



Gymnázium Evolution

Czech Maturita Exam Topics 2026/2027

MATHEMATICS: APPLICATIONS AND INTERPRETATION SL

Tools allowed: Casio fx-CG50; Mathematics: applications and interpretation formula booklet; geometry tools

1. Number and algebra (estimation and calculation of percentage error, sets, rounding, laws of exponents, scientific notation, logarithm)
2. Arithmetic sequences and series
3. Geometric sequences and series
4. Functions – graph, properties of functions, inverse function
5. Functions - linear, quadratic, inverse variation
6. Functions - exponential, goniometric
7. Functions – modelling of real life situations
8. Surface area and volume
9. Trigonometry (right- angled and non-right angled)
10. Voronoi diagram
11. Descriptive statistics
12. Probabilities
13. Derivative of a function – rate of change
14. Further differential calculus (maxima and minima, extremes, monotony)
15. Tangent line and normal line of a graph of a function
16. Optimization
17. Integration – anti-derivatives
18. Area under a curve
19. Probability distributions (binomial, normal)
20. Hypothesis tests – Chi square test (GOF, test for independence)
21. Hypothesis tests - t-test
22. Measure of correlation, linear regression

