



91946



919460



Draw a cross through the box (X) if you have NOT written in this booklet

+



Mana Tohu Mātauranga o Aotearoa
New Zealand Qualifications Authority

Level 1 Mathematics and Statistics 2025

91946 Interpret and apply mathematical and statistical information in context

Credits: Five

Achievement	Achievement with Merit	Achievement with Excellence
Interpret and apply mathematical and statistical information in context.	Interpret and apply mathematical and statistical information in context using relational thinking.	Interpret and apply mathematical and statistical information in context using extended abstract thinking.

Check that the National Student Number (NSN) on your admission slip is the same as the number at the top of this page.

You should attempt ALL the questions in this booklet.

Pull out Resource Booklet 91946R from the centre of this booklet.

Show ALL working.

If you need more room for any answer, use the extra space provided at the back of this booklet.

Check that this booklet has pages 2–12 in the correct order and that none of these pages is blank.

Do not write in the margins (). This area will be cut off when the booklet is marked.

YOU MUST HAND THIS BOOKLET TO THE SUPERVISOR AT THE END OF THE EXAMINATION.

Use the information provided in Resource 1A and Resource 1B in the resource booklet to answer these questions.

- (c) Give at least one justified reason why Resource 1A may not be reliable for comparing the cost of Adidas and Nike sports shoes.

Resource 1B shows the amount of spending on clothing and footwear in New Zealand between the years 2010 and 2024, in millions of New Zealand dollars.

- (d) What trends, repeating patterns, and unusual features do you notice in the spending shown in the graph?

- Support your statements with evidence from the graph.
- Give at least two reasons to support and explain your answer.

- Explain your prediction, and discuss how confident you are in it.

QUESTION TWO

Use the information provided in Resource 2A and Resource 2B in the resource booklet to answer these questions.

The graph in Resource 2A shows the relationship between the price of sports shoes and the size of the shoes.

- (a) Describe and interpret TWO different features of the relationship shown in Resource 2A.

Feature 1: _____

Feature 2: _____

(b) Adina needs to buy a new pair of size 6 sports shoes.

Using the graph in Resource 2A, what price should Adina expect to pay?

- How confident can you be in using this graph to predict shoe price?
- Support your answer with statistical reasoning.

- Ricky wonders whether he should buy one or two pairs of sports shoes.

Make your recommendations, with reasons and considerations, using the information provided in Resource 2B, **as well as including your own personal world views.**

- Using **both** Resource 2A and Resource 2B, recommend the best option for Ricky when buying his sports shoes for next season.

QUESTION THREE

Use the information provided in Resource 3 in the resource booklet to answer these questions.

- (a) The survey was completed by 2571 people who visited the *Running Shoes Guru* website.

Approximately how many of the people who completed this survey, would be expected to run in the morning?

- (b) According to the survey, which brand of running shoe is the most preferred?

- Discuss how confident you would be in concluding that this brand is the most popular running shoe.
- Justify your answer.

*Question Three continues
on the following page.*

- (c) Discuss two similarities or differences in the running shoe **preference by age**.

Use this information to make suggestions of what brand of shoe you think will be bought by Quinn, who is 31 years old.

Similarity or difference 1: _____

Similarity or difference 2: _____

Suggestions for Quinn: _____

- He needs to buy a new pair of running shoes.

Include evidence from at least two sections of Resource 3 to justify your answer.

Extra space if required.
Write the question number(s) if applicable.

QUESTION
NUMBER

91946