



7th Grade Mathematics

Mr Norcross

Willows Preparatory School 2018-19

Subject Aims

- Develop confidence, perseverance and independence in Mathematical thinking and problem solving.
- Communicate confidently and clearly in a variety of contexts.
- Appreciate the contribution of Mathematics in other areas.
- Reflect critically and constructively on your work and the work of others.
- Nurture the skills and knowledge required for students to take their studies in Mathematics beyond the MYP

Keys to Class

- **Haese Mathematics** – Our textbook is from the Haese Mathematics series, 7th grade use book 8 MYP 3
- **OneNote** – Everything flows through OneNote you can check on starters, homework, study guides, reflections and resources.
- **Homework** – 3 times a week and approximately 20mins each time, returned in a timely manner, will likely be used to inform classroom practice.
- **Discussion** – I really enjoy further exposition, discussion and clarification in class, I encourage the students to talk about Maths as much as possible!
- **Equipment** – Bringing your own geometry kit is a great start, preferably students will also have their own Scientific Calculator or Graphics Calculator.

I.B. Grading Criteria

Objective A: Knowing and Understanding	Do we have access to a selection methods, processes and techniques? Can we apply them to challenging and unfamiliar problems?
Objective B: Investigating Patterns	Can we generalize patterns and investigate their properties?
Objective C: Communicating	Can we link together the different forms of Maths to produce accurate, coherent solutions?
Objective D: Apply Mathematics in Context	How do we identify what is relevant? Can we justify our answers and reflect on the accuracy of our solutions?

Content Brief

Trimester 1	Trimester 2	Trimester 3
Algebraic Expressions: Linear and quadratic expansion and factorizing, fractional coefficients, rules of indices, algebraic fractions Functions: Ratio, properties of linear functions, patterns and sequences, simultaneous equations, basic quadratic graphs	Geometry A: Constructions, angle properties, Pythagoras, similarity, congruency Geometry B: Composite area, surface area, volume, composite volumes, formulae and changing the subject	Geometry C: Trigonometry, quadratic equations Data Analysis: Collection, analysis and presentation Probability: Simple, theoretical probability and expectation