MATHEMATICS

Grade 10 mathematics –

Algebra:

Understanding and solving problems with quadratic equations and inequalities

Understanding and using properties of polynomial functions

Understanding and using the Binomial Theorem

Understanding and using the Fundamental Theorem of Algebra

Understanding and solving problems with systems of linear and nonlinear equations and inequalities
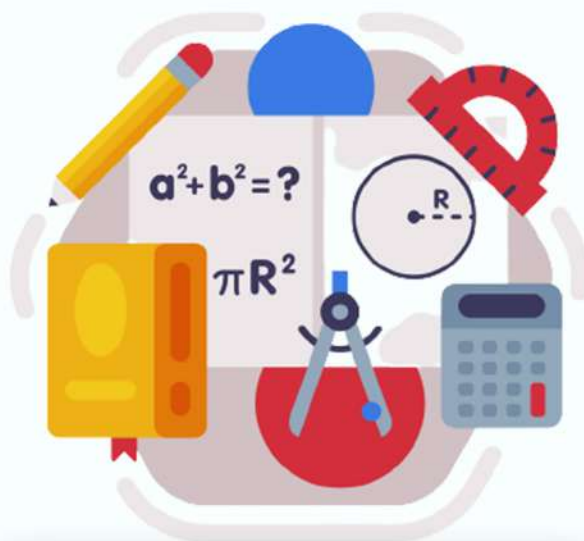
Understanding and using sequences and series to model and solve problems

Functions:

Understanding and analyzing the properties of linear, quadratic, exponential, and logarithmic functions

Understanding and using function notation

Understanding and analyzing the properties of inverse functions

MATHEMATICS

Grade 10 mathematics –

Geometry:
Understanding and using the properties of triangles, circles, and other two-dimensional shapes
Understanding and using the properties of three-dimensional shapes
Understanding and using trigonometric functions to solve problems involving right triangles and circles
Understanding and using the properties of conic sections, including circles, ellipses, parabolas, and hyperbolas
Understanding and using the properties of transformations, including reflections, rotations, and translations
Understanding and using the properties of symmetry to analyze and prove geometric theorems

Statistics and Probability:
Understanding and using statistical measures to describe and compare data
Understanding and using the normal distribution and regression models to analyze data
Understanding and using statistical inference to make predictions and draw conclusions
understanding and using experimental design to collect and analyze data

Grade 10 mathematics –

Modeling:
Understanding and using mathematical models to solve real-world problems
Understanding and analyzing the limitations of models and assumptions

Number and Quantity:
Understanding and using complex numbers to solve problems
Understanding and using the properties of vectors and matrices to solve problems
Understanding and using rational and irrational numbers to solve problems