

Assessment Notification



Course	Year 10 Mathematics Pathway A
Task	Task 3
Date and time	Friday July 28- Week 2A
Time allowed	60 minutes (3 minutes reading time)
Weighting	20%
Nature of task	Written examination style task, calculators allowed. Each student is permitted to bring a sheet of A4 paper with one side of handwritten notes into the examination.

Topics and outcomes Quadratic expressions and equations (MA5.2-6NA), Simultaneous equations(5.2-8NA), Probability (5.3-6NA)

Topics content and text references Year 10 5.1-5.3 Signpost Text Chapter 2
Year 10 5.1-5.3 Signpost Text Chapter 4
Year 9 5.1-5.3 Cambridge Maths Text Chapter 2 Ex 2I, 2J and 2K

Quadratic expressions and equations

Students can be asked to:

- Add and subtract algebraic terms
- Multiply and divide algebraic expressions
- Simplify division of algebraic expressions where factorisation is needed
- Expand brackets and simplify resulting expressions including negative expansions
- Factorise algebraic expressions involving a difference of 2 squares e.g. $x^2 - 9$, $4x^2 - 25$, $9a^2 - 49b^2$
- Factorise trinomial expressions e.g. $x^2 + 6x + 8$, $x^2 - 4x - 40$, $x^2 + 5x - 14$ etc
- Expand binomials and the perfect squares e.g. $(x + 4)(x + 5)$, $(x - 5)^2$ etc
- Add and subtract algebraic fractions
- Multiply and divide algebraic fractions
- Solve quadratic equations by using factorisation, completing the square and the quadratic formula
- Factorise algebraic expressions using the HCF and including questions where a negative factor is the HCF e.g. Factorise $3x + 6$, $10x + 15$, $-7p - 14$ etc

Simultaneous Equations

Students can be asked to:

- Solve simultaneous equations using both the elimination and the substitution method
- Use linear simultaneous equations to solve different problems

Probability

Students can be asked to:

- Find the probability of an event occurring for independent and dependent events
- Find the probability of an event occurring in a two or three-step event.

Preparation

- Review class notes and work and use this to prepare the one side of A4 (handwritten) that you can bring into the assessment
- Complete the revision sheets given and check your answers against the answers provided
- Study the chapters and topics listed above by reviewing the theory and working through relevant questions, seeking assistance where required
- Bring all your equipment to the examination – calculator, pen, pencil, ruler, eraser