

Ke fakakatoatoa he tau tagata tohi kamatamata

NSN

--	--	--	--	--	--	--	--	--	--

School Code

--	--	--	--

KE FAKAAOGA NI HE TAGATA
LEVEKI KAMATAMATA

See the back page for an English
translation of this cover

Hihika aki e ikisi e puha (☒)
kaeke kua NAKAI FAI mena a koe kua
tohitohi ki loto he pepa nei

+

32406N MAGAAHO AOGA 3



Mana Tohu Mātauranga o Aotearoa
New Zealand Qualifications Authority

Numela 2024

**32406N Fakaaoga e tau puhala fakanumela mo e tau
fakamauaga ke he tau numela he tau mena kehekehe
he laulahi he tau mena tutupu he tau aho takitaha**

Tau ola moua: Hogofulu

TAU FUA NE MOUA MAI	
1	Talaga e tau puhala fakanumela po ke tau fakamauaga he tau numela ke he tau mena kehekehe ke lagomatai aki e tau lekua laulahi ne kua fa tutupu he tau tau aho takitaha.
2	Fakaaoga e tau puhala fakanumela po ke tau fakamauaga he tau numela ke he tau mena kehekehe ke moua e tau ukauka fakanumela ke he laulahi ne kua fa tutupu he tau aho takitaha.
3	Fakamaama e tau tali he tau puhala fakanumela po ke tau fakamauaga he tau numela ke he tau mena kehekehe.

Tohi hifo haau a National Student Number (NSN) mo e School Code ke he puha na ne kua fakatoka i luga.

Kua lata i a koe ke lali ke tali OTI e tau huhu i loto he pepa nei.

Kaeke ke manako foki e taha vala ke tohi ai, fakaaoga e vala toka noa ne ha ha ki ai he tua he pepa nei.

Fakakia ko e 2-43 e laupepa he pepa nei mo e hako e tokaaga he tau lau mo e puni oti e tau laupepa.

Aua neke tohitohi ki tua he tau laini kua vate he faahi he laupepa (///). To hehele kehe e tau vala nei he magaaho ka maaka e pepa.

KUA LATA I A KOE KE FAKAOLO AGE E PEPA NEI KE HE TAGATA GAHUA NE LEVEKI KE HE KAMATAMATA.

HUHU TAHA: Tau Fonu

Ko e tau fonu fakamua ne fakataitai ko e moui 230 e miliona he tau tau he vaha ia.

**Fakamauaga he tau
vaha he kelekele**

**Magaaho, ko e tau miliona e
tau tau to hoko ke he magaaho nei**

TAHA MAGAAHO LOALOA MO E MAALI KUA KEHE

- (a) Kua momoui nakai e tau fonu he magaaho taha ne momoui ai e tau tainosoa? Fakaaoga e tau vala tala ne moua mai he fakatino chart ke fakamaama haau a tali.

QUESTION ONE: Turtles

The first turtles lived around 230 million years ago.



- (a) Did turtles live around the same time as dinosaurs? Use information from the chart to explain your answer.

Ha nei e tau laini fakamua he taha fakamauaga. Ha i ai 1000 e fonu ne toka ai ke he fakamauaga katoa.

Vahega Manu	Fifine po ke Taane	Gati (cm)	Mamafa he (kg)
Lanu Laufuti	Fifine	87	108
Loggerhead	Taane	76	89
Lanu Laufuti	Taane	123	145
Hawksbill	Fifine	65	71
Hawksbill	Fifine	54	64
Loggerhead	Taane	81	93



(b) Tohi e taha huhu ne maeke ke tali ka fakaaoga e tau vala tala mai he fakamauaga nei.

Taha ni mai he 100 e tau punua fonu ka momoui ke hoko ke eke mo fonu lalahi.

(c) Ko e poini decimal fe ne fuafua ke ligaliga ke taha mai he 100 e mena nei?

Fakamailoga (✓) e tali hako.

☐

1.0

☐

0.1

☐

0.01

☐

0.001

☐

0.0001

Here are the first few rows of a data set. There are 1000 turtles in the whole table.

Species	Gender	Shell length (cm)	Weight (kg)
Green	Female	87	108
Loggerhead	Male	76	89
Green	Male	123	145
Hawksbill	Female	65	71
Hawksbill	Female	54	64
Loggerhead	Male	81	93

(b) Write a question that could be answered using information from this table.

Only one in every 100 baby turtles survive to become adults.

(c) Which decimal is the probability of a one in 100 chance?

Tick (✓) the correct answer.

- ☐ 1.0
- ☐ 0.1
- ☐ 0.01
- ☐ 0.001
- ☐ 0.0001

Fakakite he graph nei e tau numela mo e tau faga fonu ne moua i Fiji, he tau magaaho to uha mo e magomago.

Ko e puke numela mo e tau vahega fonu ne moua i Fiji

Fakaaoga he taha tohi mai Fiji e tau numela mai he magaaho magomago ke pehe:

“Ko e 23 ni e tau fonu Hawksbill ne kua moua. Ko e vahega manu nei ne hagahaga kelea ke galo tukumalagi mai he ha tautolu a tau vai.”

- (d) Talia nakai a koe? Fakaaoga e tau vala tala ne moua mai he fakatino graph ke fakamaama haau a tali.

This graph shows the numbers and types of turtles found in Fiji, in the wet and dry seasons.

Numbers and types of turtles found in Fiji

A Fiji newspaper uses the figures from the dry season to claim:

“Only 23 Hawksbill turtles were found. This species is at risk of extinction in our waters.”

(d) Do you agree? Use information from the graph to explain your answer.

Ne talaga e petene nei fakaaoga aki e fakatino he fonu ne kitia kua fa hake mai tumau.



(e) Ko e petene fe i loto he puha i lalo ne tatai mo e petene he fonu?

Fakaveliveli  e tali hako.

(i)   Q   Q

(ii)    Q    

(iii)   Q     Q

(iv) Q     Q   

FAKAMAAMAAGA



● ulu he fonu

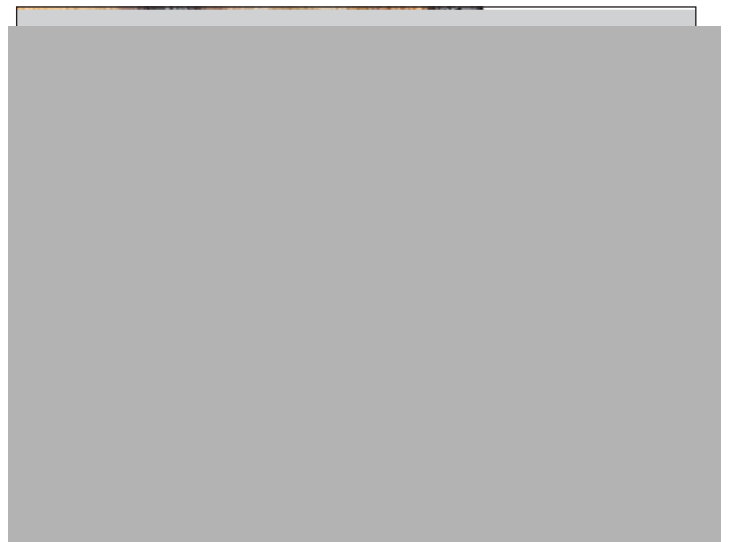
● tino he fonu

Kua lata lahi e tau fonu ke lahi e vai i loto he ha lautolu a tau tula.

Ke lata ma e **tau centimetre taki taha oti** he loa he tua he fonu, kua lata e tula ke katoa e 15 e lita vai.

(f) Lahi fefe e vai kua lata ke tuku he tula he fonu nei?

_____ tau lita



Fuafua e tua fonu.

This pattern is made using a repeating turtle figure.



(e) Which pattern in the box below matches the turtle pattern?

Circle  the correct answer.

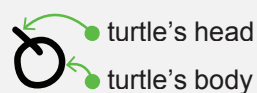
(i)       

(ii)       

(iii)       

(iv)       

KEY



turtle's head

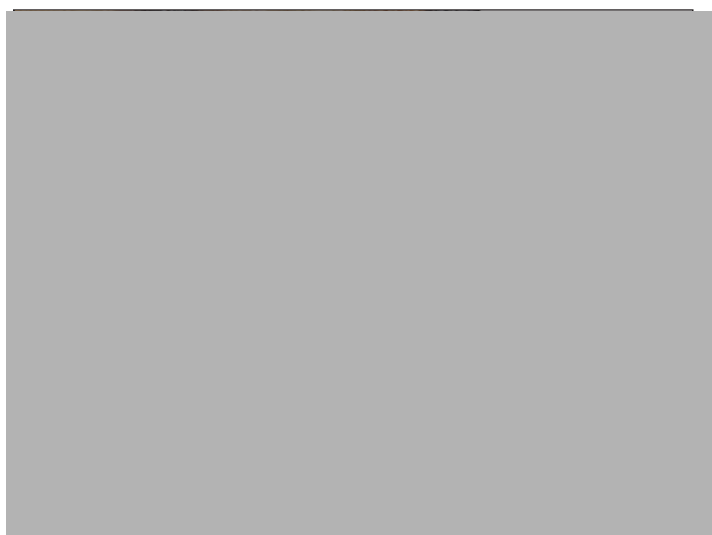
turtle's body

Turtles need a lot of water in their tank.

For **every centimetre** of the turtle's shell length, the tank must hold 15 litres of water.

(f) How much water will this turtle need in its tank?

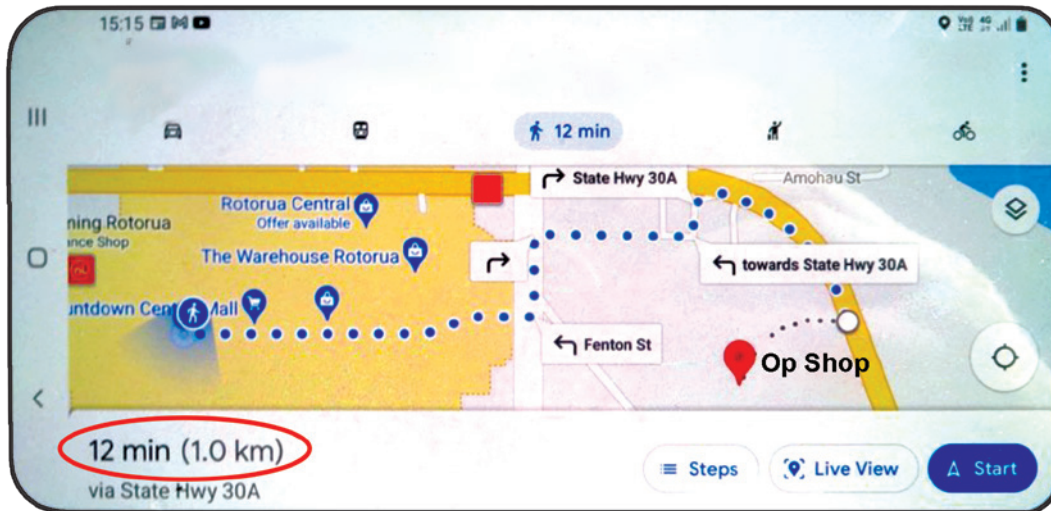
_____ litres



Measuring a turtle's shell.

HUHU UA: Tau koloa tau mukamuka mai he fale sela

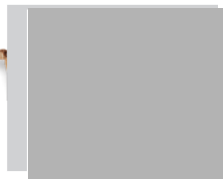
Ko e fale sela ko e taha fale ne fakatau he tau tagata e tau koloa ne kua liu ke fakaaoga. Ha nei e tau talahauaga ne fakakite e puhala ke hoko atu a koe ke he fale sela.



- (a) Kaeke ke 12 e minute ka laka ke katoa taha e kilomita, fiha e kilomita ne maeke a koe ke laka he taha e tula?

_____ km

Ha nei e totogi he taha e fihui paku mai he fale sela. \$120 e tau he fihui paku nei ka fakatau foou.

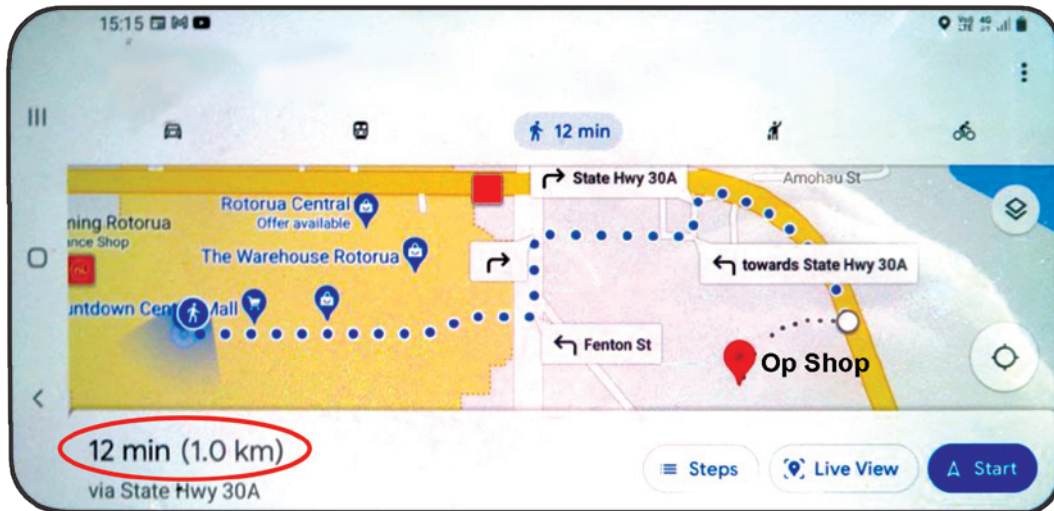


- (b) Ko e heigoa e pasene **he totogi he fihui paku foou**, ka totogi he fale sela?

_____ %

QUESTION TWO: Bargains at the op shop

An op shop is a place where people buy things that are recycled. Here are directions to get to an op shop.



- (a) If walking one kilometre takes 12 minutes, how many kilometres can you walk in one hour?

_____ km

Here is the price of a pair of jeans at the op shop. These jeans are priced at \$120 when new.



- (b) What percentage of the new price for jeans, is the op shop price?

_____ %

Ha nei e taha fakatino he pelesi kai.

- (c) (i) Fai nakai ke he pelesi katoa e **reflectional** (mirror) symmetry?

Fakamailoga (✓) e tali hako.

☐

Nakai

☐

- (ii) Fai nakai ke he pelesi katoa e **holo vikoviko** (fuluhi) tatai (rotational symmetry)?

Fakamailoga (✓) e tali hako.

☐

Nakai

☐

Ha ha ki ai i loto he fale sela e taha mohega tapolo.

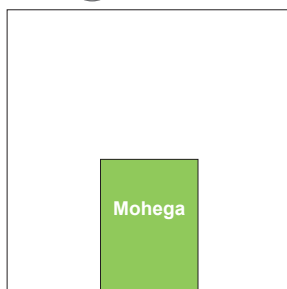
Ko e haana a tau fuafuaaga ko e 1.37 m e laulahi mo e 1.88 m e loa.

Ko e fuafuaaga he poko mohe ko e 3.5 m × 3.5 m.

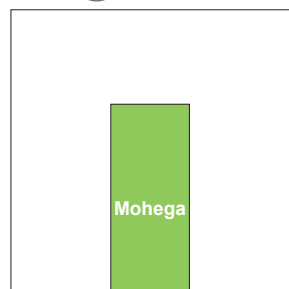
- (d) Ko e fakatino fe ne fakakite maali ko e hao fefe e mohega tapolo ki loto he poko mohe?

Fakamailoga (✓) e tali hako.

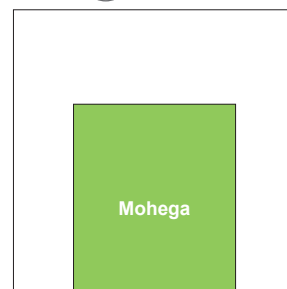
(i) ☐



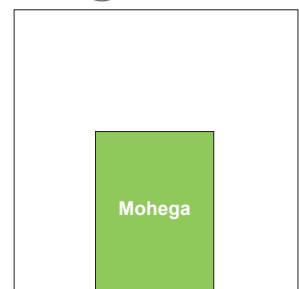
(ii) ☐



(iii) ☐



(iv) ☐



Here is an image of a plate.

- (c) (i) Does the whole plate have **reflectional** (mirror) symmetry?

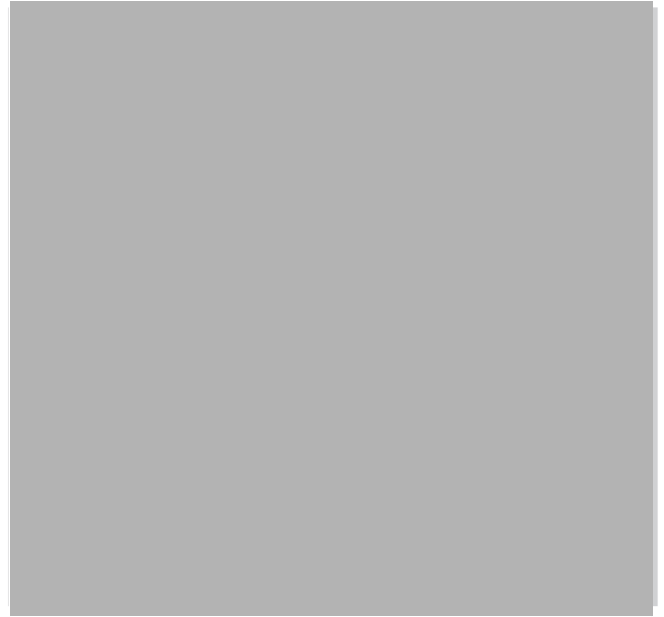
Tick (✓) the correct answer.

Yes ☐ No ☐

- (ii) Does the whole plate have **rotational** (turn) symmetry?

Tick (✓) the correct answer.

Yes ☐ No ☐



In the op shop, there is a double bed.

It measures 1.37 m across and 1.88 m long.

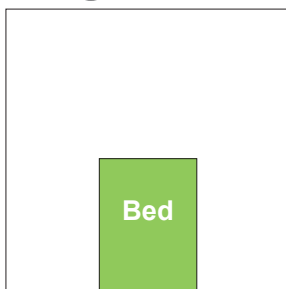
A bedroom measures 3.5 m × 3.5 m.

- (d) Which diagram best shows how the double bed will fit in the bedroom?

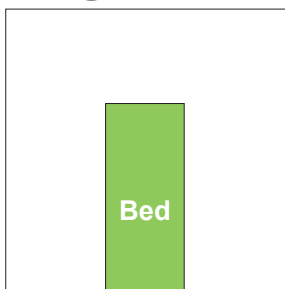
Tick (✓) the correct answer.



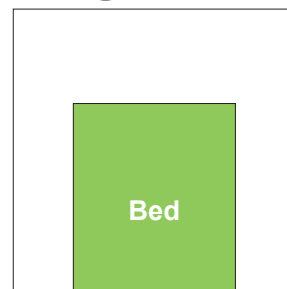
(i) ☐



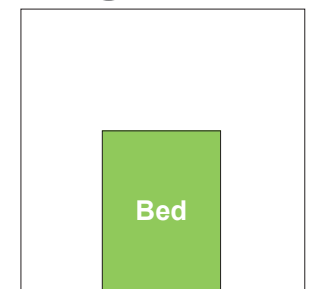
(ii) ☐



(iii) ☐



(iv) ☐

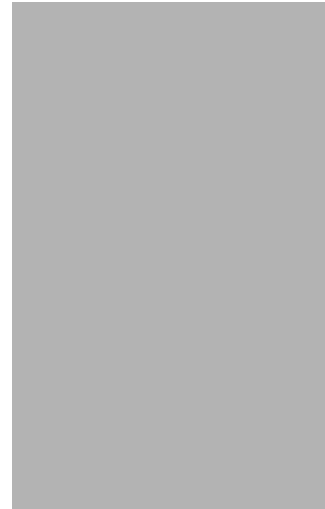


Ko e lupu nei ne hao ki loto 20 e kalase valavai.

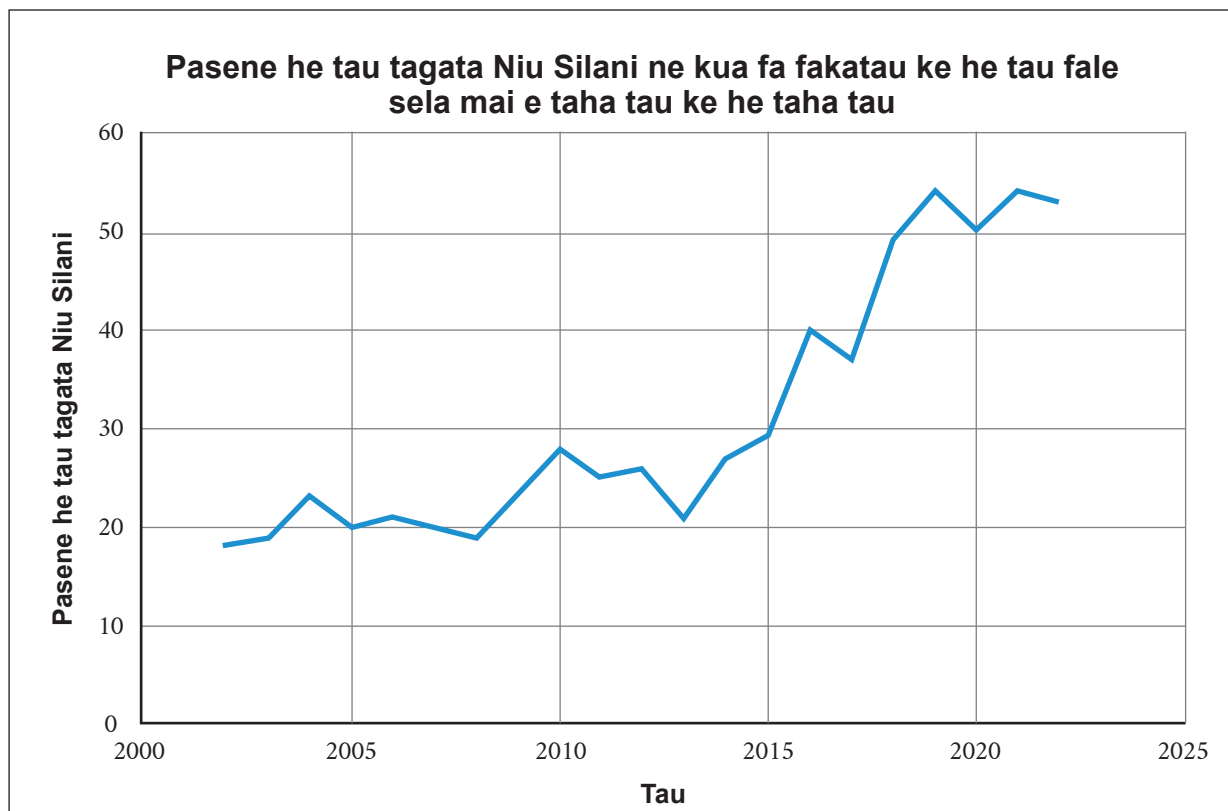
250 mL valavai ne hao ki loto he taha e kalase.

(e) Fiha e **litavalavai** ne hao ki loto he lupu nei?

_____ tau lita



Ko e taha e tagata gahua fakamatala he TV ne talahau kua fakalahi lagatolu e numela he tau tagata Niu Silani ne fakatau koloa he fale sela he 20 e tau tali mai he 2002 ke he 2022.



(f) Hako nakai e tagata fakamatala he TV?

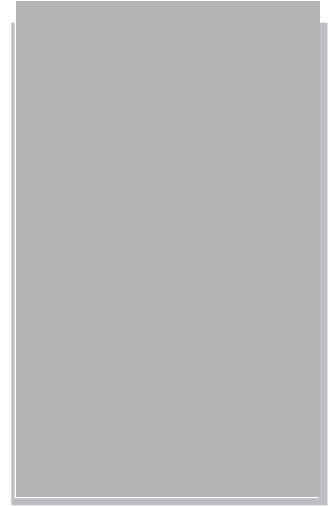
Fakaaoga e tau vala tala mai he fakatino graph ke talahau ko e ha ne talia a koe, po ke nakai talia, ke he haana a talahauaga.

This jar holds 20 glasses of water.

A glass holds 250 mL of water.

(e) How many **litres** of water does the jar hold?

_____ litres



A TV presenter claims the percentage of New Zealanders buying at op shops has trebled in the 20 years from 2002 to 2022.

Note: “Trebled” means three times as much.



(f) Is the TV presenter right?

Use information from the graph to say why you agree, or disagree, with their claim.

HUHU TOLU: Kai tahi

Manako a Awa ke oko fua pipi, ko e taha kai tahi lolo.

Maeke a Awa ke oko 60 e fua pipi he taha e tula.

- (a) Fiha e leva, **ka totou e tau tula mo e tau minute**,
ke moua e Awa e 150 e fua pipi?

_____ tau tula,

mo e _____ tau minute

Toto e Awa e tau fua pipi.

Ha nei e tau fakailoaaga ke lata ma e tahi pakupaku mo e tahi hokohoko he aho Faiumu
7 Oketopa mo e vala fakamua he aho Tapu 8 Oketopa.

- (b) Manako a Awa ke oko kai tahi ka **pakupaku e tahi**. Ligaliga ko e magaaho fe ne maeke a Awa
ke oko kai tahi he aho Tapu 8 Oketopa?

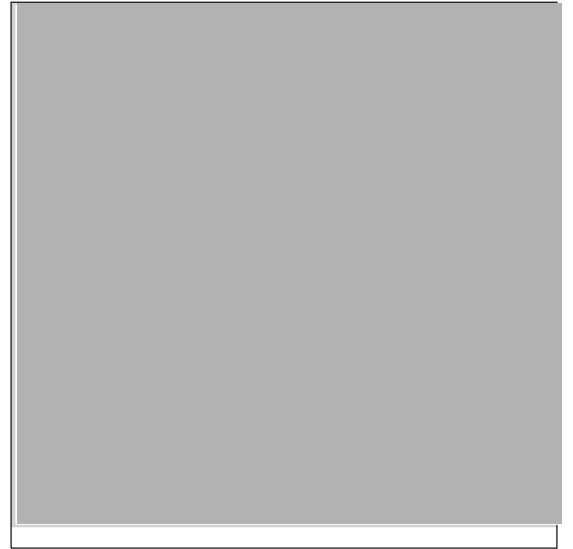
QUESTION THREE: Kaimoana (Seafood)

Awa wants to collect pipi, a tasty shellfish.

Awa can collect 60 pipi per hour.

- (a) How long, in **hours and minutes**, will it take Awa to collect 150 pipi?

_____ hours, and _____ minutes



Awa holding pipi.

Here is a tide chart for Saturday 7 October and the first part of Sunday 8 October.



- (b) Awa wants to collect seafood at **low tide**. About what time can Awa next collect seafood on Sunday 8 October?

Manako a Awa ke fakapage kalahimu mo e fakaaoga e page.

Ko e matua tupuna taane ha Awa ne manako ki a ia ke fakaaoga e page fiofio ne ha ha ki ai $\frac{3}{8}$ e vala squid mo e lalafi aki e valamo.

- (c) Ka 150 g e vala squid ha Awa, lahi fefe e kuleme vala moa ne kua lata i a Awa fakaaoga?

_____ g

Maeke ni he tau tagata hi ika ke toka e ika sinapa kaeke ka **tokolalo hifo mai he 30 cm** (ka fuafua mai he V he haana a hiku). Kaeke ke ku mai he 30 cm kua lata ni ke liuaki ke he tahi.



- (d) Ko e fuafuaaga he loa he ika sinapa nei ne fakakatoatoa ke hoko ke he 30 cm (rounded). Kua lata nakai a Awa ke toka e sinapa nei po ke liuaki ke he tahi? Fakamaama e haau a tali mo e fakaaoga ke he tau fuafuaaga.

Awa wants to set a crab trap using bait.

Awa's koro (grandfather) recommends using a bait mixture that is $\frac{3}{8}$ squid and the rest is chicken.

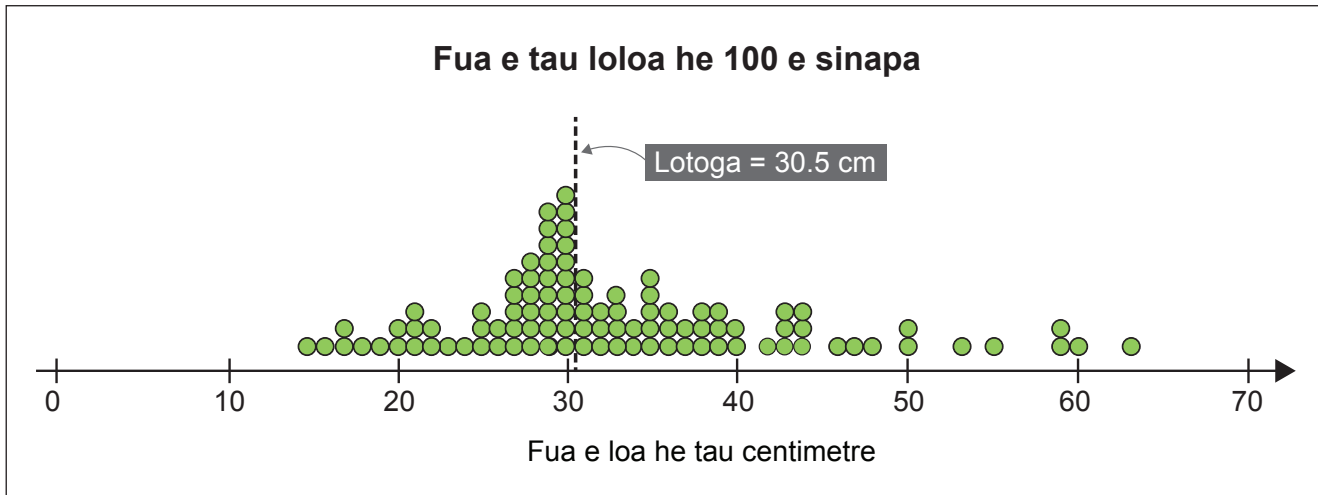
- (c) If Awa has 150 g of squid, how many grams of chicken does Awa need?

_____ g

People who catch fish can only keep a snapper if it has a **minimum** length of 30 cm (measured from the V in its tail). If it is shorter than 30 cm it must be put back into the sea.

- (d) The length of this snapper rounds up to 30 cm. Should Awa keep the snapper or put it back into the sea? Explain your answer using measurements.

Kitia e Awa e fakatino graph nei hagaa ke he fuafuaaga loa he 100 e ika sinapa.



- (e) Manamanatu a Awa ke hi mai lima e sinapa ke fagai aki e magafaoa kua lata ni i a ia ke hi 10 e sinapa mo e liuaki e lima ke he tahi. Hako nakai a Awa? Fakaaoga e tau manamanatuaga hagaa ke he tau fakataitai (probability) mo e tau numela mai he fakatino graph ke fakamaama aki haau a tali.

Taha e posi ha Awa ne ha ha i ai e enisini two-stroke. Ko e lolo ne fakaaoga ke lata mo e enisini ko e penisini ne lalafi ki ai e oela ke he fuafuaaga 50:1 (fakataitai 2% oela).

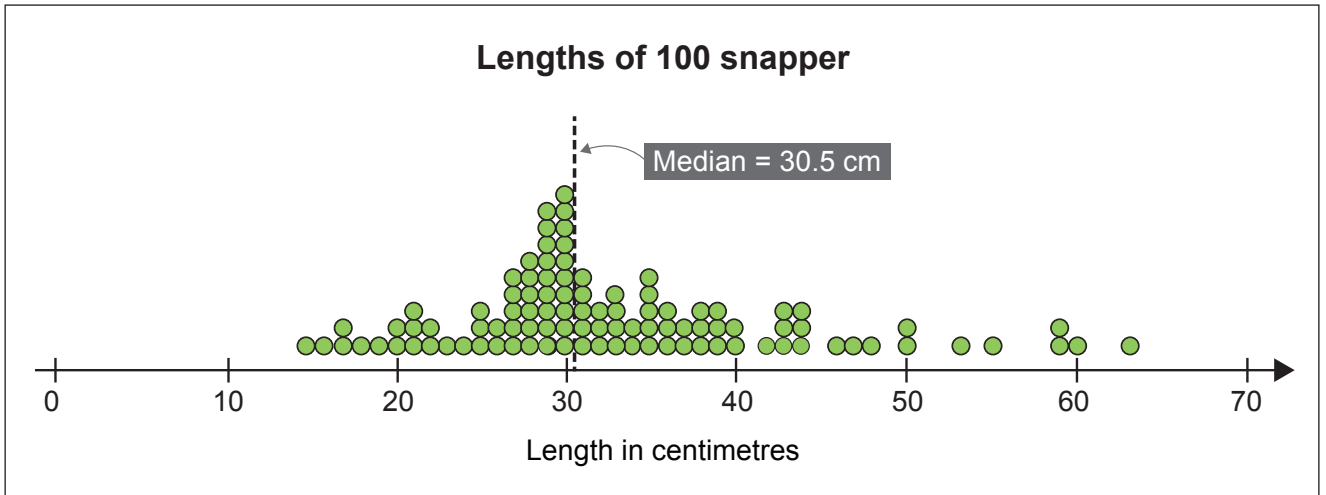
- (f) Kaeke ke 10 e lita penisini ha Awa, fiha e lahi he oela, ke he totouaga **millilitres**, ne kua lata a ia ke lalafi ki ai?

_____ mL



Taha e posi ha Awa ne ha ha i ai e enisini two-stroke.

Awa sees this graph about the lengths of 100 snapper.

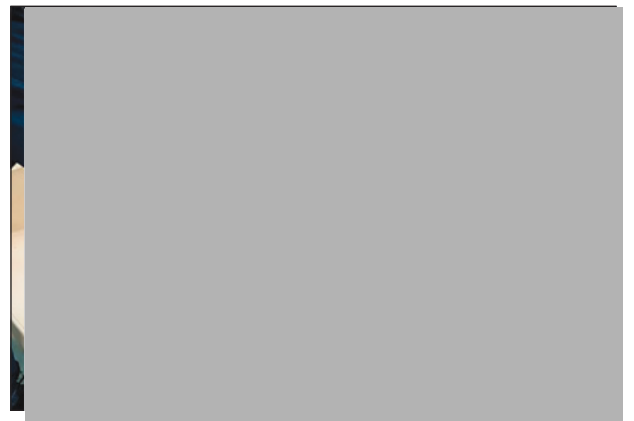


- (e) Awa thinks that to catch five snapper to feed the whānau he will need to hook 10 snapper and put five of them back into the sea. Is Awa right? Use ideas about probability and numbers from the graph to explain your answer.

Awa has a boat with a small two-stroke motor. The fuel for the motor is petrol mixed with oil in a ratio of 50:1 (about 2% oil).

- (f) If Awa has 10 litres of petrol, how much oil, in **millilitres**, should he add?

_____ mL



Awa's boat with a small two-stroke motor.

HUHU FA: Tau fakaakoaga fakaholo

Ko e fakaako a Deena ke fakaholo.
\$80 he taha e tula ka fakaako ke fakaholo.

Kaeke ke laga lima e fakaako, to moua e 30% ke utakehe mai he totogi katoa.

- (a) Fiha e totogi ka laga lima e fakaako, mo e ka utakehe e toluhogofulu e pasene?

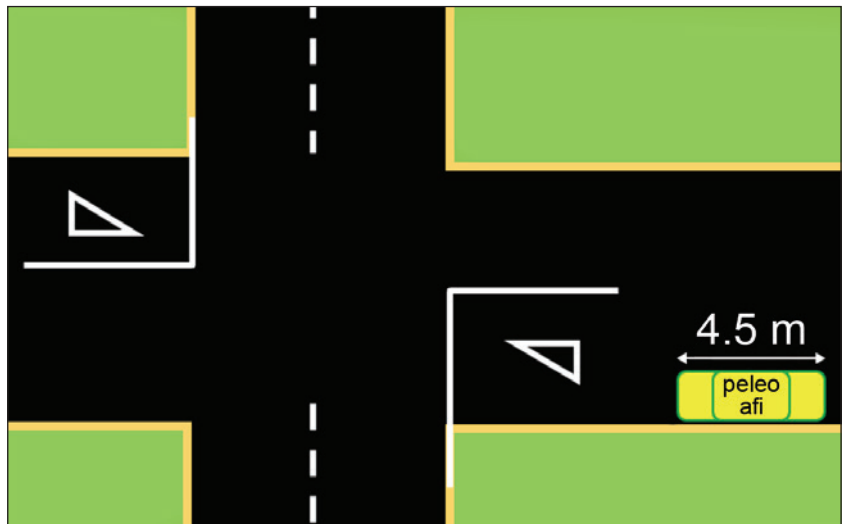
\$ _____

Fakaako a Deena ke fakaholo.

Gofua e motoka ke paaka mo e nakai fakahala kaeke ke **ono po ke loa atu e mita** mai he matahoe he puhalatu.

Iloa e Deena ko e na 4.5 e mita he loa haana a peleo afi.

Ne paaka e Deena **1½ e fakataitai loa he motoka** mai he matahoe he puhalatu.



- (b) Hako nakai e paakaaga he motoka ha Deena?
Fakamaama e haau a tali mo e fakaaoga ke he tau fuafuaaga.

QUESTION FOUR: Driving lessons

Deena is learning to drive.

A one-hour driving lesson costs \$80.

If Deena takes five lessons, there is a 30% discount.

- (a) How much do five driving lessons cost, with the discount?

\$ _____



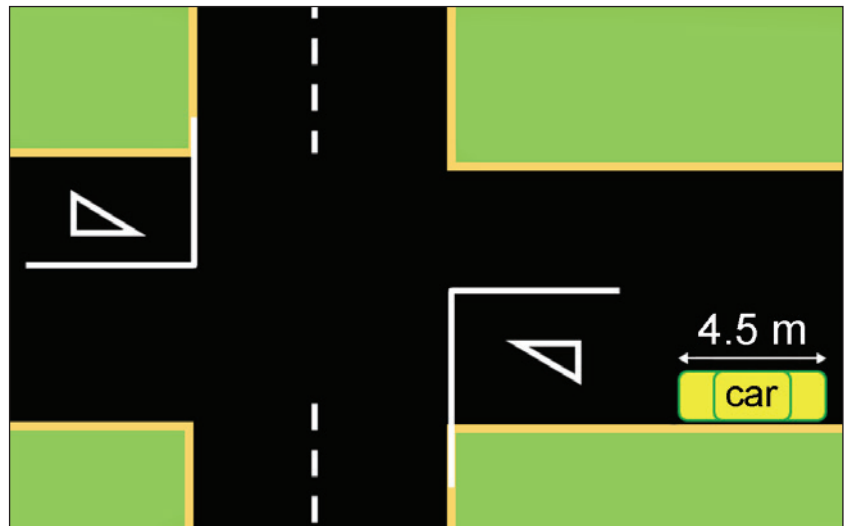
Deena learning to drive.

A car is parked legally if it is **six metres or more** from the corner.

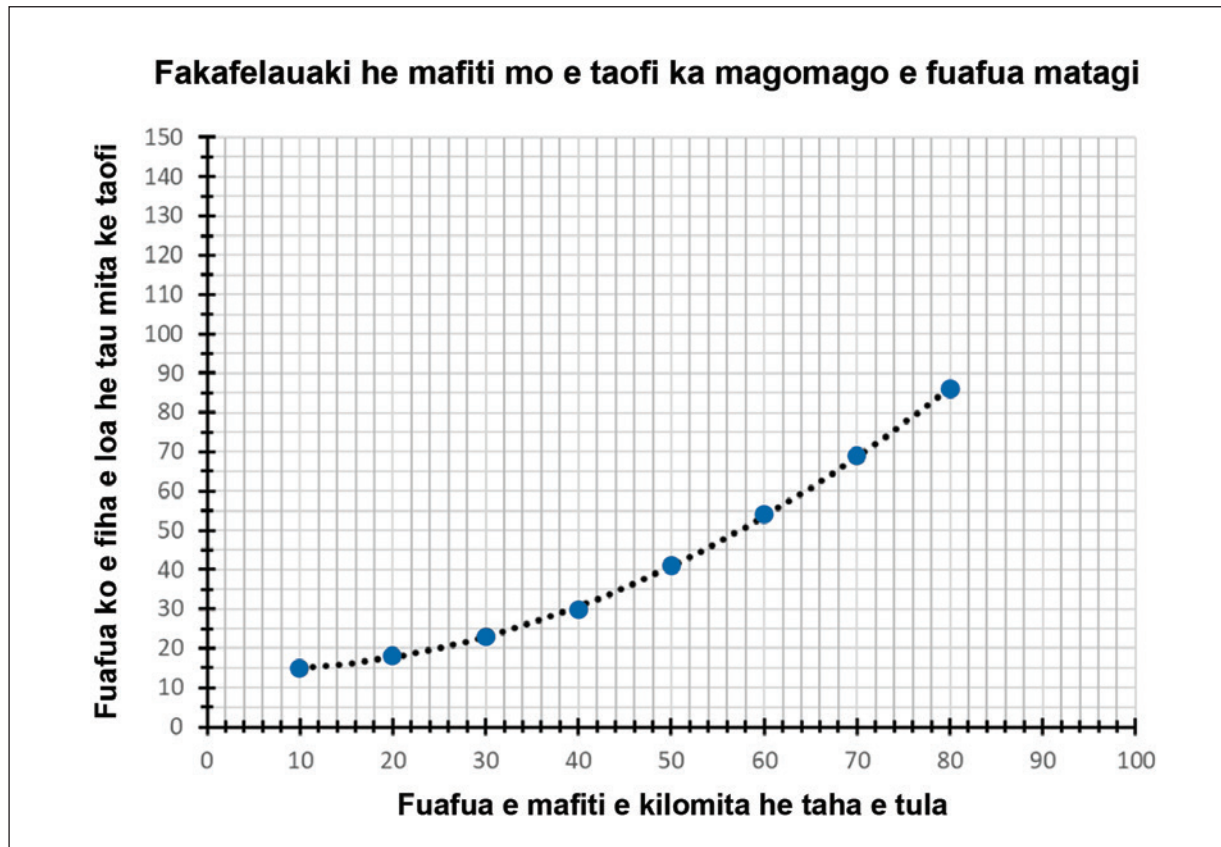
Deena knows her car is 4.5 metres long.

Deena parks $1\frac{1}{2}$ car lengths from the corner.

- (b) Is Deena's car parked legally? Explain your answer using measurements.



Fakakite he fakatino graph nei e mamao ne kua lata e peleo ahi ke taofi e holo ka fakataitai ke he tau holo mafiti kehekehe he tau magaaho fuafua matagi magomago.



Holo e peleo ahi ke he 100 kilomita he taha e tula.

(c) Ligaliga ke loa fefe e mamao ne kua lata ki ai ke maeke e peleoahi haana ke taofi?

_____ m

Ko e magaaho ka aafe atu a Deena he fale penisini, pe he nei e fofoga he fuafua penisini he haana a peleoahi.

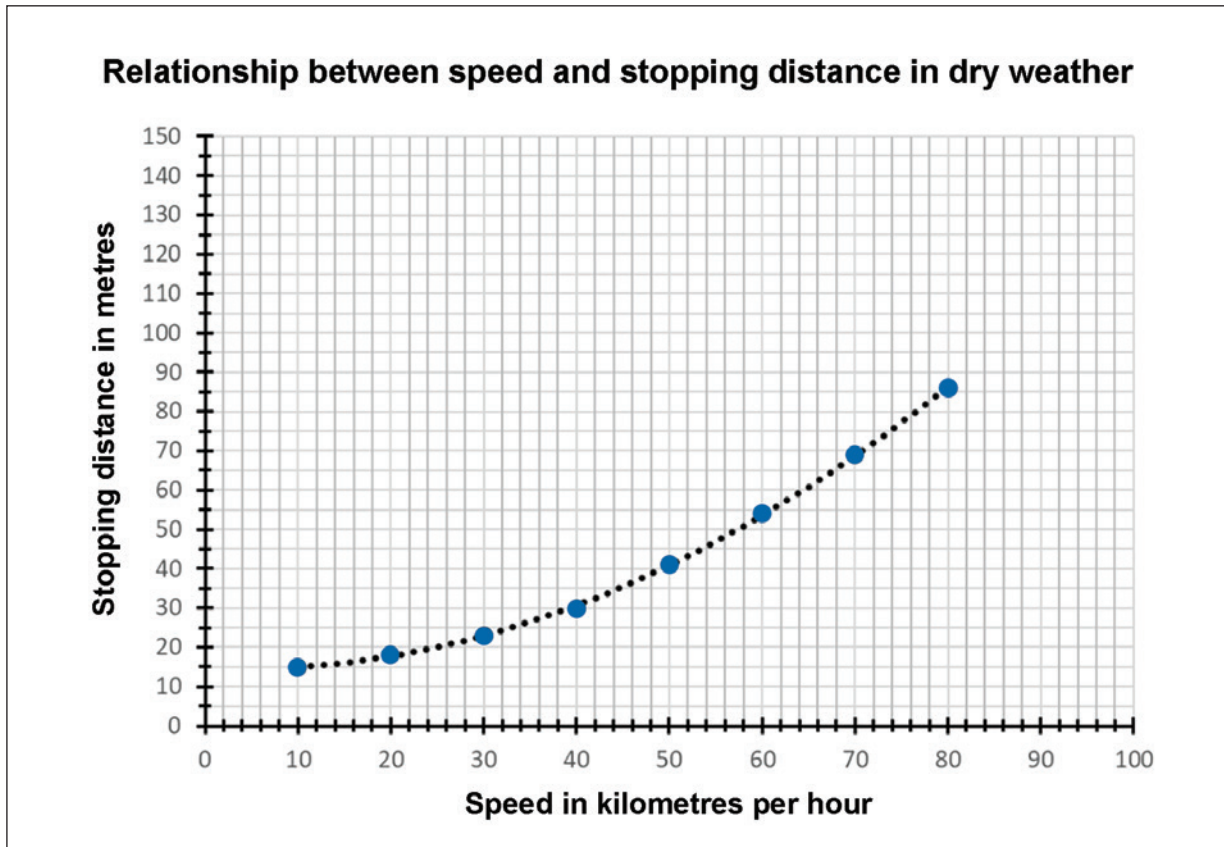
Iloa e Deena ko e na 48 e lita he tula penisini kaeke ke puke.

(d) Fakataitai ko e fiha e lita penisini kua lata i a Deena ke fakatau ke puke e tula?

_____ tau lita



This graph shows the distance that a car needs to stop at different speeds in dry weather.



Deena's car is moving at 100 kilometres per hour.

- (c) About how much distance will her car take to stop?

_____ m

When Deena stops at the fuel station, the gauge on her car looks like this.

Deena knows that the fuel tank holds 48 litres when it is full.

- (d) About how many litres of fuel does Deena need to buy to fill the tank?

_____ litres



Fakaholo kehe mai i a Christchurch a Deena he ulu atu ki Dunedin.



Kitia e ia e fakamailoga puhalatu nei, he mole laia a Christchurch.

	
Ashburton	87
Timaru	164
Oamaru	247
Dunedin	360

- (e) Ko e magaaho ka hoko atu a Deena ki Oamaru, ligaliga kua fiha ia e fuafuaaga he haana a fenoga ne kua oti?

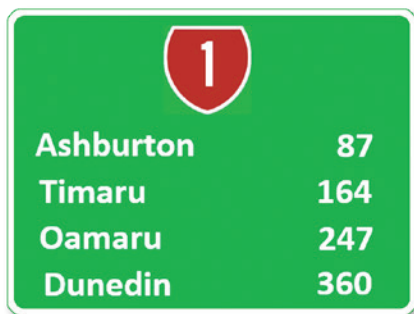
Fakamailoga (✓) e vala **ne tata lahi** ke he tali hako.

- (i) $\frac{5}{10}$ ☐ (ii) $\frac{6}{10}$ ☐ (iii) $\frac{7}{10}$ ☐ (iv) $\frac{8}{10}$ ☐ (v) $\frac{9}{10}$ ☐

Deena drives out of Christchurch on her way to Dunedin.



She sees this road sign, just out of Christchurch.



(e) When Deena reaches Oamaru, about what fraction of her journey will she have completed?

Tick (✓) the fraction that is **closest** to the correct answer.

(i) $\frac{5}{10}$ ☐

(ii) $\frac{6}{10}$ ☐

(iii) $\frac{7}{10}$ ☐

(iv) $\frac{8}{10}$ ☐

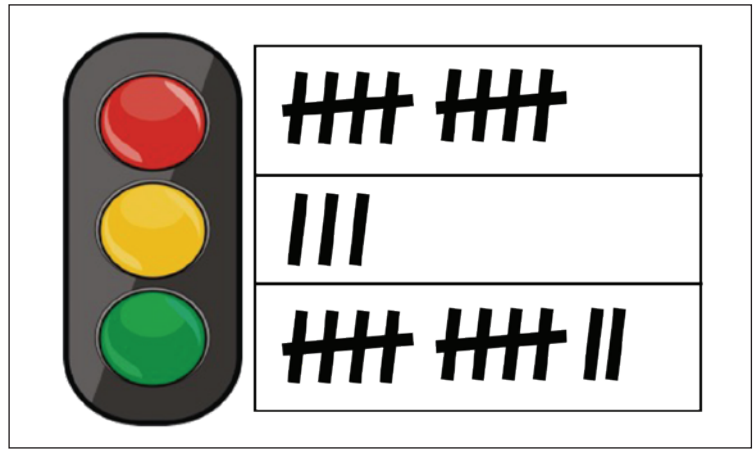
(v) $\frac{9}{10}$ ☐

Ne mahani a Deena ke fakaholo tumau he taha e hala mo e mole tumau e tau moli puhalatu he taha ni e magaaho he tau aho oti.

Fakamau tumau e ia ke he tally chart ke kitia ko e fai petene nakai ke he tau lanu he tau moli puhalatu.

Ko e tau fakamailoga ne fakakite e tau lanu he tau moli puhalatu he taha e aho.

Ui a Deena, “Ka liu foki, to ligaliga ko e lanu laufuti e moli.”



Ko e fakamauaga tally chart ha Deena.

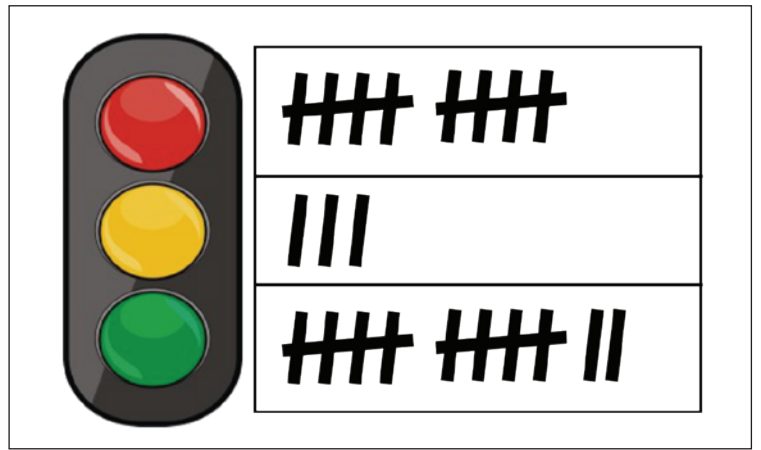
- (f) Hako nakai a ia? Fakamaama haau a tali mo e fakaaoga ke he tau pasene mai he fakamauaga tally chart ha Deena.

Deena drives through the same set of traffic lights at the same time every day.

She makes a tally chart to see if there is a pattern to the colour of the lights.

Each mark shows the colour of the lights on one day.

Deena says, "The next time, the lights will probably be green."

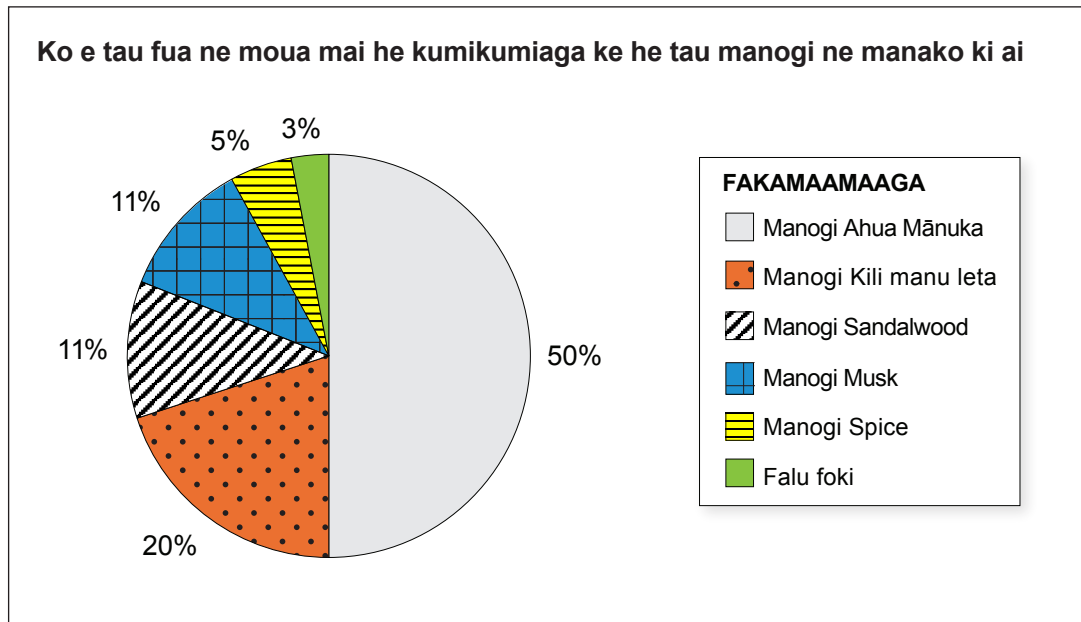


Deena's tally chart.

- (f) Is she right? Explain your answer using percentages from Deena's tally chart.

HUHU LIMA: Tau kanela fakamanogi

Tauteute e Zion e tau kanela mo sela he aho makete he taha fale aoga. Fakafano e ia e taha savea kumikumiaga ke iloa ko e tau manogi fefe ne manako e tau tagata ki ai. Hanei e tau talahauaga ne kua moua mai.



(a) Ko e tau manogi ne ua fe ne lalafi hake ke moua e ua mai he tolu e tau fifiliaga?

_____ mo e _____

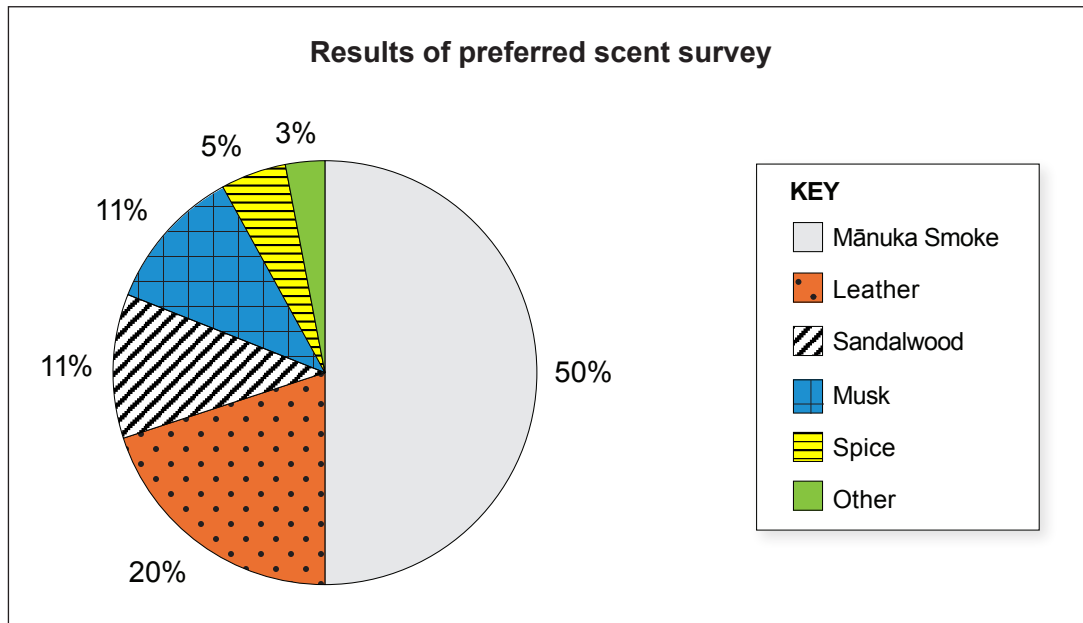
Talaga e Zion e tau kanela mo e fakaaoga e fuafuaaga: lima e kanela Manogi Ahua Mānuka ke he ua e kanela Manogi Kili manu leta (5:2)

(b) Talaga e Zion 84 e kanela ne fakaaoga e fuafuaaga ne 5:2 e fafatiaga. Fiha e kanela Manogi Ahua Mānuka haana ne talaga?

_____ Tau kanela Manogi Ahua Mānuka

QUESTION FIVE: Scented candles

Zion makes candles to sell at a school's market day. He sent out a survey to find out which scents people prefer. Here are the results.



- (a) Which two scents make up over two thirds of the choices?

_____ and _____

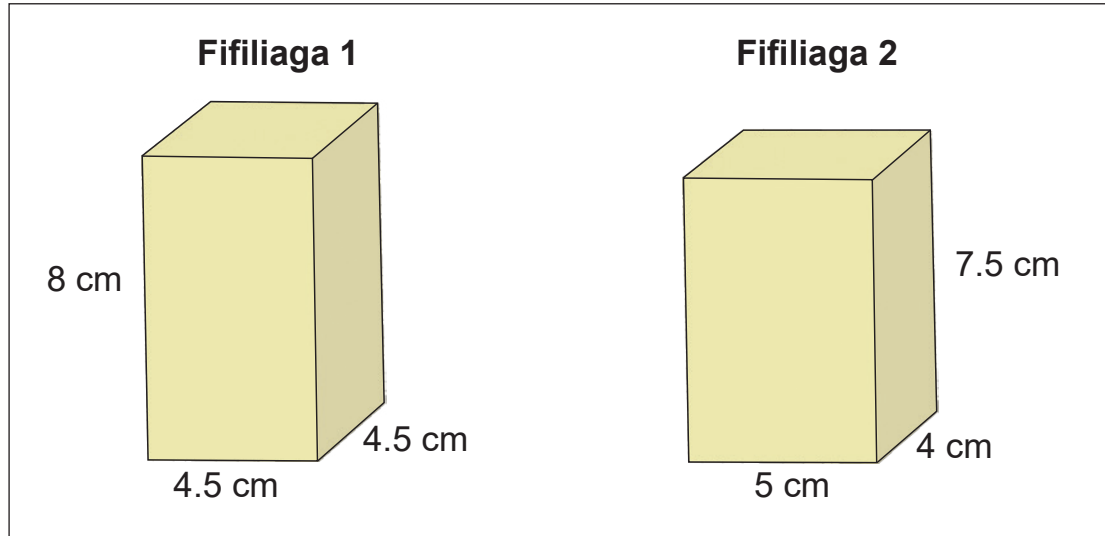
Zion makes candles using this ratio: five Mānuka Smoke candles to every two Leather candles (5:2).

- (b) Zion makes 84 candles using the 5:2 ratio. How many Mānuka Smoke candles does he make?

_____ Mānuka Smoke candles

Talaga foki e Zion e tau kanela ne tuga e tau pakafa prism.

Ke taofi e tupe fakatau aki e tau kanela ke tokolalo, kua nakai maeke e tau kanela ke lalahi mahaki.



Pehe a Zion ko e tau fifiliaga nei ne ua ne lalahi ni e tau puke ke 150 cm^3 po ke tote hifo mai.

- (c) Hako nakai a Zion? Fakamaama e haau a tali mo e fakaaoga ke he tau fuafuaaga mai he tau fifiliaga ne **uana** i luga.

Fakakite he fakatino table nei e tau totogi he tau koloa. Ko e katoatoa he totogi he 84 e kanela.

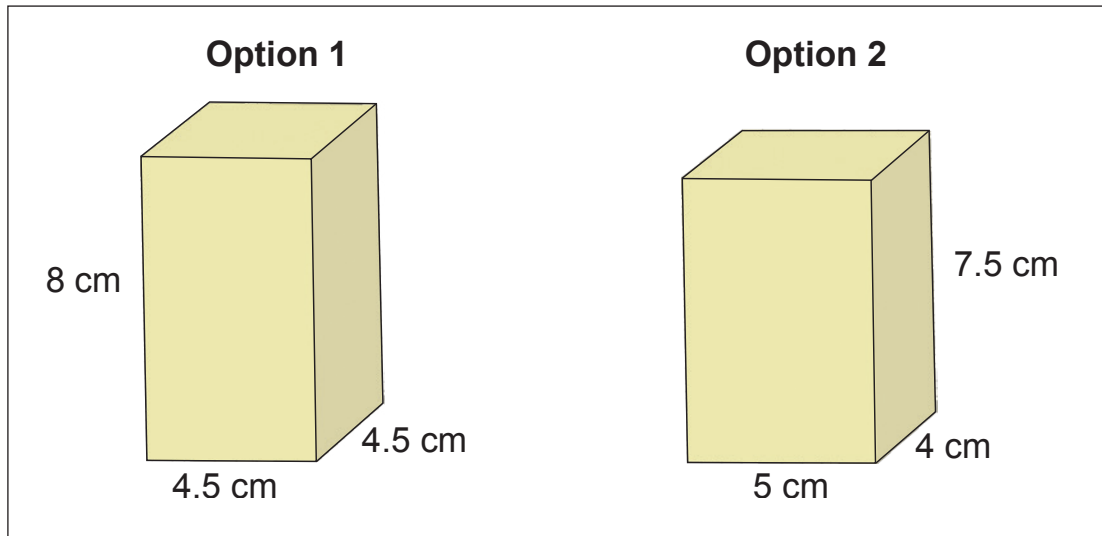
Koloa	Katoatoa he totogi he 84 e kanela
Pili kanela (13kg)	\$182.00
Uisi kanela	\$40.50
Tau manogi kanela	\$33.70
Lanu fakahu kanela	\$21.00

- (d) Fiha e totogi ke talaga **tahae** kanela?

\$ _____

Zion also makes candles that are the shape of rectangular prisms.

To keep costs down, the candles cannot be too big.



Zion says that both options have a volume of 150 cm^3 or less.

(c) Is Zion right? Explain your answer using measurements from **both** options above.

This table shows the cost of supplies. The total cost is for 84 candles.

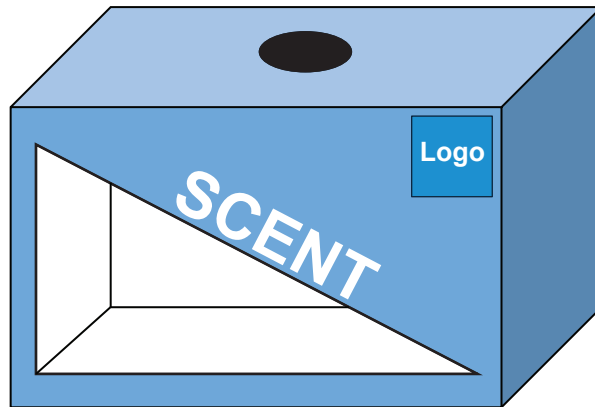
Item	Total cost for 84 candles
Candle wax (13 kg)	\$182.00
Candle wicks	\$40.50
Candle scents	\$33.70
Candle dyes	\$21.00

(d) How much does it cost to make **one** candle?

\$ _____

Kua lata i a Zion ke talaga e taha puha ke tuku aki taha e kanela.

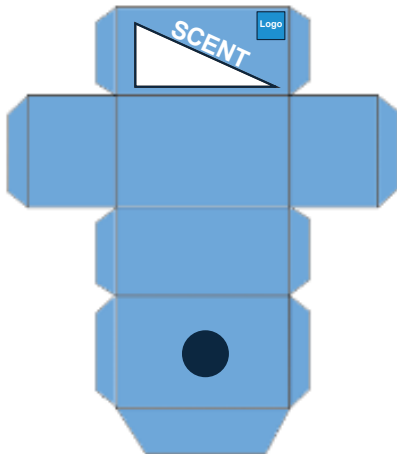
To fofoga pehe nei e puha:



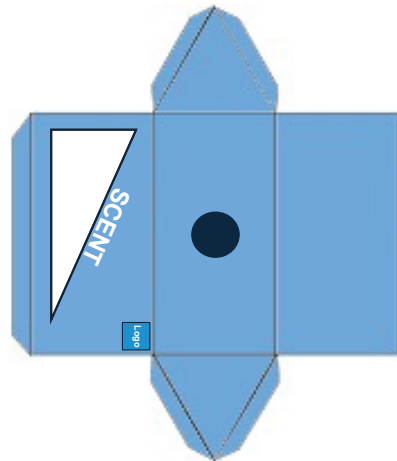
(e) Ko e fakatino fe ne tatai mo e puha ne fakakite na i luga?

Fakamailoga (✓) e tali hako.

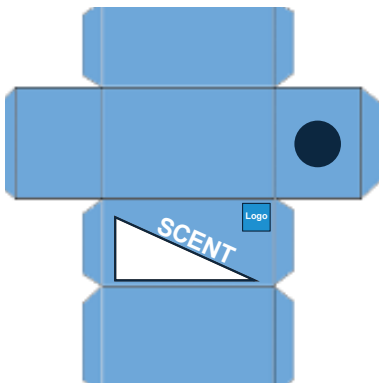
(i) ☐



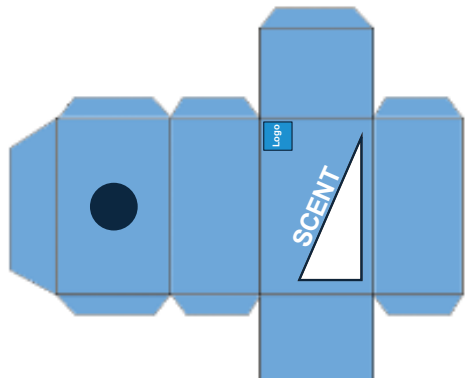
(ii) ☐



(iii) ☐

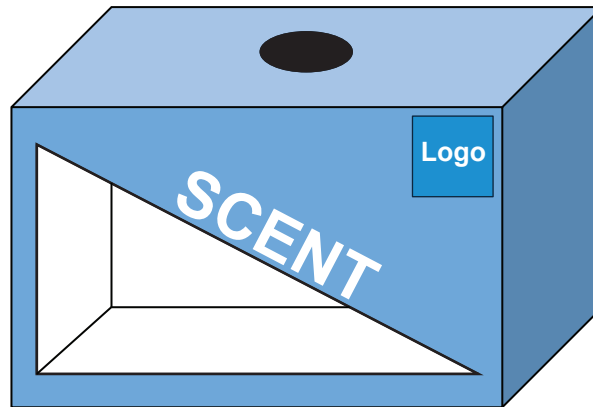


(iv) ☐



Zion needs to make a box to hold one candle.

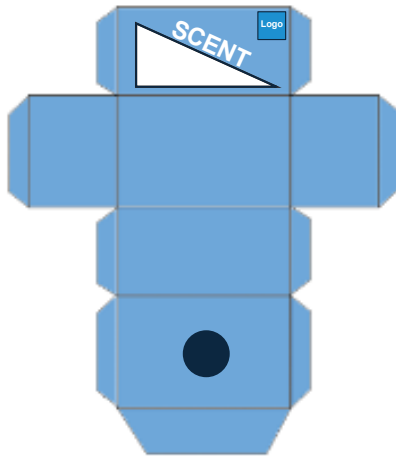
The box will look like this:



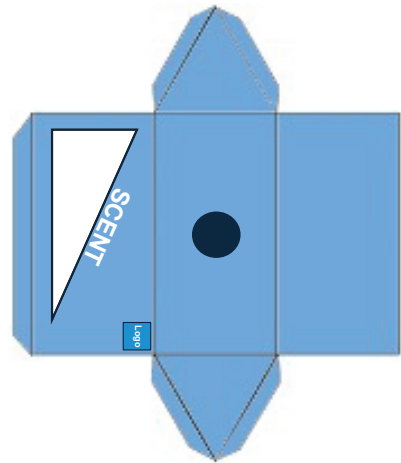
(e) Which net matches the box shown above?

Tick (✓) the correct answer.

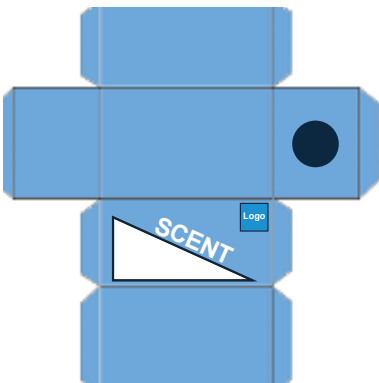
(i) ☐



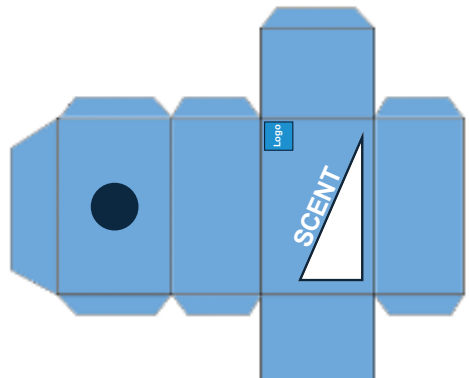
(ii) ☐



(iii) ☐



(iv) ☐



Hanei e totogi tau mukamuka he tau Kanela Fakamanogi ke lata tonu ma e Aho Makete.

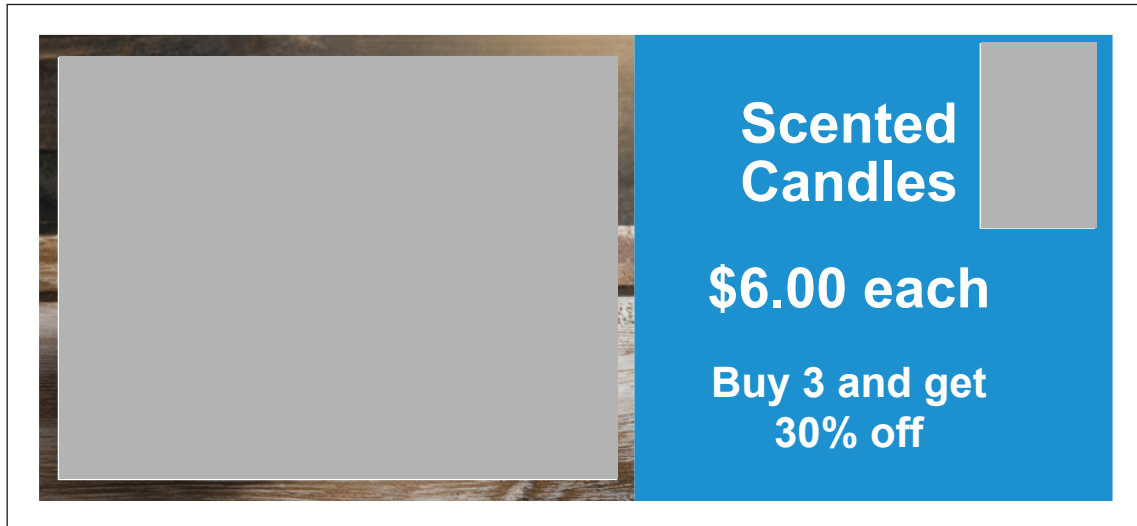


Manako a Jules ke fakatau ua e kanela mo foaki mena fakaalofa ma e haana a matua taane mo e matua tupuna taane.

- (f) Kua lata nakai a Jules ke fakatau tolu e kanela ne moua e 30% ka uta kehe ke totogi, po ke ua e kanela ne \$6 e he taha?

Fakamaama haau a tali mo e fakaaoga ke he tau lafilafiaga.

This is the Market Day special deal for Scented Candles.



Jules wants to buy two candles as gifts for her father and grandfather.

- (f) Should Jules buy three candles with 30% off, or two candles for \$6 each?

Explain your answer using calculations.

**Fai vala pepa foki ka manako ki ai.
Tohi hifo e (tau) numela he tau huhu ka lata ki ai.**

NUMELA
HUUH

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

[illegible]

**Fai vala pepa foki ka manako ki ai.
Tohi hifo e (tau) numela he tau huhu ka lata ki ai.**

NUMELA
HUUH

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

QUESTION
NUMBER

Tau fakaaue

Ko e tau koloa fakaaoga mai i a lautolu na ne mui mai ne fakaaoga he fuafuaaga kumikumi nei:

Huhu Taha

Lalolagi, <https://stock.adobe.com/images/planet-earth-or-world-globe-with-oceans-and-water-flat-vector-color-icon-for-apps-and-websites/170537095>

Ika, https://as2.ftcdn.net/v2/jpg/02/78/07/69/1000_F_278076962_aGpb3OGG2ONzsRczAWb3pOCFtIPOXySx.jpg

Lizard, <https://stock.adobe.com/nz/images/side-view-of-western-green-lizard-aka-lacerta-bilineata-isolated-on-white-background/558141610>

Tainosoa, https://as2.ftcdn.net/v2/jpg/02/96/43/13/1000_F_296431397_azSr3joO9Dnywn8v5IBHQY29nOFkJHqj.jpg

Manu totolo kekeleke, <https://commons.wikimedia.org/wiki/Category:Paleocene>

Tagata, https://t4.ftcdn.net/jpg/07/48/96/47/240_F_748964785_HSRxCdwfaijNY0gVm5o6dS3qXWTCCNrm.jpg

Fonu kakau, <https://andyoucreations.com/blog/how-fast-do-pacific-green-sea-turtles-swim/>

Tau punua fonu, <https://asiangeo.com/articles/turtle-nesting-season-in-singapore-how-can-we-help/>

Fonu taveliveli, <https://stock.adobe.com/nz/images/turtle-marine-animal-vector-sea-turtle-silhouette-clipart/670532819>

Fuafua e tua he fonu, https://www.lls.nsw.gov.au/__data/assets/image/0007/1377070/Measuring-the-underside-of-a-juvenile-Eastern-long-neck-turtle.-Photo-Dan-Hutton_1.jpg

Huhu Ua

Laupepa totoi, <https://stock.adobe.com/images/set-or-collection-brown-natural-craft-kraft-paper-hang-tags-price-tags-or-gift-tags-with-striped-bakers-twine-isolated-design-elements-different-positions-png-file/693906873>

Pelesi kai, <https://www.replacements.com/china-crown-lynn-polynesia/c/254524>

Lupo lahi mo e tepe, <https://www.ikea.com/ie/en/p/vardagen-jar-with-tap-80452639/>

Huhu Tolu

Pipi, <https://www.poulosbros.com.au/pippies-fresh-goolwa-1kg>

Hele kalahimu, <https://www.completeangler.co.nz/tackleman-heavy-duty-collapsible-crab-pot-55cm-11347>

Ika sinapa, <https://www.mpi.govt.nz/fishing-aquaculture/recreational-fishing/information-on-popular-fish-in-nz/snapper-status-and-information/>

Lula, <https://stock.adobe.com/images/school-metal-ruler-isolated-on-white-background-metric-steel-ruler-isolated-on-white-30cm/678798856>

Enisini posi, <https://thumbs.dreamstime.com/z/man-starting-outboard-engine-plastic-boat-exhaust-smoke-motor-haugesund-norway-januray-yamaha-108589991.jpg>

Huhu Fa

Fakaholo peleoafi, <https://www.aa.co.nz/drivers/driver-licences/learner-driver-licences/>

Fuafua penisini, <https://www.amazon.ca/Backlight-Adjustable-10-180ohm-240-30ohm%E2%8C%94Fuel-Motorcycle/dp/B09PG8519L>

Mepe, <https://www.google.com/maps/dir/Dunedin/Christchurch/>

Fakatino peleoafi, https://stock.adobe.com/search?k=car+icon+front&asset_id=501416924

Huhu Lima

Tau kanela, <https://stock.adobe.com/images/candles-kit-design-realistic-wax-base-of-different-shapes-and-flames-burning-lights-vector-set-illustration-fire-candle-candlelight-realistic/383008655>

Kolola afifi, Adobe stock - AI generated

Acknowledgements

Material from the following sources has been adapted for use in this assessment:

Question One

Earth, <https://stock.adobe.com/images/planet-earth-or-world-globe-with-oceans-and-water-flat-vector-color-icon-for-apps-and-websites/170537095>

Fish, https://as2.ftcdn.net/v2/jpg/02/78/07/69/1000_F_278076962_aGpb3OGG2ONzsRczAWb3pOCFtIPOXySx.jpg

Lizard, <https://stock.adobe.com/nz/images/side-view-of-western-green-lizard-aka-lacerta-bilineata-isolated-on-white-background/558141610>

Dinosaur, https://as2.ftcdn.net/v2/jpg/02/96/43/13/1000_F_296431397_azSr3joO9Dnywn8v5IBHqY29nOFkJHqj.jpg

Mammal, <https://commons.wikimedia.org/wiki/Category:Paleocene>

Human, https://t4.ftcdn.net/jpg/07/48/96/47/240_F_748964785_HSRxCdwfaiJNY0gVm5o6dS3qXWTCCNrm.jpg

Swimming turtle, <https://andyoucreations.com/blog/how-fast-do-pacific-green-sea-turtles-swim/>

Baby turtles, <https://asiangeo.com/articles/turtle-nesting-season-in-singapore-how-can-we-help/>

Rotating turtle, <https://stock.adobe.com/nz/images/turtle-marine-animal-vector-sea-turtle-silhouette-clipart/670532819>

Measuring a turtle's shell, https://www.lls.nsw.gov.au/__data/assets/image/0007/1377070/Measuring-the-underside-of-a-juvenile-Eastern-long-neck-turtle.-Photo-Dan-Hutton_1.jpg

Question Two

Price label, <https://stock.adobe.com/images/set-or-collection-brown-natural-craft-kraft-paper-hang-tags-price-tags-or-gift-tags-with-striped-bakers-twine-isolated-design-elements-different-positions-png-file/693906873>

Plate, <https://www.replacements.com/china-crown-lynn-polynesia/c/254524>

Large jar with tap, <https://www.ikea.com/ie/en/p/vardagen-jar-with-tap-80452639/>

Question Three

Pipi, <https://www.poulosbros.com.au/pippies-fresh-goolwa-1kg>

Crab pot, <https://www.completeangler.co.nz/tacklemans-heavy-duty-collapsible-crab-pot-55cm-11347>

Snapper fish, <https://www.mpi.govt.nz/fishing-aquaculture/recreational-fishing/information-on-popular-fish-in-nz/snapper-status-and-information/>

Ruler, <https://stock.adobe.com/images/school-metal-ruler-isolated-on-white-background-metric-steel-ruler-isolated-on-white-30cm/678798856>

Outboard motor, <https://thumbs.dreamstime.com/z/man-starting-outboard-engine-plastic-boat-exhaust-smoke-motor-haugesund-norway-januray-yamaha-108589991.jpg>

Question Four

Driving, <https://www.aa.co.nz/drivers/driver-licences/learner-driver-licences/>

Fuel gauge, <https://www.amazon.ca/Backlight-Adjustable-10-180ohm-240-30ohm%EBC%8CFuel-Motorcycle/dp/B09PG8519L>

Map, <https://www.google.com/maps/dir/Dunedin/Christchurch/>

Car icon, https://stock.adobe.com/search?k=car+icon+front&asset_id=501416924

Question Five

Candles, <https://stock.adobe.com/images/candles-kit-design-realistic-wax-base-of-different-shapes-and-flames-burning-lights-vector-set-illustration-fire-candle-candlelight-realistic/383008655>

Wrapped package, Adobe stock – AI-generated

English translation of the wording on the front cover

Numeracy 2024

32406N Apply mathematics and statistics in a range of everyday situations

Credits: Ten

OUTCOMES	
1	Formulate mathematical and statistical approaches to solving problems in a range of everyday situations.
2	Use mathematics and statistics to meet the numeracy demands of a range of everyday situations.
3	Explain mathematical and statistical responses to situations.

Enter your National Student Number (NSN) and School Code into the space above.

You should attempt ALL the questions in this booklet.

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 2–43 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.