The final sequence is matched to the student's school programme, assessment calendar, starting point, and progress.

MYP-4 FOUNDATION AND DEVELOPMENT

Unit and focus	Examples of learning	Students build towards
1. Mathematical foundations	Number, ratio, percentages, accuracy, measurement, and financial mathematics.	Calculate accurately, estimate sensibly, and explain choices.



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Unit and focus	Examples of learning	Students build towards
2. Algebra and patterns	Expressions, equations, inequalities, sequences, and generalisation.	Represent, solve, identify patterns, and justify a generalisation.
3. Geometry and measurement	Angles, transformations, similarity, Pythagoras, area, and volume.	Reason spatially, use diagrams and formulae accurately, and justify measurements.

MYP-5 INTEGRATION AND PREPARATION

Unit and focus	Examples of learning	Students build towards
4. Functions and graphs	Coordinates, linear relationships, proportion, and introductory quadratic ideas.	Connect equations, tables, graphs, and context.
5. Statistics and probability	Data collection, representation, averages, spread, probability, and interpretation.	Interpret evidence and question conclusions.
6. Integration and preparation	Modelling, investigations, mixed problem-solving, and MYP assessment preparation.	Work independently and communicate a complete solution.

Extended students work with the same foundation while taking on more abstraction, richer patterns, less structured prompts, strategic choice, and explanation of why a method or model works.



07 Frequently asked questions and enrolment

A clear next step helps students begin at the right level and helps families know what to expect from the first few weeks.

Frequently asked questions

What is the difference between Standard and Extended?

Extended keeps the Standard foundation and adds greater depth, abstraction, reasoning, application, and independence. It is not simply about racing ahead.

Does attending Tuesday and Thursday move a student to Extended?

No. For MYP-5 Standard students, those sessions are complementary opportunities for deeper work, individual guidance, tailored practice, or revision. Any pathway change is discussed and agreed with the student, family, and Hillview.

How do you decide which pathway fits?

The starting conversation, baseline tasks, classwork, student goals, and school requirements are considered together. The pathway can be reviewed as confidence and learning needs develop.

Is this private tuition?

Classes are small-group sessions with up to 6 students. Students can receive one-to-one guidance within the lesson while also learning from carefully chosen questions and explanations.

What is MYP eAssessment?

It is an optional externally assessed route. The school manages entry, registration, subjects, and official requirements. Hillview prepares students for the habits and skills the assessment requires but does not enter students or award official IB grades.



What happens after enrolment?

Students begin with a friendly baseline, agree a small number of targets, and settle into a predictable weekly rhythm of explanation, practice, investigation, feedback, and review.

Book a place

Next step	Details
Start date	23 September 2026
Class places	Limited to 6 students
Standard attendance	MYP-4: Monday, Wednesday, and Friday. MYP-5: all five classes recommended.
Extended attendance	MYP-4 and MYP-5 Extended: all five classes recommended.
Fees	Contact Hillview for current MYP fees and payment details.
Booking route	WhatsApp +92-3122253056 to confirm the right pathway, current fees, and enrolment process.

Contact Hillview to confirm the right pathway, current fees, and the enrolment process. We look forward to helping each student build the understanding, communication, and independent problem-solving habits that MYP Mathematics requires.