

# Advance information June 2022

## Level 2 Certificate in Further Mathematics (8365)

---

### Version 1.1\*

---

Because of the ongoing impacts of the Coronavirus (COVID-19) pandemic, we are providing advance information on the focus of June 2022 exams to help students revise.

This is the advance information for Level 2 Certificate in Further Mathematics (8365).

### Information

---

- This advance information covers all examined components.
- There are no restrictions on who can use this.
- The format/structure of the papers remains unchanged.
- For each paper the list shows the major focus of questions.
- The information is presented in specification order and not in question order.
- You are **not** permitted to take this advance information into the exam.

### Advice

---

- The following areas of content are suggested as key areas of focus for revision and final preparation, in relation to the June 2022 examinations.
- Students and teachers should consider how to revise other parts of the specification, for example to review whether other topics may provide knowledge which helps your understanding in relation to the areas being tested in June 2022.
- Students will be credited for using any relevant or appropriate knowledge from any topic areas when answering questions.

## Focus of the June 2022 exam

### Paper 1 8365/1 June 2022

Topic	Detail
Number	Percentage increase
	Ratio
	Rationalisation of surd
Algebra	Inverse function
	Identity
	Expanding brackets
	Binomial expansion
	Changing subject of formula
	Completing the square
	Quadratic inequality
	Draw graph of function
	Simultaneous equations, one linear and one second order
	Index laws
	$n$ th term of sequence
	Limiting value of sequence
Quadratic sequence	
Coordinate Geometry	Equation of line
	Length of a line
	Intercept of a line
	Point on circle
	Equation of tangent to a circle
Calculus	Differentiation
	Stationary points
Matrix Transformations	Matrix multiplication
	Matrix transformations
Geometry	Circle theorems
	Geometric proof
	Sine rule
	Pythagoras' Theorem
	Trigonometrical graph
	Trigonometrical value
	Trigonometrical identity

**Paper 2 8365/2 June 2022**

<b>Topic</b>	<b>Detail</b>
<b>Number</b>	Ratio
	Product rule
<b>Algebra</b>	Inequality
	Expanding three brackets
	Factorisation
	Rational expression simplification
	Factor theorem
	Exponential graph recognition
	Solving equations
	Quadratic equation
	Three simultaneous equations
	Quadratic inequality
	Index laws
	Algebraic proof
Linear sequence	
<b>Coordinate Geometry</b>	Equation of line
	Midpoint of line
	Parallel line
	Equation of circle
<b>Calculus</b>	Rate of change
	Differentiation
	Gradient of curve
<b>Matrix Transformations</b>	Matrix multiplication
<b>Geometry</b>	Cyclic quadrilateral
	Area of a triangle
	Pythagoras' Theorem in 3D
	Trigonometry
	Trigonometry in 3D
Trigonometric equation	

## 8365/1 and 8365/2 Aggregated Content June 2022

Topic	Detail
<b>Number</b>	Percentage increase
	Ratio
	Product rule
	Rationalisation of surd
<b>Algebra</b>	Inverse function
	Inequality
	Identity
	Expanding brackets
	Expanding three brackets
	Binomial expansion
	Factorisation
	Rational expression simplification
	Changing subject of formula
	Factor theorem
	Completing the square
	Exponential graph recognition
	Draw graph of function
	Simultaneous equations, one linear, one second order
	Solving equations
	Quadratic equation
	Three simultaneous equations
	Quadratic inequality
	Index laws
	Algebraic proof
$n$ th term of sequence	
Limiting value of sequence	
Linear sequence	
Quadratic sequence	
<b>Coordinate Geometry</b>	Equation of line
	Length of a line
	Midpoint of line
	Intercept of a line
	Parallel line
	Point on circle
	Equation of circle
	Equation of tangent to a circle
<b>Calculus</b>	Rate of change
	Differentiation
	Gradient of curve
	Stationary points

<b>Matrix Transformations</b>	Matrix multiplication
	Matrix transformations

<b>Geometry</b>	Circle theorems
	Cyclic quadrilateral
	Area of a triangle
	Geometric Proof
	Sine rule
	Pythagoras' Theorem
	Pythagoras' Theorem in 3D
	Trigonometry
	Trigonometry in 3D
	Trigonometrical graph
	Trigonometrical value
	Trigonometrical identity
	Trigonometric equation

\*This advance information has been updated. The reference **Algebra – Draw graph of function** was included in the aggregated version on page 4. The reference has now also been added to paper 1 (8365/1) on page 2.

END OF ADVANCE INFORMATION