

Math Expectation to Enter Grade 10

A student who shows a mastery of the skills listed below should be able to perform well in the Grade 10 (MYP 5) Mathematics course:

1- Number:

- Concept of Rational Number
- Exponent laws (incl. power 0 and negative powers)
- Deciding rationality by simplifying radicals.
- Scale factor (transformations, maps)
- Percentage error
- Number sets N , Z , Q , R and use of set notation
- Expressing solutions of linear inequalities using set notation
- Operations on radicals and Simplifying radicals
- Describing arithmetic and geometric progressions
- Percentage error

2- Algebra:

- Expanding and simplifying polynomial expressions (including binomial x binomial)
- Recognizing, expanding and factoring perfect square and difference of squares
- Factoring algebraic expressions using GCF
- Reordering formulae
- Finding equations of lines: standard form and slope-intercept form
- Solving simultaneous equations algebraically and graphically.
- Equations of vertical & horizontal lines
- Finding axes intercepts

3- Geometry :

- Finding slopes of parallel and perpendicular lines
- Identifying 2 linear relations with 2 unknowns
- Angle properties for triangles, quadrilaterals
- Using Pythagorean Theorem & basic understanding of trigonometric ratios
- Calculating perimeter and area and all Surface Area and Volume formulas for 3D objects
- Solving problems involving algebra and geometry

4- Statistics & Probability:

2-variable statistics:

- Draw scatter plots
- Identify independent & dependent variables
- Calculate first differences
- Find line of best fit by hand
- Interpret slope and intercepts etc. in real life situations