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91946R



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

RESOURCE BOOKLET

Refer to this booklet to answer the questions for Mathematics and Statistics 91946.

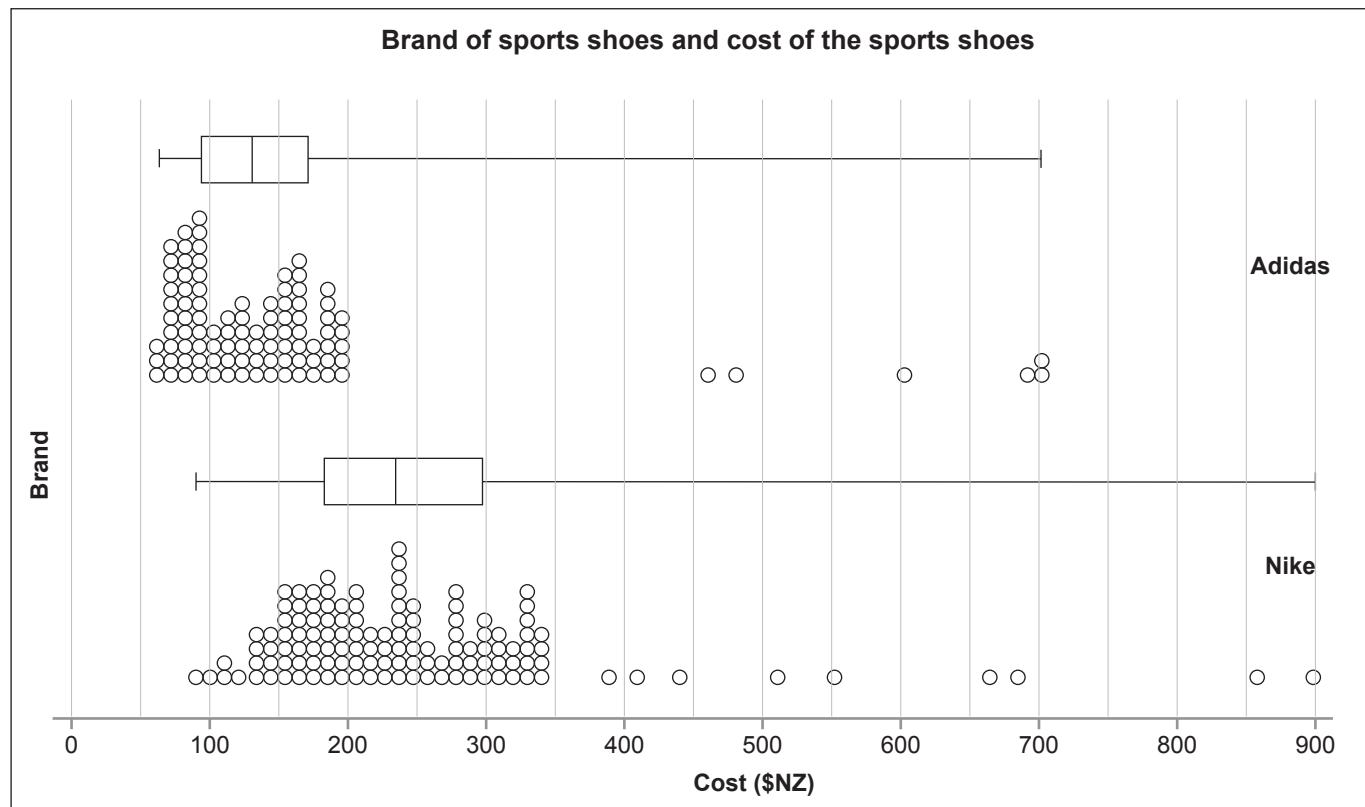
Check that this booklet has pages 2–7 in the correct order and that none of these pages is blank.

YOU MAY KEEP THIS BOOKLET AT THE END OF THE EXAMINATION.

SPORTS SHOES

RESOURCE 1A

The graph below shows the prices of a random sample of Adidas and Nike sports shoes taken from a New Zealand website selling shoes. The prices are in New Zealand dollars (\$NZ).



	Minimum	Lower quartile	Median	Mean	Upper quartile	Maximum	Number of pairs of shoes
Adidas	\$63.00	\$94.00	\$131.00	\$158.39	\$171.00	\$702.00	99
Nike	\$90.00	\$183.00	\$234.00	\$255.90	\$298.00	\$900.00	126

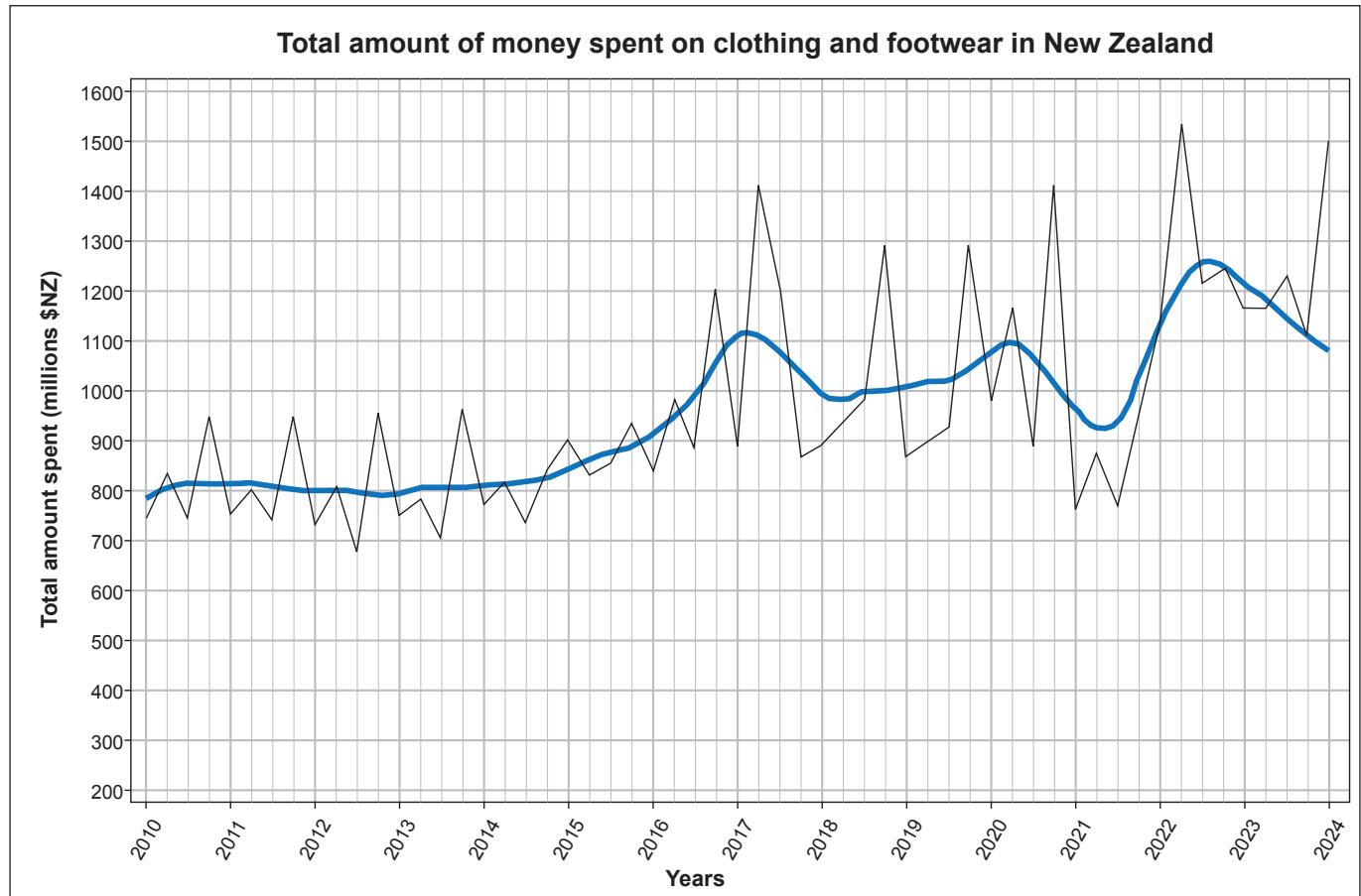
Adapted from: www.asos.com/women/shoes/cat/?cid=4172

RESOURCE 1B

The graph below shows the amount of money spent (millions of \$NZ) on clothing and footwear each quarter, between the years 2010 and 2024.

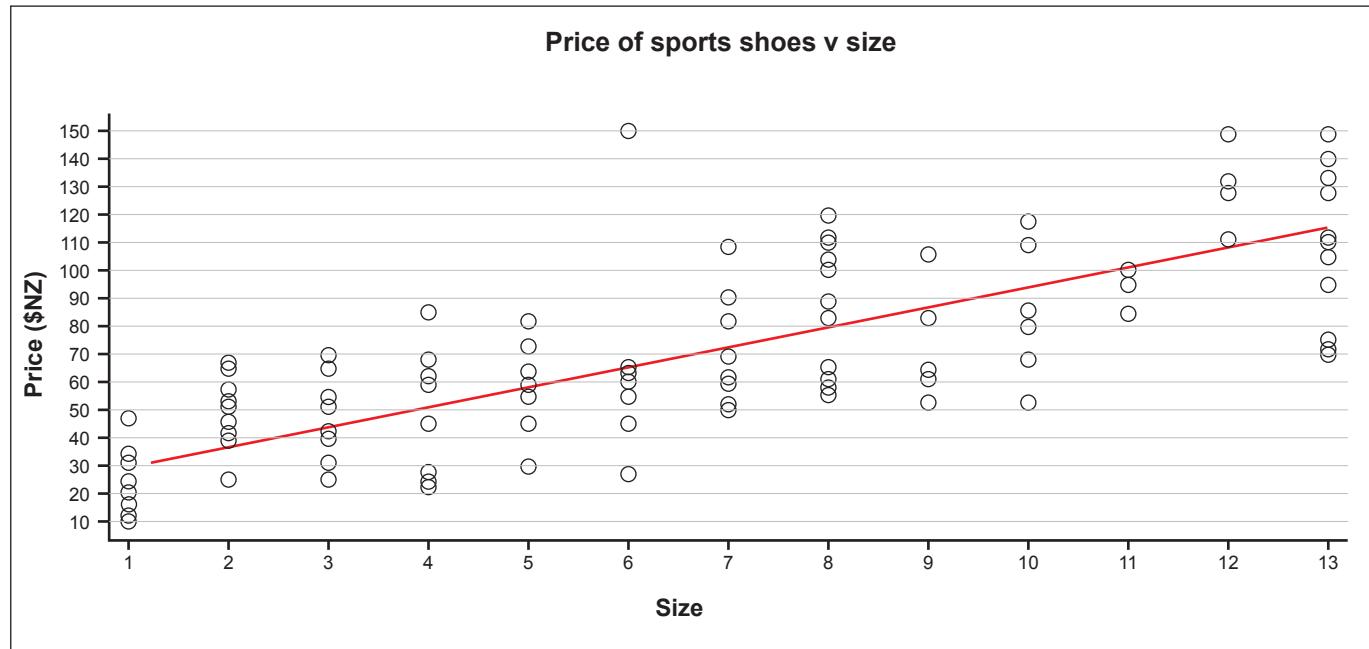
Each quarter is a group of 3 months. Quarter 1 is January to March; Quarter 2 is April to June; Quarter 3 is July to September; Quarter 4 is October to December.

The **blue line** is the long-term trend for the data shown.



RESOURCE 2A

The graph below shows the relationship between the price (\$NZ) of a pair of sports shoes and the size of the sports shoes based on 117 randomly selected pairs.



RESOURCE 2B

The table below shows the costs and special offers offered by three different online companies selling sports shoes for football (soccer). All prices are in New Zealand dollars.

Shipping cost is the additional cost that the company charges to send the shoes to a customer's home address.

GST is 15% extra to the cost of the item being purchased.

For all three companies, the special offers below apply only to shoe sizes 1–7.

For larger shoe sizes, prices are likely to be higher.

Company	Price	Special Offers	Shipping Cost
<i>Football Direct</i>	\$68	<ul style="list-style-type: none"> • Price excludes GST. • Special offer of $\frac{1}{3}$ off shipping cost if the purchase price is between \$70 and \$100, including GST. • Special offer of no shipping cost if the purchase price is more than \$150, including GST. 	\$9.99
<i>Footy Fields</i>	\$90	<ul style="list-style-type: none"> • Price includes GST. • Special offer of ‘pay no GST’. • Special offer of a 5% discount on the price of a pair of sports shoes. • Special offer of a 10% discount if buying two pairs of sports shoes. 	\$5.99
<i>Kick Off</i>	\$70	<ul style="list-style-type: none"> • Price excludes GST. • Will allow collection from the factory so no shipping cost. • Special offer of buy one pair of sports shoes and get a second pair for only half its usual price. 	\$4.00

RESOURCE 3

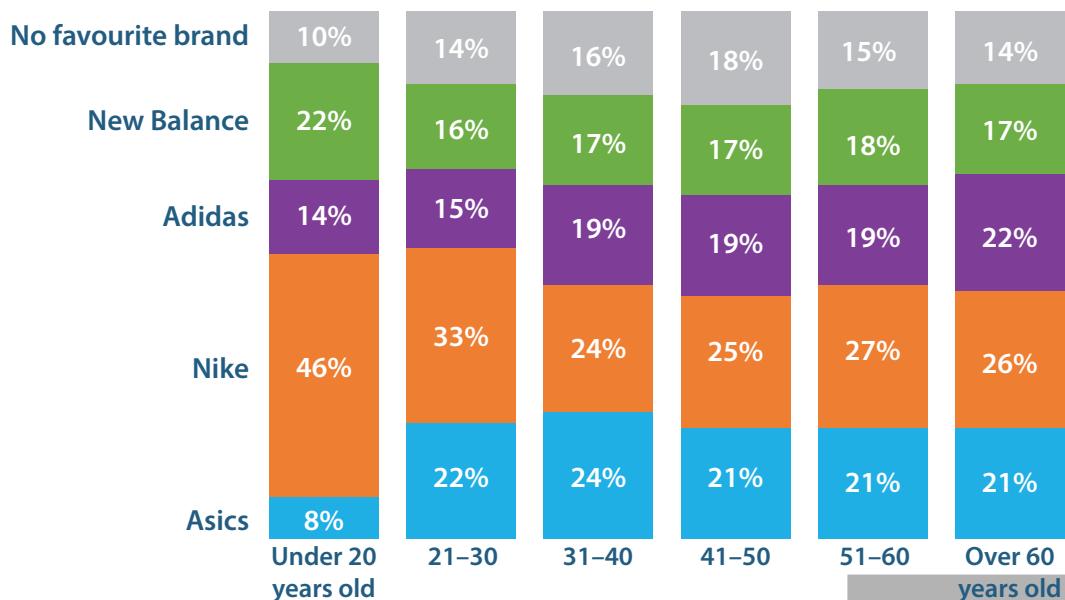
RUNNING SHOES

Buying habits in 2022

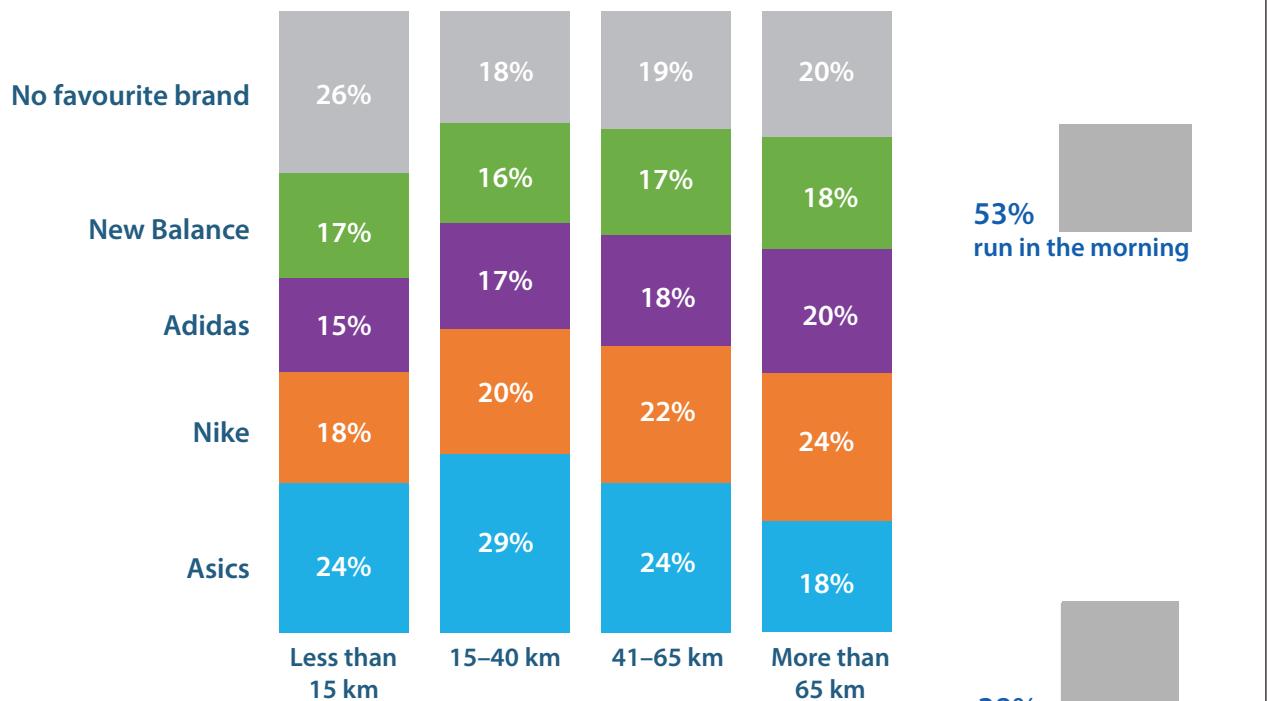
Running shoes preference



Running shoes preference by age (excluding other makes)



Running shoes preference by weekly km run (excluding other makes)



47%
spend between \$80 and
\$120 for buying a new
pair of running shoes

26%
consider personal
experience when
buying a new pair

7%
consider the
brand when
buying a new pair

53%
run in the morning

38%
consider comfort
when buying a
new pair

**Survey was completed by 2571 people who
visited the website runningshoeguru.com**

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