

N6

Higher Course Summary

Unit 1

Straight Line (A)

Differentiation (R&C)

including:

Optimisation

Differentiation of $\sin x$ and $\cos x$

◇ Applications Test(1):

Assessment Standards 1.1 (Straight Line)

◇ Relationships and Calculus Test(1):

Assessment Standards 1.3 (Differentiation)

Unit 2

Sets and Functions (EF)

including:

Inverse Functions

Composite Functions

Graphs of Functions (EF)

including:

Graphs of Trig Functions

Trig Equations

Exponential and Logarithmic Graphs

Recurrence Relations (A)

◇ Expressions and Functions Test(1):

Assessment Standards 1.3 (Functions and Graphs)

◇ Applications Test(2):

Assessment Standards 1.3 (Recurrence Relations)

Unit 3

Polynomials (R&C)

Quadratic Functions (R&C)

Circle (A)

◇ Relationships and Calculus Test(2):

Assessment Standards 1.1 (Polynomials and Quadratics)

◇ Applications Test(3):

Assessment Standards 1.2 (Circle)

Unit 4

Integration

including:

Area under a curve and between two curves

Differential equations

Integration of $\sin x$ and $\cos x$

Further Calculus

Chain Rule, Rules for Integration

Differentiation

Optimisation (revision)

◇ Relationships and Calculus Test(3):

Assessment Standard 1.4 (Integration)

◇ Applications Test(4):

Assessment Standard 1.4 (Optimisation/Area and Curves)

Unit 5

Vectors (E&F)

◇ Expressions and Functions Test(2):

Assessment Standard 1.4 (Vectors)

Unit 6

Trigonometry 1

including:

Addition/Double Angle formulae

Trig equations involving double angle

Trigonometry 2

The Wave Function

Exponential and Logarithmic Functions

◇ Relationships and Calculus Test(4):

Assessment Standard 1.2 (Trig Equations)

◇ Expressions and Functions Test(3):

Assessment Standard 1.2 (Double Angle)

◇ Expressions and Functions Test(4):

Assessment Standard 1.1 (Logarithmic Functions)