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School code

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School name

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Given name/s

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Family name

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Attach your  
barcode ID label here

Book

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of

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books used

External assessment 2022

Question and response book

# General Mathematics SEE

## SEE 2 Paper 2

### Time allowed

- Perusal time — 5 minutes
- Working time — 90 minutes

### General instructions

- Answer all questions in this question and response book.
- Write using black or blue pen.
- QCAA-approved scientific calculator permitted.
- QCAA formula book provided.
- Planning paper will not be marked.

### Section 1 (38 marks)

- 7 short response questions



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**THIS PAGE WILL NOT BE MARKED**

## Section 1

### Instructions

- Questions worth more than one mark require mathematical reasoning and/or working to be shown to support answers.
- If you need more space for a response, use the additional pages at the back of this book.
  - On the additional pages, write the question number you are responding to.
  - Cancel any incorrect response by ruling a single diagonal line through your work.
  - Write the page number of your alternative/additional response, i.e. See page ...
  - If you do not do this, your original response will be marked.

### QUESTION 1 (4 marks)

The table shows a swimwear company's seasonally adjusted swimsuit sales (in thousands).

	Season			
	Spring	Summer	Autumn	Winter
Seasonally adjusted swimsuit sales (in thousands)	33.3	34.8	36.4	35.8

The long-term seasonal indices for spring, summer and winter are 1.11, 1.42 and 0.62 respectively. Determine the actual swimsuit sales for autumn.

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#### QUESTION 4 (5 marks)

The table shows the current road length (in kilometres) between six towns.

	Manon	Veria	Bolint	Farra	Recen	Alin
Manon		16	34	—	—	33
Veria			12	—	—	15
Bolint				—	10	—
Farra					15	23
Recen						15
Alin						

The government plans to build a direct road between Manon and Farra.

Use a network diagram to determine the length of the direct road if it is to be 4 km shorter than the length of the current shortest road route between Manon and Farra.

**Note:** If you make a mistake in the diagram, cancel it by ruling a single diagonal line through your work and use the additional response space at the back of this question and response book.

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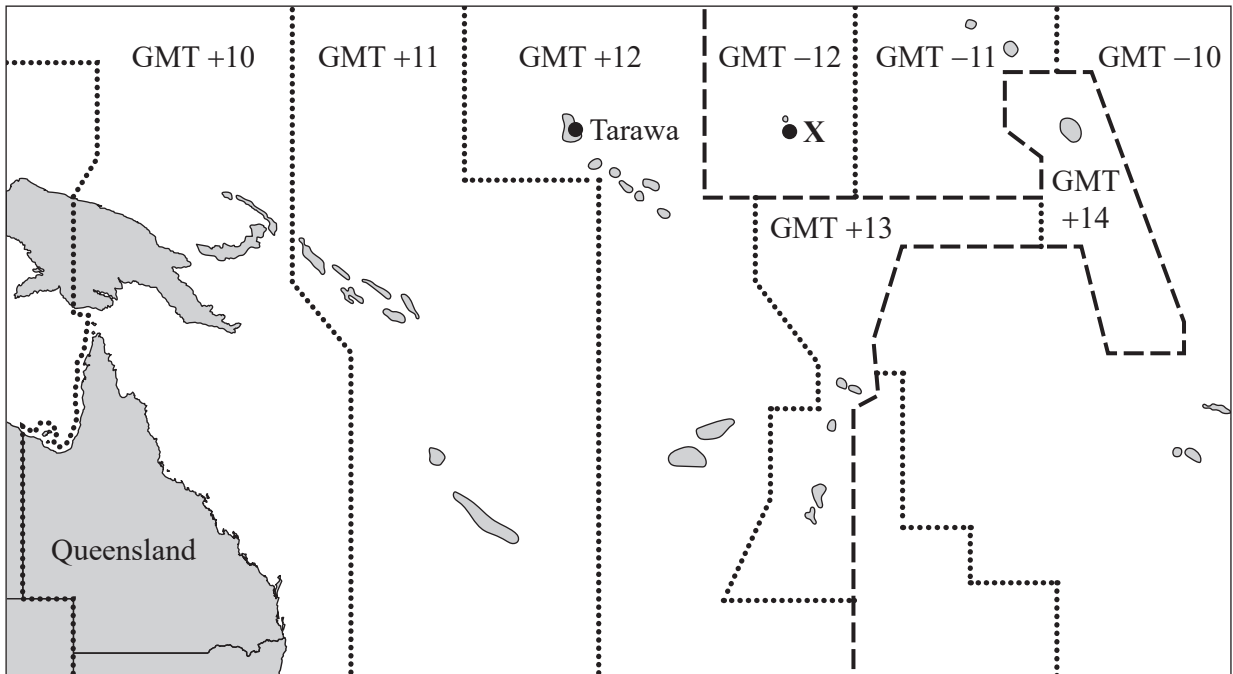
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**QUESTION 7 (7 marks)**

You live in Queensland and your friend is on a cruise ship holiday.

As their ship departs from X to travel 1350 km due west to Tarawa, your friend sends you a message saying ‘Local time 6:12 am Wednesday and enjoying the sunrise as our ship begins its trip to Tarawa’.



Not to scale

**Key**    - - - - International date line    ..... Time zone

You plan to phone your friend as soon as they arrive in Tarawa.

Assuming their ship is travelling at 50 km/h, determine the time in Queensland when you will phone your friend.

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**ADDITIONAL PAGE FOR STUDENT RESPONSES**

Write the question number you are responding to.

Do not write outside this box.



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