





TERM I Entrance Exam Requirements "Going to Grade12/SAT"

<u>Math</u>

- 1. Roots and Radical Expressions
- 2. Multiplying and Dividing Radical Expressions
- 3. Binomial Radical Expressions
- 4. Rational Exponents
- 5. Solving Square Root and Other Radical Equations
- 6. Function Operations
- 7. Inverse Relations and Functions
- 8. Graphing Square Root and Other Radical Function
- 9. Exploring Exponential Models
- 10. Properties of Exponential Functions
- 11. Logarithmic Functions as Inverses
- 12. Properties of Logarithms
- 13. Exponential and Logarithmic Equations
- 14. Natural Logarithms
- 15. Inverse Variation
- 16. The Reciprocal Function Family
- 17. Rational Functions and Their Graphs
- 18. Rational Expressions
- 19. Adding and Subtracting Rational Expressions
- 20. Solving Rational Equations
- 21. Probability of Multiple Events
- 22. Exploring Conic Sections
- 23. Parabolas
- 24. Circles
- 25. Ellipses
- 26. Hyperbolas
- 27. Translating Conic Sections

- 28. Mathematical Patterns
- 29. Arithmetic Sequences
- 30. Geometric Sequences
- 31. Arithmetic Series
- 32. Geometric Series
- 33. Area Under a Curve
- 34. Probabilities Distributions
- 35. Conditional Probabilities
- 36. Analyzing Data
- 37. Standard Deviation
- 38. Working With Samples
- 39. Binomial Distributions
- 40. Normal Distributions
- 41. The Tangent Functions
- 42. Radian Measure
- 43. The Sine Function
- 44. The Cosine Function
- 45. Exploring Periodic Data
- 46. Translating Sine and Cosine Function
- 47. Reciprocal Trigonometric Functions
- 48. Trigonometric Identities
- 49. Solving Trigonometric Equations Using Inverses
- 50. Area and the Law of Sines
- 51. The Law of Cosine
- 52. Angle Identities
- 53. Double-Angle and Half-Angle Identities

Enalish

- **Reading Comprehension:** Students should be able to answer multiple choice questions based on a *critical reading* passage.
- **Grammar**: In the Grammar Section, candidates should be able to identify sentence errors. In addition, they should be able to decide on an answer that best revises the underlined part.
- **Essay**: The last question requires pupils to compose a persuasive, discursive or descriptive essay in response to a certain topic.







TERM II Entrance Exam Requirements "Grade12/SAT"

Math

<u>Text Book:</u> <u>Calculus.</u>

- Lesson 2.4 Infinite Limits (Book pages 79 to 87).
- Lesson 2.5 Limits at Infinity (Book pages 88to 97).
- Lesson 2.6 Continuity (Book pages 98 to 111).
- Lesson 3.1 Introduction to Derivatives (Book pages 126 to 135).
- Lesson 3.3 Rules of Differentiation (Book pages 144 to 152).
- Lesson 3.4 Product and Quotient Rules (Book pages 153 to 162).
- Lesson 3.5 Derivatives of Trigonometric Functions (Book pages 163 to 170).
- Lesson 3.7 The Chain Rule (Book pages 185 to 194).

English

- **Reading Comprehension:** Students should be able to answer multiple choice questions based on a *critical reading* passage.
- **Grammar**: In the Grammar Section, candidates should be able to identify sentence errors. In addition, they should be able to decide on an answer that best revises the underlined part.
- **Essay**: The last question requires pupils to compose a persuasive, discursive or descriptive essay in response to a certain topic.

Senior School Administration