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91946



Draw a cross through the box (☒) 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.

QUESTION ONE

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

<i>C</i>	41- distribution of the control of Addison A Niles on the characteristic December 1
C01	mpare the distributions of the cost of Adidas and Nike sports shoes shown in Resource 1
•	Discuss similarities and differences considering centre , shift , shape , and spread . Provide numerical evidence where appropriate.
•	In your answer, describe at least TWO different features, in context.
•	What conclusion about Adidas and Nike sports shoes can you make about which brand of shoe is more expensive, based on this sample?
•	Use evidence from the graph to support your answer.
	Ose evidence from the graph to support your answer.

(c)	Give at least one justified reason why Resource 1A may not be reliable for comparing the cost of Adidas and Nike sports shoes.					
	ource 1B shows the amount of spending on clothing and footwear in New Zealand between the s 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 predict	tion, and discuss h	now confident	you are in it.	
1 2 1			•	

QUESTION TWO

(a)

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.

Describe and interpret TWO different features of the relationship shown in Resource 2A.					
eature 1:					
eature 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.				

	Resource 2B summarises three different sports shoe companies' prices and their special offers.					
	Ricky wants to buy new size 7 football (soccer) sports shoes, and will choose from these companies.					
	Ricky wonders whether he should buy one or two pairs of sports shoes.					
	Which company should Ricky choose? Make your recommendations, with reasons and considerations, using the information provided in Resource 2B, as well as including your own personal world views.					

Hains hadd Daranas 2A and Daranas 2D married the hart artist C. Di L. L. L.					
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.

Simi	arity or difference 1:
Simi	arity or difference 2:
Sugg	estions for Quinn:

	Axel is 45 years old and runs approximately 50 km per week.				
	He needs to buy a new pair of running shoes.				
	Using any of the Resources 1–3, recommend which brand of shoe Axel should consider buyin and estimate the cost of the shoes. Include evidence from at least two sections of Resource 3 to justify your answer.				
	How confident would you be using information from this survey to make recommendations about running shoes?				

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

QUESTION NUMBER		write the question number(s) is applicable:	
NUMBER	_		