

TEMATY preDP2 i future HL

QUADRATICS

- 1 factorization
- 2 completing the square
- 3 solving equations
- 4 quadratic function general form & vertex form
- 5 quadratic function formulas on vertex, connections with the graph
- 6 quadratic function product form, conditions of existence
- 7 finding formula of quadratic function from given properties
- 8 graphing quadratic function and reading formula from the graph
- 9 solving equations and inequalities
- 10 application of quadratic function
- 11 modelling of quadratic function
- 12 optimization
- 13 parameters
- 14 Viete'a formulae and parameters
- 15 revision and test

TRIGONOMETRY

- 16 definition of ratios in right triangles
- 17 properties of triangles 45,45,90 and 60,30,90
- 18 applications of trig ratios angle of depression and angle of elevation
- 19 trig function of any angle
- 20 unit circle
- 21 radian measure
- 22 trig equations linear and quadratic
- 23 sector ,segment, arc,area of the triangle
- 24 connection the gradient of linear function with tangent
- 25 sine rule, ambiguous case
- 26 cosine rule
- 27 bearings
- 28 graphs of circular functions, period, amplitude, transformations
- 29 finding formula of trig function from the graph
- 30 revision and test

FUNCTIONS

- 31 domain, range, zeroes, y- intercept, 1-1 function
- 32 reciprocal, rational function (asymptotes, standard form, graphs)
- 33 absolute values (graphs, equations and inequalities)
- 34 composite functions
- 35 inverse functions (also to rational function and to part of quadratic function)
- 36 revision and test

revision to end of semester exam

exam P1 2h P2 2h

overtalking the exam

EXPONENTIAL AND LOGARITHMIC FUNCTIONS

- 37 rules of exponents
- 38 rules of logarithms
- 39 equations
- 40 exponential function graph, its transformations and properties
- 41 logarithmic function graph, transformations and properties
- 42 applications and simple inequalities

43 revision and test

SEQUENCES, SERIES AND BINOMIAL THEOREM

44 recursive formula, n-th term rule

45 arithmetic sequence , nth term formula

46 sum of n-th terms of arithmetic sequence

47 geometric sequence n-th term formula

48 sum of n-th terms of geometric sequence

49 applications

50 finite sum of infinite sequence, geometric series

51 Pascal triangle, Binomial theorem

52 binomial coefficients

53 Binomial theorem exercises

54 revision and test

PROBABILITY

55 experimental probability

56 properties of theoretical probability

57 Venn diagram, grids as a method of finding probability

58 conditional probability

59 total probability

60 independent events

61 Bayes theorem

review to exam

exam P1 2h P2 2h

overtalking the exam

64 remainder theorem

65 equations and rational roots

66 inequalities

67 Viete'a formulae

68 equation of a circle

69 intersections lines and circles

70 tangent line to a circle

71 intersections of 2 circles

72 triangles inscribed and circumscribed

73 revision and test