



**Entrance Exam Requirements "Going to Grade12/SAT"**

**Math**

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| 1. Roots and Radical Expressions                   | 28. Mathematical Patterns                          |
| 2. Multiplying and Dividing Radical Expressions    | 29. Arithmetic Sequences                           |
| 3. Binomial Radical Expressions                    | 30. Geometric Sequences                            |
| 4. Rational Exponents                              | 31. Arithmetic Series                              |
| 5. Solving Square Root and Other Radical Equations | 32. Geometric Series                               |
| 6. Function Operations                             | 33. Area Under a Curve                             |
| 7. Inverse Relations and Functions                 | 34. Probabilities Distributions                    |
| 8. Graphing Square Root and Other Radical Function | 35. Conditional Probabilities                      |
| 9. Exploring Exponential Models                    | 36. Analyzing Data                                 |
| 10. Properties of Exponential Functions            | 37. Standard Deviation                             |
| 11. Logarithmic Functions as Inverses              | 38. Working With Samples                           |
| 12. Properties of Logarithms                       | 39. Binomial Distributions                         |
| 13. Exponential and Logarithmic Equations          | 40. Normal Distributions                           |
| 14. Natural Logarithms                             | 41. The Tangent Functions                          |
| 15. Inverse Variation                              | 42. Radian Measure                                 |
| 16. The Reciprocal Function Family                 | 43. The Sine Function                              |
| 17. Rational Functions and Their Graphs            | 44. The Cosine Function                            |
| 18. Rational Expressions                           | 45. Exploring Periodic Data                        |
| 19. Adding and Subtracting Rational Expressions    | 46. Translating Sine and Cosine Function           |
| 20. Solving Rational Equations                     | 47. Reciprocal Trigonometric Functions             |
| 21. Probability of Multiple Events                 | 48. Trigonometric Identities                       |
| 22. Exploring Conic Sections                       | 49. Solving Trigonometric Equations Using Inverses |
| 23. Parabolas                                      | 50. Area and the Law of Sines                      |
| 24. Circles  | 51. The Law of Cosine                              |
| 25. Ellipses                                       | 52. Angle Identities                               |
| 26. Hyperbolas                                     | 53. Double-Angle and Half-Angle Identities         |
| 27. Translating Conic Sections                     |  |

**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.