MYP Mathematics Assessment Criteria – M4 & M5

CRITERION A	KNOWLEDGE & UNDERSTANDING
Achievement level	**Descriptor**
0	The student does not reach a standard described by any of the descriptors given below.
1–2	The student **generally** makes appropriate deductions when solving **simple** problems in **familiar** contexts.
3–4	The student **generally** makes appropriate deductions when solving **more complex** problems in **familiar** contexts.
5–6	The student **generally** makes appropriate deductions when solving **challenging** problems in a **variety** of **familiar** contexts.
7–8	The student **consistently** makes appropriate deductions when solving **challenging** problems in a **variety** of contexts including **unfamiliar situations.**

CRITERION B	INVESTIGATING PATTERNS
Achievement level	**Descriptor**
0	The student does not reach a standard described by any of the descriptors given below.
1–2	The student **applies**, **with some guidance**, mathematical problem-solving techniques to recognize simple patterns.
3–4	The student **applies** mathematical problem-solving techniques to recognize patterns, and **suggests** relationships or general rules.
5–6	The student **selects and applies** mathematical problem-solving techniques to recognize patterns, **describes** them as relationships or general rules, and **draws conclusions** consistent with findings.
7–8	The student **selects and applies** mathematical problem-solving techniques to recognize patterns, **describes** them as relationships or general rules, draws the **correct conclusions** consistent with the correct findings, and **provides justifications or a proof**.

CRITERION C	COMMUNICATION
Achievement level	**Descriptor**
0	The student does not reach a standard described by any of the descriptors given below.
1–2	The student shows **basic use** of mathematical language and/or forms of mathematical representation. The lines of reasoning are **difficult to follow**.
3–4	The student shows **sufficient use** of mathematical language and forms of mathematical representation. The lines of reasoning are **clear though not always logical or complete**. The student moves between different forms of representation with **some success**.
5–6	The student shows **good use** of mathematical language and forms of mathematical representation. The lines of reasoning are **concise**, **logical** and **complete**. The student moves **effectively** between different forms of representation.

CRITERION D	REFLECTION
Achievement level	**Descriptor**
0	The student does not reach a standard described by any of the descriptors given below.
1–2	The student **attempts to explain** whether his or her results make sense in the context of the problem. The student **attempts to describe** the importance of his or her findings in connection to real life where appropriate.
3–4	The student **correctly but briefly explains** whether his or her results make sense in the context of the problem. The student **describes the importance** of his or her findings in connection to real life where appropriate. The student **attempts to justify** the degree of accuracy of his or her results where appropriate.
5–6	The student **critically explains** whether his or her results make sense in the context of the problem. The student provides a **detailed explanation** of the importance of his or her findings in connection to real life where appropriate. The student **justifies** the degree of accuracy of his or her results where appropriate. The student suggests improvements to his or her method where appropriate.