Summer Teaching plan

Date of beginning: 8/7

Materials required: Homework collecting box

Deadline of Homework: Dead by sunset.

For who is promoting to F.6:

Period	Content	Homework	中	英
8/7-10/7	Functions and Variations	Solving equations, Building Variations, Polynomial division w/ Rem. Thm.		
15/7-19/7	Inequalities and Linear programming	Solving inequalities, function graphs, straight lines		
22/7-26/7	Locus and Circle properties	Distance formula, equation of circle, angle in and tangent to circle		
29/7-2/8	Trigonometry in 2D	360Trigo, identities with Trigonometry		
5/8-9/8	Trigonometry in 3D	Area and Volume, 3D problems		
12/8-16/8	Distribution and statistical graphs	Mean, mode, median, S.D., Variance, Algebraic method		
19/8-23/8	Counting and Probability	Factorial, nPr, nCr, Conditional and unconditional probability		

For who is promoting to F.5:

Period	Content	Homework	中	英
8/7-10/7	Surds and Complex numbers, solving simple equations and inequalities	Complex Numbers and surds operations, Solving equations in one unknowns, two unknowns and make subjects, identities, basic inequalities		
15/7-19/7	Quadratic equations, its roots and its graphs	Discriminant, sum and product of roots, completing squares, vertex, axis of symmetry, extreme value		
22/7-26/7	Functions and variations	Operations on functions, building variations, solve for variational problems		
29/7-2/8	Polynomials	Long division, factor theorem, remainder theorem		
5/8-9/8	Trigonometry in 2D	Basic Triangle, Pythagoras theorem, 360Trigo, Sine Law, Cosine Law, Heron's formula		
12/8-16/8	Locus and equations of straight lines and circles	Distance formula, equation of straight lines, equation of circles (Intersections)		
19/8-23/8	Statistical charts and basic probabilities	Different charts, box-and-whisker diagram, stem-and-leaf diagram, conditional and unconditional probabilities		

For who is promoting to F.4:

Period	Content	Homework	中	英
17/7-23/7	Factorization up to degree n polynomials	Factorization problems and solving simple system of equations		
24/7-30/7	Understanding the existence of quadratic polynomial and know to solve it, including relation between roots and the polynomial itself	Solving quadratic equation, relation between roots and coefficients		
31/7-6/8	Understanding graph of quadratic polynomial, properties and completing square	Open directions, completing square, vertex, axis of symmetry, extremum		
7/8-13/8	Surds and complex number, knowing $i^2 = -1$ and do rationalizations	Differentiation between real and imaginary part, complex arithmetic, algebras on surds		

Appendix

Students are also required to complete a test under Teacher's inspection. A test paper will be published at the end of period. Teachers should take initiatives to arrange a test time and meet students for discussion about the result of the test, providing study plans for them.

Students are suggested to follow the plan to do revisions, or they shall take on their initiatives to communicate with teachers in order to provide the best-suited study plan according to the HKDSE.