IB Mathematics Exploration Rubric HL

Criterion A: Presentation

Coherence: the logical structure of the written work, including transitions between introduction, body, and conclusion
Organization: the presence of an introduction, aim, rational, body, and conclusion, with appropriate placement of graphs, tables, diagrams, and appendices.
Conciseness: the inclusion of only relevant and necessary calculations, graphs, and/or descriptions without needless repetition.

Coherence	Organization	Conciseness	Score
None	None		0
Some of one, none of the other			1
Some	Some		2
Abundant	Abundant	None or some	3
Abundant	Abundant	Abundant	4

Criterion B: Mathematical Communication

Relevance: validity of notation, symbols, and terminology for accomplishing the aim
Appropriateness: notation, symbols, and terminology at the level of this math course
Consistency: unchanging notation, symbols, and terminology throughout the work

Relevance	Appropriateness	Consistency	Score
None	None		0
Some of one, none of the other			1
Some	Some		2
Abundant	Abundant	Some	3
Abundant	Abundant	Abundant	4

Criterion C: Personal Engagement

Personal Engagement: the extent to which the author invests in the topic by exploring the mathematics and making it their own, by presenting ideas in their own way, or from different perspective, or my making and testing predictions.

Personal Engagement	Score
None	0
Some	1
Frequent	2
Abundant	3

Criterion D: Reflection

Reflection: the extent to which the student reviews, analyzes and evaluates their own work and results throughout the exploration

Reflection	Definition	Score
None	Presenting work and results without meaning	0
Limited	Describing results in context	1
Meaningful	Significant, linking aims, commenting on learning, limitations	2
Critical	Discussing impact of results, strengths/weaknesses, consequences, different perspectives	3

Criterion E: Use of Mathematics

Relevance: validity of processes that are valid approaches for accomplishing the aim
Understanding: ability to explain reasoning for each step in a procedure, and the real-world meaning of results
Correctness: accurate procedure and results
Sophistication: commensurate with mathematics beyond the SL curriculum
Rigor: clarity of logic and language when making mathematical arguments and calculations

Relevance	Understanding	Correctness	Sophistication and Rigor	Score
None	None			0
Some	Some			1
Some	Some	Some		2
Abundant	Some	Abundant		3
Abundant	Abundant	Abundant	None	4
Abundant	Abundant	Abundant	Some	5
Abundant	Abundant	Abundant	Abundant	6