



NSW Education Standards Authority

**2022** HIGHER SCHOOL CERTIFICATE EXAMINATION

# Mathematics Extension 1

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**General****Instructions**

- \* Reading time -- 10 minutes
- \* Working time -- 2 hours
- \* Write using black pen
- \* Calculators approved by NESA may be used
- \* A reference sheet is provided at the back of this paper
- \* For questions in Section II, show relevant mathematical reasoning and/or calculations
- \* Write your Centre Number and Student Number on the Question 12 Writing Booklet attached

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**Total marks:**  
**70****Section I -- 10 marks** (pages 2-6)

- \* Attempt Questions 1-10
- \* Allow about 15 minutes for this section

**Section II -- 60 marks** (pages 2-6)

- \* Attempt Questions 11-14
- \* Allow about 1 hour and 45 minutes for this section

## Section I

10 marks

Attempt Questions 1--10

Allow about 15 minutes for this section

Use the multiple-choice answer sheet for Questions 1--10.

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G  $a = 1$   
i a  $b = 2$   
v n ,  $a + b$   
e d e  $\cdot \frac{1}{2}$   
n v  $\frac{3}{4}$   
t a  
h l  
a u  
t a  
t t  
e