Kia ‘akakī‘ia e te tangata te tārērē‘ia nei

NSN

Te Numero o te ‘Āpi‘i (School Code)

NA TE ARONGA ‘AKATERETERE I TE TĀRĒRĒ‘ANGA ANAKE

See back cover for an English translation of this cover

Tikoti‘ia a roto i te pi‘a (☒) me KĀRE KOE i tātā ana ki roto i teia puka

32406C TU‘ANGA-‘ĀPI‘I 3

NZQA | **Mana Tohu Mātauranga o Aotearoa**
New Zealand Qualifications Authority

Numero 2025

32406C Ta‘anga‘anga‘ia te au numero, e te statistics kia tau ki te au mea mātau‘ia na roto i te au ra tatakita‘i

Credits: Ta‘i nga‘uru

TE RUA O TE ‘EPETOMA |
RA 8–RA 12 O TEPETEMA I TE MATA‘ITI 2025

TE AU MEA TEI TUPU	
1	‘Anga‘ia te au rāvenga numero, e te statistical, no te ‘akatanotano‘anga i te au manatā, i roto i te au mea mātau‘ia na roto i te au ra tātakita‘i.
2	Ta‘anga‘anga‘ia te au numero, e te statistics kia tau ki te au anoano numero, i roto i te au mea mātau‘ia na roto i te au ra tatakita‘i.
3	‘Akamārama‘ia te au pa‘u‘anga numero, e te statistical, no runga i te au turanga.

Tukuna‘ia to‘ou National Student Number (NSN), e te School Code, ki roto i te ātea i runga ake nei.

E tau kia tāmata koe i te au ui‘anga POUROA, i roto i teia puka.

Me te anoano ra koe i teta‘i ngā‘i ke atu no teta‘i pa‘u‘anga, ta‘anga‘anga‘ia te ātea tei ‘ōronga‘ia atu, i muri ake i teia puka.

‘Ākara meitaki kia tu teia puka i te kapi 2–51, kia tau te tārē‘anga mei mua ki te ‘openga, kāre ‘okota‘i o teia au kapi e va (blank) ana.

‘Auraka e tātā ki roto i te au tapa (margins) (////). Ka tīpu‘ia teia ngā‘i, me māka‘ia te puka.

KIA ‘ŌRONGA ATU KOE I TEIA PUKA, KI TE TANGATA ‘AKATERETERE I TE TĀRĒRĒ, ME OTI TEIA TĀRĒRĒ‘ANGA.

REO PAPA‘Ā

UIʻANGA TAʻI: Te au teata

Kua ʻakapapa teia ʻakapapaʻanga i te au teata, na runga te moni tei rauka ʻia rātou.

Turanga Takaʻiʻanga	Teata	Te moni tei rauka
1	Te turanga o te tai pi/marō o Aotearoa	$1,629,000,000
2	Operation Sun Fall	$1,239,000,000
3	Karate Keas	$852,005,000
4	Lizardfire: The Final Showdown	$750,000,000
5	Rebellion on Mars	$711,800,000

Kua rauka i te, The Phantom of Fiordland tetaʻi $1.108 pirioni (billion).

(a) Me ka tāruʻia te teata ki roto i te ʻakapapaʻanga i runga ake nei, eaʻa i reira tōna turanga (rank)?

ʻIkiʻia (✓) te turanga tano.

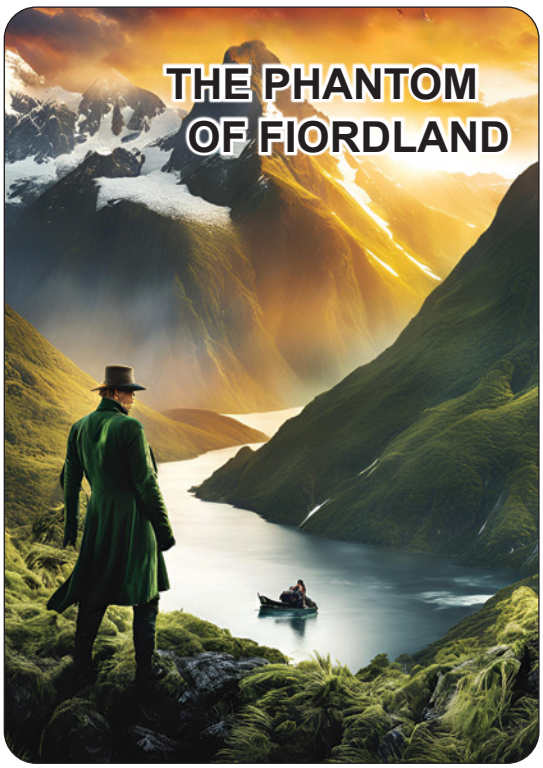
(i) ◯ 1

(ii) ◯ 2

(iii) ◯ 3

(iv) ◯ 4

(v) ◯ 5



QUESTION ONE: Movies

This table ranks movies by how much money they made.

Rank	Movie	Money made
1	Tides of Aotearoa	$1,629,000,000
2	Operation Sun Fall	$1,239,000,000
3	Karate Keas	$852,005,000
4	Lizardfire: The Final Showdown	$750,000,000
5	Rebellion on Mars	$711,800,000

The Phantom of Fiordland makes $1.108 billion.

(a) If the movie is added to the table above, what rank will it be?

Select (✓) the correct rank.

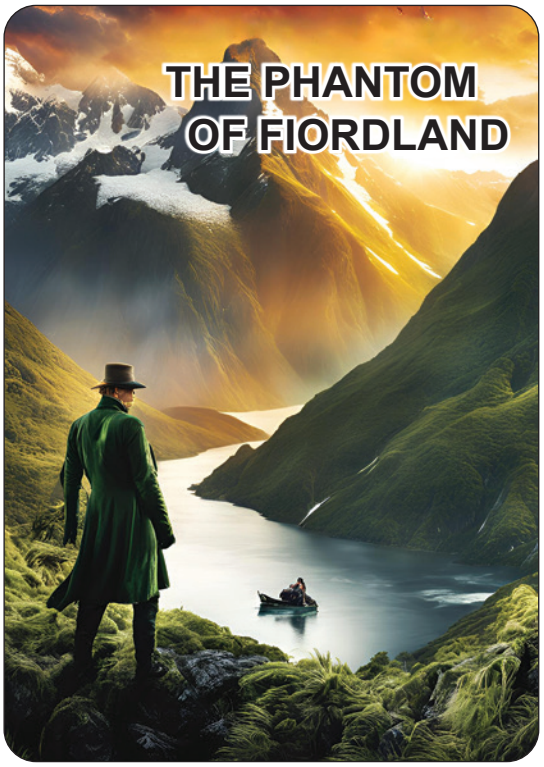
(i) ◯ 1

(ii) ◯ 2

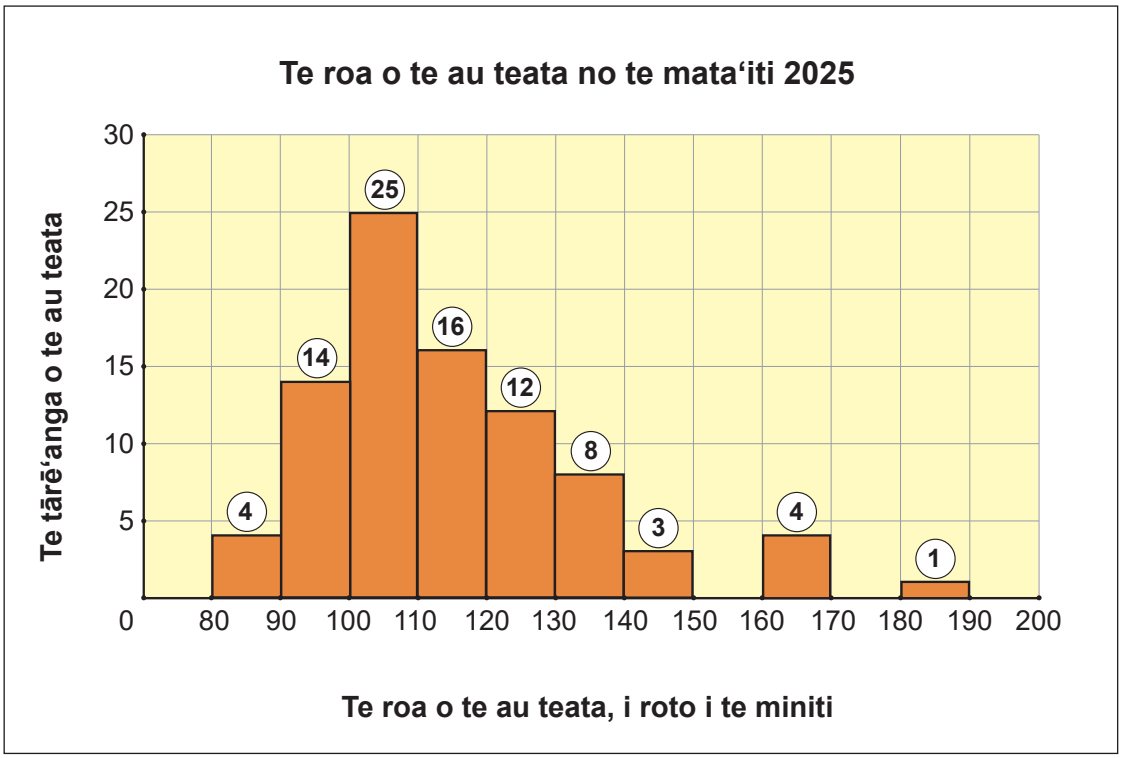
(iii) ◯ 3

(iv) ◯ 4

(v) ◯ 5



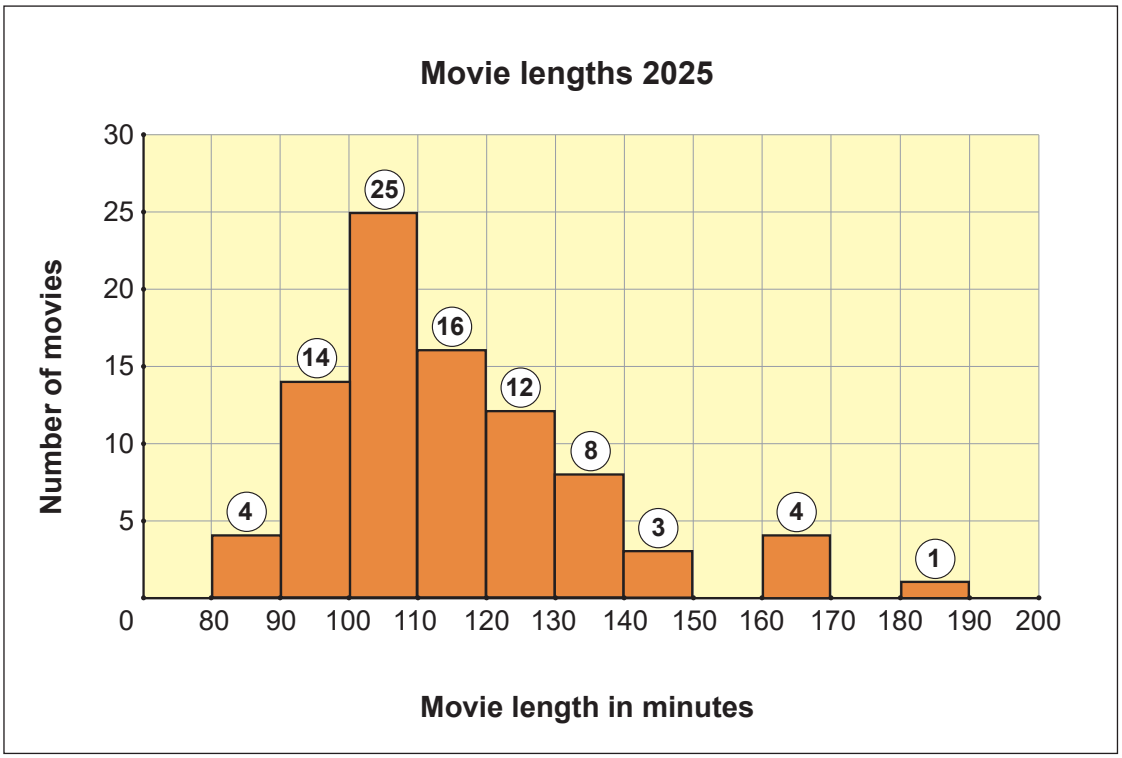
Te ʻakaāri mai nei teia graph, i te roa o te teata, i roto i te mataʻiti 2025.



Te karanga nei tetaʻi karere (magazine), e, mei tetaʻi 20% o te au **8**7 teata, e 130 miniti te roa, me kore ra, kua tere atu.

(b) Kua tika āinei ta te karere (magazine)? Taʻangaʻangaʻia te au numero mei roto i te graph, i te ʻakamārama i taʻau paʻuʻanga.

This graph shows movie lengths in 2025.



A magazine says about 20% of the **87** movies are 130 minutes long or longer.

(b) Is the magazine correct? Use numbers from the graph to explain your answer.

Ka ʻinangaro koe i te kite i te teata *The Phantom of Fiordland*.

The Phantom of Fiordland

PG 103 miniti

Te au ora ʻakamataʻanga		
3:50 i te aʻiaʻi	5:55 i te aʻiaʻi	8:20 i te aʻiaʻi

E ʻakamata ana i te 3:50 i te aʻiaʻi, e, e 103 miniti te roa.

(c) Eaʻa i reira te ora e ʻakaoti ei?

[ ] aʻiaʻi

E $91.00 te katoaʻanga, no te tutaki i te au tiketi teata, no tetaʻi tokorua tanagata mamaʻata, ʻokotaʻi tauira, e te ʻokotaʻi tamaiti.

Me tutaki koe i tetaʻi $10.00, kia riro mai koe ʻei mēma no te CinemaAotearoa, ka topa mai i reira, tetaʻi 20%, no runga i te tutakiʻanga i te au tiketi pouroa.

CinemaAotearoa

Te tutaki no te au tīketi	
$25.00	Te aronga mamaʻata
$21.50	Te tauira (e te ID)
$19.50	Te tamaiti (14 mataʻiti & i raro ake)

(d) ʻĒʻia i reira aʻau moni, ka tāporoporo koe, me riro mai koe ʻei mēma?

(ʻAuraka e ʻakangaropoina i te $10.00, no te riroʻanga mai ʻei mēma.)

$ [ ]

You want to see the movie *The Phantom of Fiordland*.

The Phantom of Fiordland

PG 103 min

Start times		
3:50 p.m.	5:55 p.m.	8:20 p.m.

It starts at 3:50 p.m. and lasts 103 minutes.

(c) What time will it end?

[ ] p.m.

Movie tickets for two adults, one student, and one child will cost you $91 in total.

If you pay $10 to get a CinemaAotearoa membership, you will get 20% off all ticket prices.

CinemaAotearoa

Ticket prices	
$25.00	Adult
$21.50	Student (with ID)
$19.50	Child (14 & under)

(d) How much will you save on the tickets if you get a membership?

(Don't forget to include the $10 cost of membership.)

$ [ ]

Me ka ʻinangaro koe i te ʻoko i teta‘i popcorn ma‘atama‘ata, teta‘i nga mea inu ma‘atama‘ata e rua, e te ʻokota‘i ice cream.

Te tutaki no te au mea katikati

	Meangiti	Tau ʻua	Ma‘atama‘ata
Popcorn	$10.00	$11.00	$12.00
Te mea inu	$8.00	$9.00	$10.00
Ice cream	$7.00 i te mea ʻokota‘i		

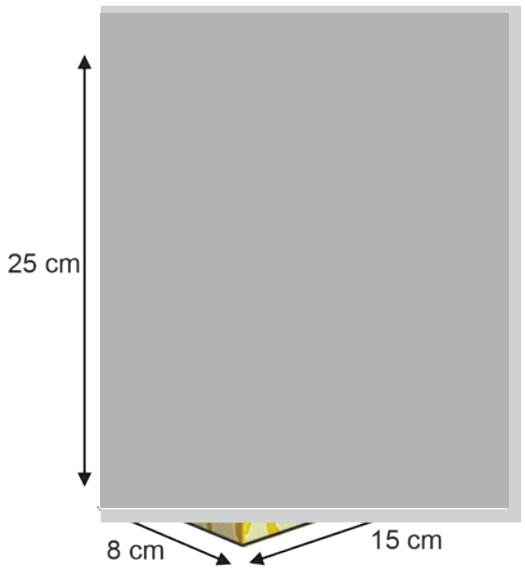
(e) ʻE māmā ake āinei, i te ʻoko i te combo, tei roto katoa te ice cream, me kore ra, i te tutaki i tei mātau‘ia, no te au mea katikati? ʻAkamārama‘ia mai ta‘au pa‘u‘anga, na roto i te ta‘anga‘anga‘anga i te ʻakakitekite‘anga i runga ake nei.

Teia te au vāito, no teta‘i pi‘a popcorn.

(f) ʻĒ‘ia rīta (litres) i roto i te pi‘a ʻokota‘i?

ʻAkamatakite‘anga: 1 rīta (litre) = 1000 cm³

L



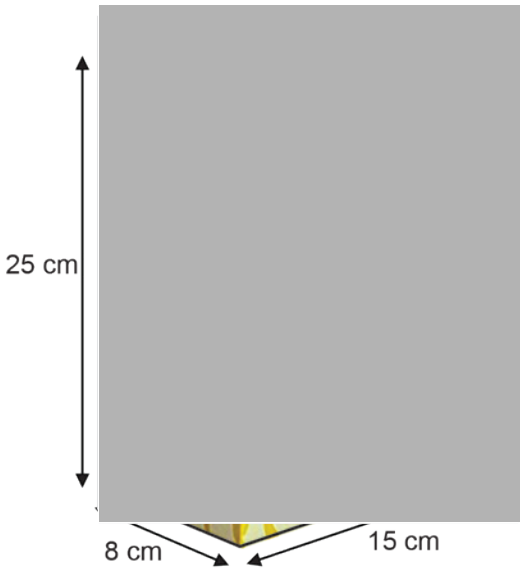
You want to buy one large popcorn, two large drinks, and one ice cream.

Snack prices

	Small	Medium	Large
Popcorn	$10	$11	$12
Drink	$8	$9	$10
Ice cream	$7 each		

(e) Is it cheaper to buy the combo with the ice cream added, or pay the usual snack prices? Explain your answer, using the information above.

Here are the dimensions of a popcorn box.



(f) How many litres does the box hold?

Note: 1 litre = 1000 cm^3

L

UIʻANGA RUA: Te Oraʻanga Meitaki

ʻĒ 206 ivi, i roto i te kōpapa tangata.

E kiteʻia ana tetaʻi 12% o te katoaʻanga o te au ivi, ki roto i te rib cage.

(a) ʻĒʻia au ivi rib bones?

[ ] rib bones

This section is deliberately blank.
The assessment continues on page 12.

QUESTION TWO: Health

There are 206 bones in the human body.

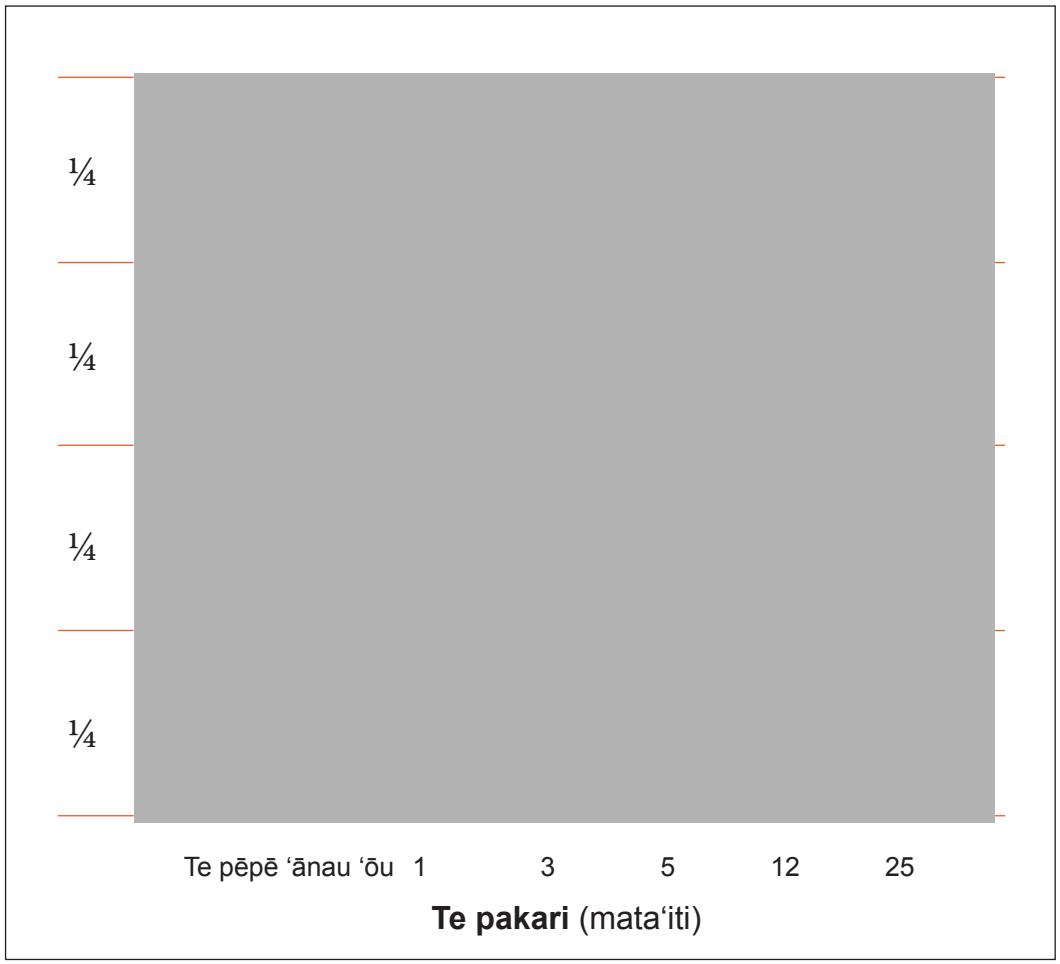
About 12% of all the bones are found in the rib cage.

(a) How many rib bones are there?

[ ] rib bones

This section is deliberately blank.
The assessment continues on page 13.

Te ʻakaāri mai nei teia parāni i te tuātau e tupu ra te tangata, ka riro mai to rātou katu, ʻei tuʻanga meangiti ake, i te katoaʻanga o to rātou roāngarere. ʻOkotaʻi kōta o te katu o tetaʻi tamaiti e taʻi mataʻiti te pakari, i to rātou roāngarere.



(b) ʻEaʻa i reira te tuʻanga o te katu o tetaʻi **pēpē ʻānau ʻōu** mei to rātou roāngarere.

ʻIkiʻia (✓) te tuʻanga tano.

(i) ◯ ¼

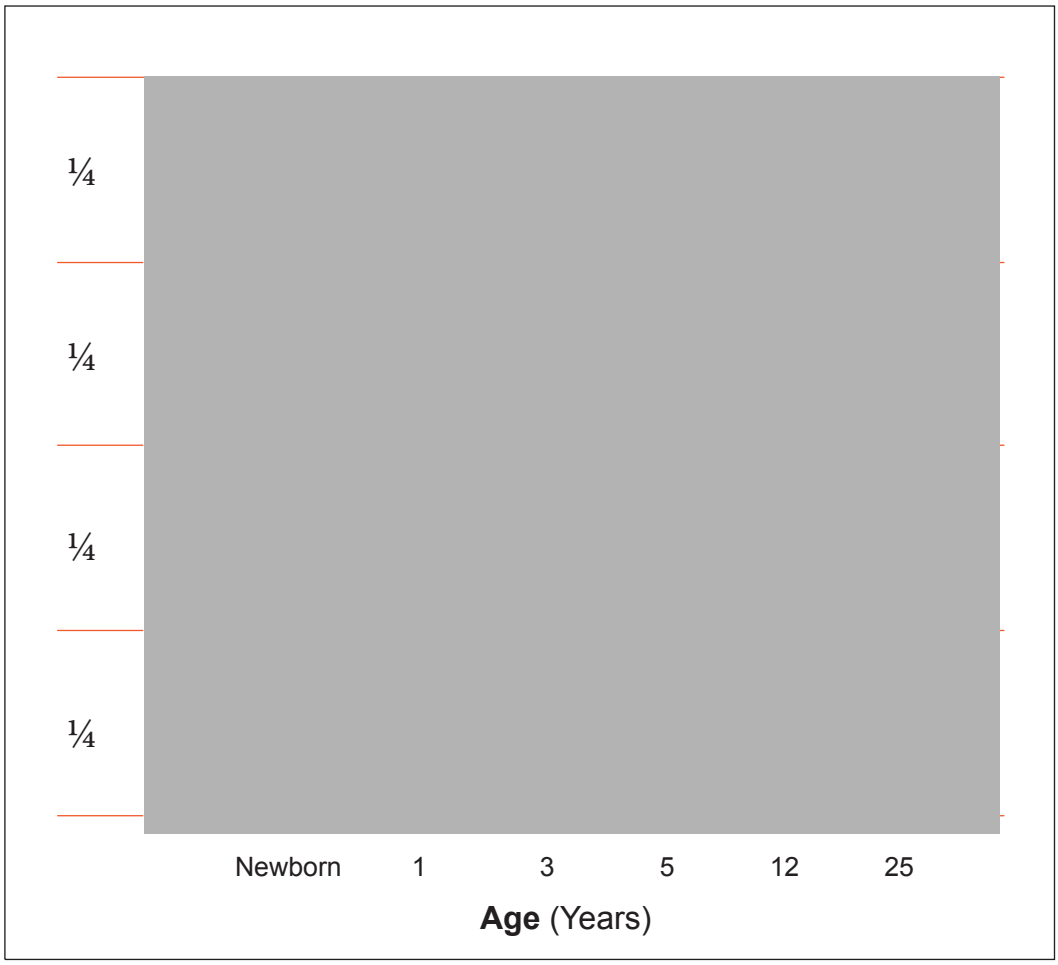
(ii) ◯ ⅓

(iii) ◯ ⅗

(iv) ◯ ⅘

(v) ◯ ½

This diagram shows that as people grow up, their head becomes a smaller fraction of their total height. A one-year-old's head is one quarter of how tall they are.



(b) What fraction of a **newborn** baby's height is their head?

Select (✓) the correct fraction.

(i) ◯ ¼

(ii) ◯ ⅓

(iii) ◯ ⅗

(iv) ◯ ⅘

(v) ◯ ½

ʻĒ $2,760.00, te tutaki no tetaʻi Automated External Defibrillator (AED)

(c) Eaʻa i reira te tutaki, me ʻoko pātēʻia no tetaʻi 30%?

$ ☐

I te tuātau Cardiopulmonary Resuscitation (CPR), ka anoanoʻia koe kia taomi i te umauma o tetaʻi tangata, i roto i te tārēʻanga, 100 ki te 120 taime i te miniti.

(d) Eaʻa i reira te **tārēʻanga maʻata rava atu** o te au taomiʻanga, e tau kia rave koe i roto i tetaʻi 8 miniti?

☐ te au taomiʻanga

An Automated External Defibrillator (AED) costs $2,760.

(c) How much would it cost with a 30% discount?

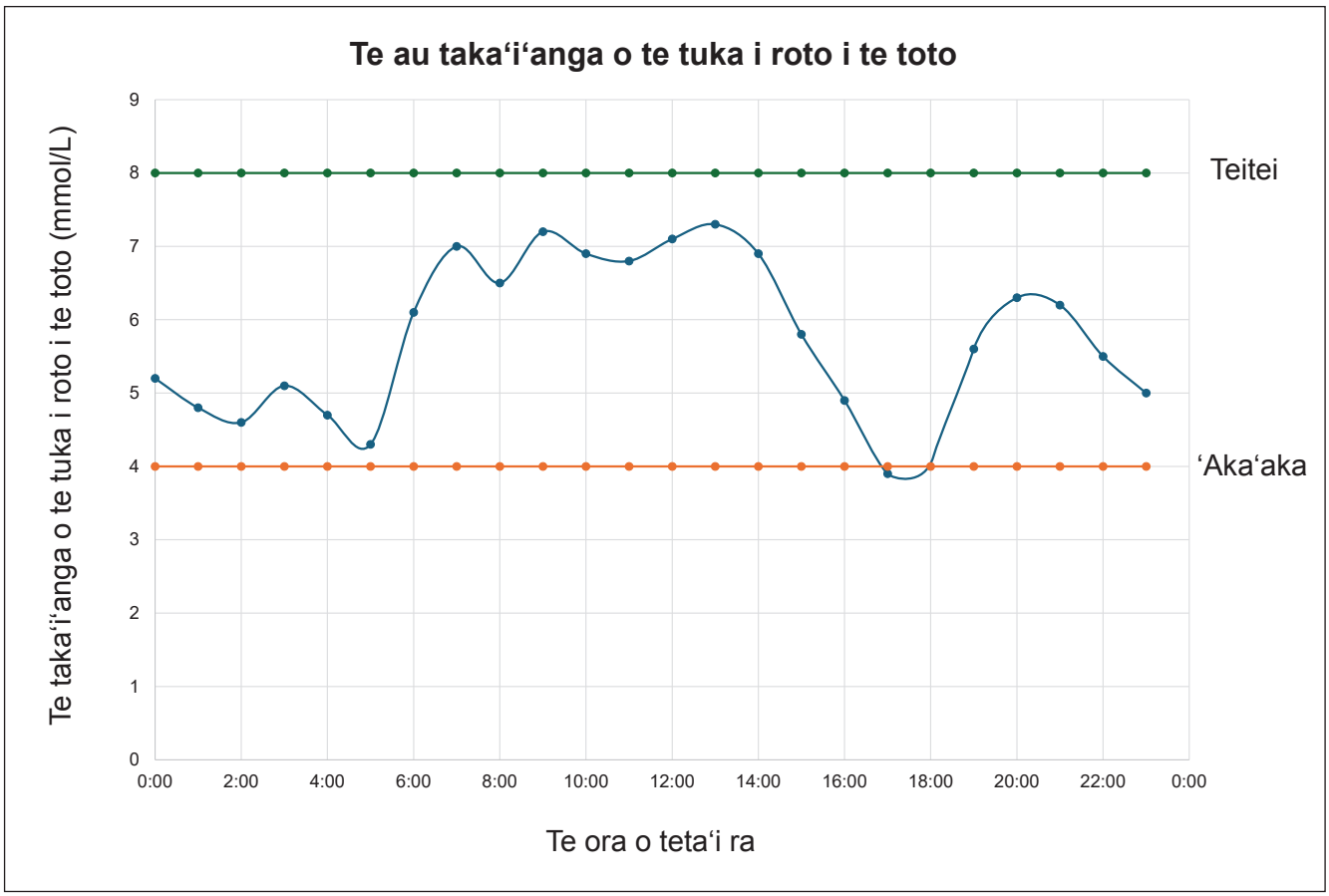
$ ☐

During Cardiopulmonary Resuscitation (CPR), you need to push on the person's chest at a rate of 100 to 120 times per minute.

(d) What is the **greatest** number of pushes you should do in 8 minutes?

☐ pushes

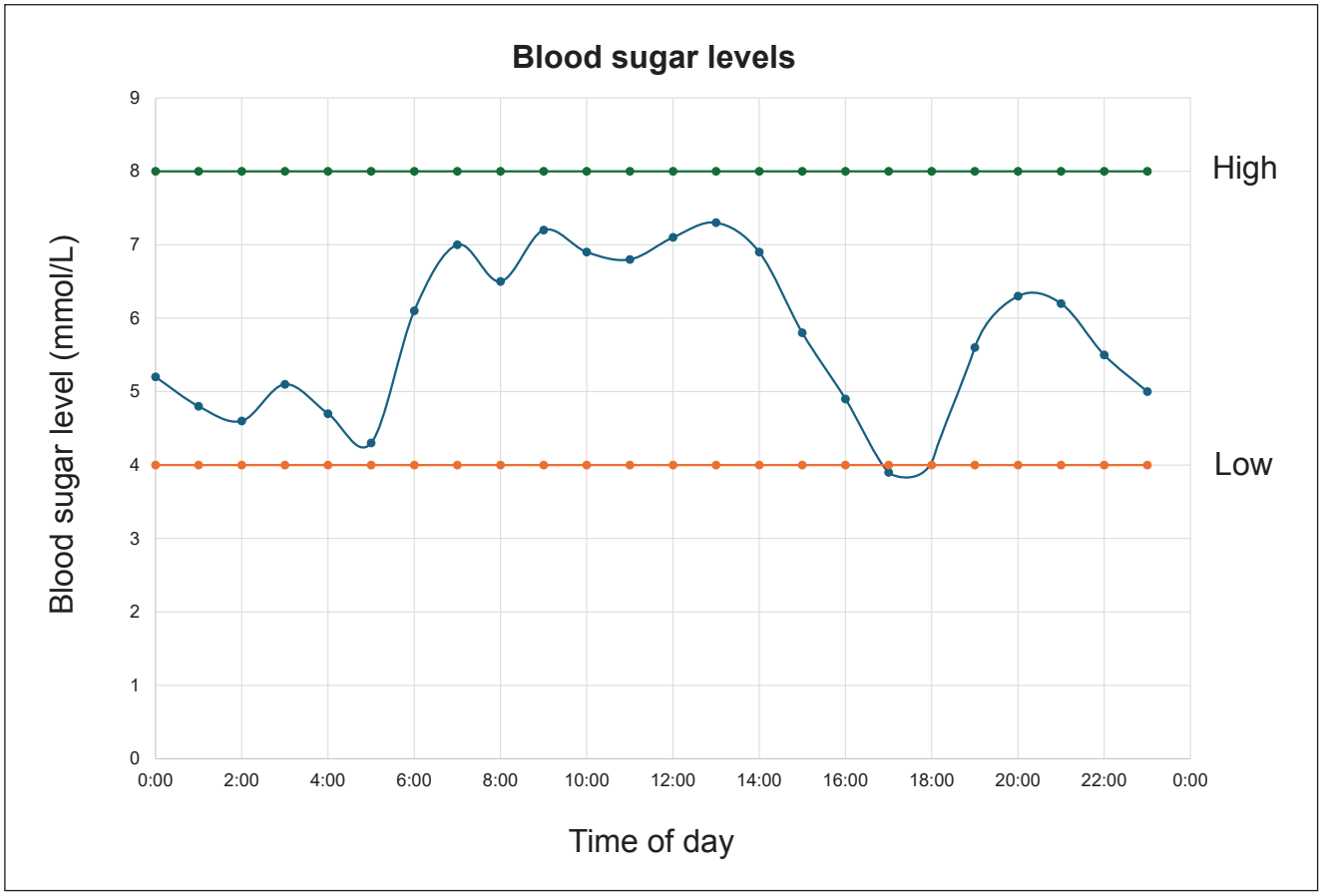
Te ʻakaāri mai nei te graph i raro ake nei, i te takaʻiʻanga o te tuka i roto i te toto o tetaʻi tangata.



Kua ʻaere atu teia tangata i te ʻoro no tetaʻi ʻokotaʻi ora, ʻ**akamataʻanga** i te ora 6:00 i te pōpongi.

(e) Kua ʻōpara āinei te ʻoroʻanga i te takaʻiʻanga o te tuka i roto i tōna toto kia kake? Taʻangaʻangaʻia te au numero mei roto i te graph, i te ʻakamārama i taʻau paʻuʻanga.

The graph below shows a person's blood sugar levels.



This person went for a one-hour run, **starting** at 6:00 a.m.

(e) Did the run cause their blood sugar level to rise? Use numbers from the graph to explain your answer.

Me ʻiti te rā i te tuātau raumata, ka pakapaka toʻou pākiri i roto i teta‘i 12 miniti.

Te ʻirinakiʻia nei e, ka pāruru te SPF 30+ sunscreen iā koe mei te pakapaka‘anga, no teta‘i **30** taime roa atu, me ta‘anga‘anga putuputu koe i te reira.

(f) E‘ia i reira **ora** te ka rauka i teta‘i tangata, i te noʻo ki roto i te ra, me parai‘ia te SPF 30+ sunscreen, kia kore e pakapaka?

[ ] te tārē‘anga ora

On a sunny summer day, your skin can burn in just 12 minutes.

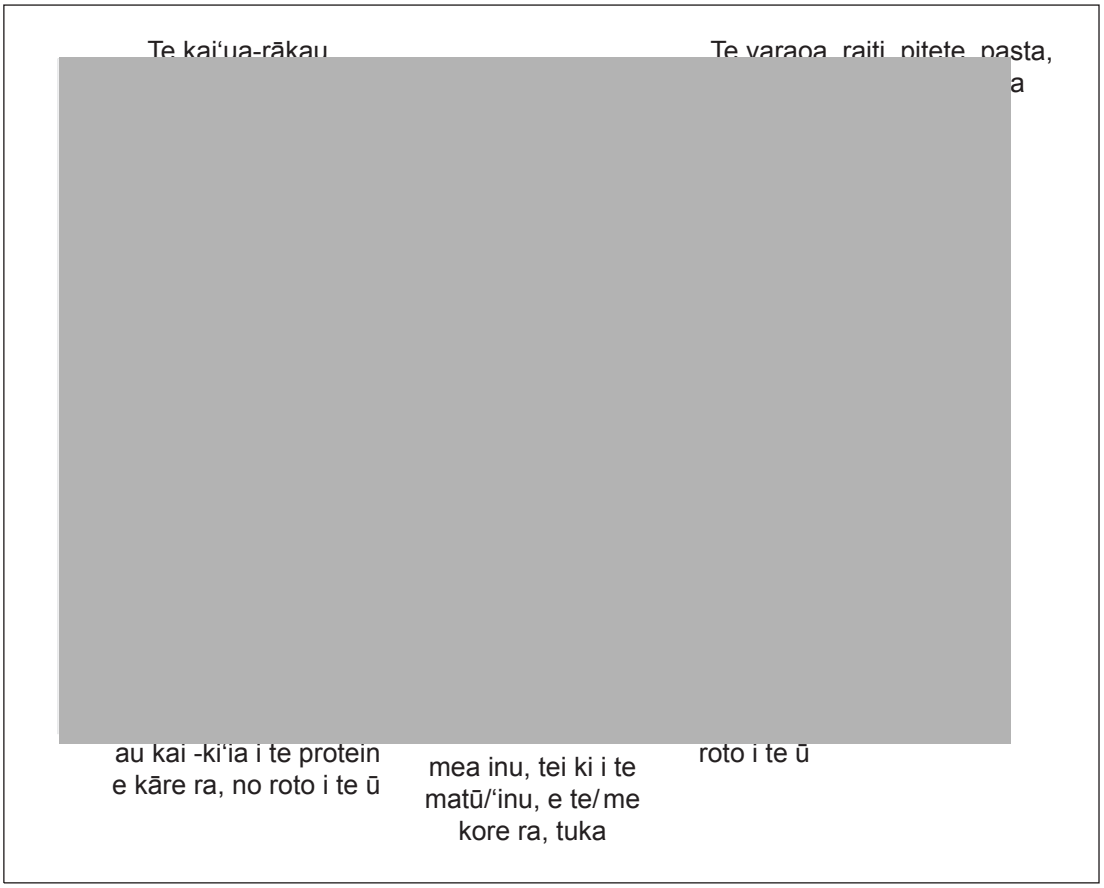
SPF 30+ sunscreen is meant to protect you from sunburn for **30** times longer if you use it regularly.

(f) How many **hours** can a person be in the sun with SPF 30+ sunscreen on, without burning?

[ ] hours

UIʻANGA TORU: Te au kai kiko-ʻenua

Te ʻakaāri mai nei te tūtū i raro ake nei, i te au tuʻanga o te au pupu kai tātakitaʻi, e tau kia kai koe i te au ra tātakitaʻi.



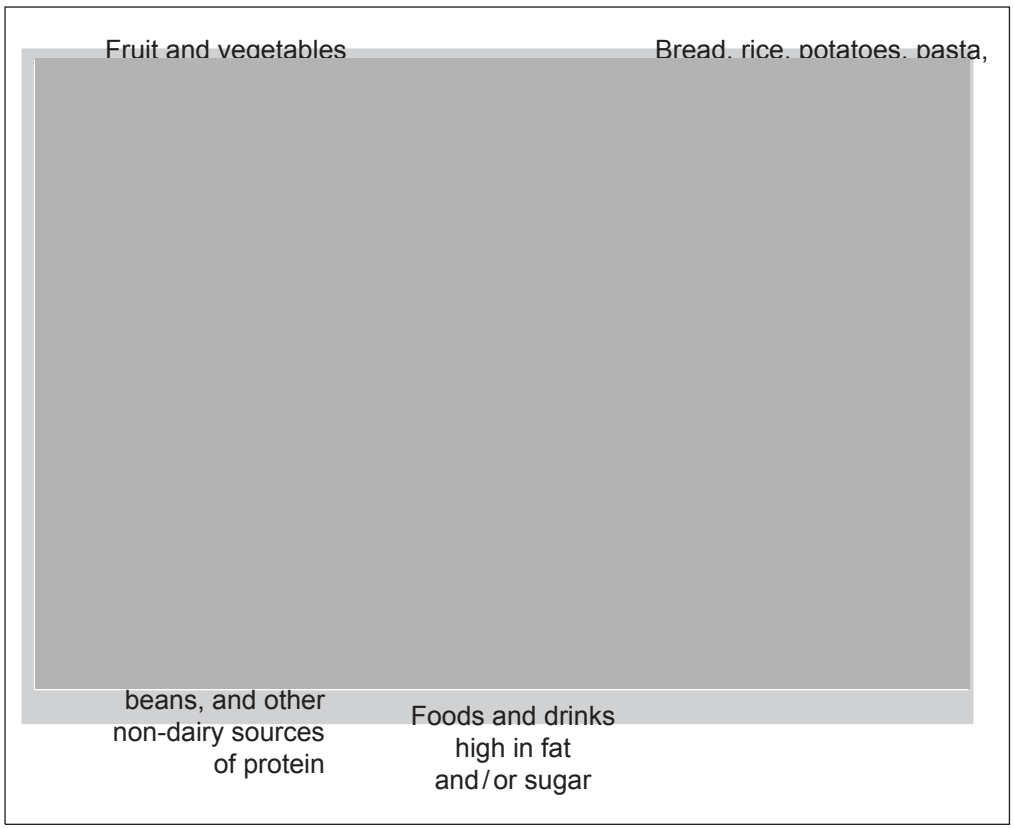
Ka anoanoʻia koe, kia kai e **rima** kaiʻanga ʻua-rākau, e te kiko-ʻenua, i te au ra tātakitaʻi, no te oraʻanga meitaki.

(a) ʻĒʻia i reira kaiʻanga, i te katoaʻanga, e tau kia kai koe i te au ra tātakitaʻi, mei roto mai i te au pupu kai tātakitaʻi?

☐ te au kaiʻanga

QUESTION THREE: Vegetables

The image below shows the fractions of each food group you should eat every day.



You need to eat **five** servings of fruit and vegetables every day to stay healthy.

(a) How many servings, in total, should you eat each day from each of the food groups?

[ ] servings

No muri i teta‘i paeketi ‘ua kāroti, te tūtū i raro ake nei. Te ‘akaāri mai nei teia i nga marama pu‘apinga rava atu, no te tanu‘anga i te ‘ua na roto i te au vaka tūkētūkē o Aotearoa.

Te au vaka mā‘ana‘ana ake

Te au vaka anuanu ake

Te au marama pu‘apinga rava atu no te tanutanu

TIĀNUARE	PEPERUARE	MĀTI	‘ĀPERĪRA
●	●	●●	●●
ME	**TIUNU**	**TIURAI**	**‘AUKUTE**
●			
TEPETEMA	**‘OKOTOPA**	**NOEMA**	**TITEMA**
●	●●	●●	●

‘Ē ‘oko koe i te au ‘ua kāroti i roto i te marama **Tiunu**.

(b) Ea‘a i reira, te marama mua i muri ake i ta‘au ‘oko‘anga, e tau kia tanu koe i ta‘au ‘ua kāroti, i roto i te Ika-a-Māui?

‘Iki‘ia (✓) te marama tano.

(i) ◯ TIURAI

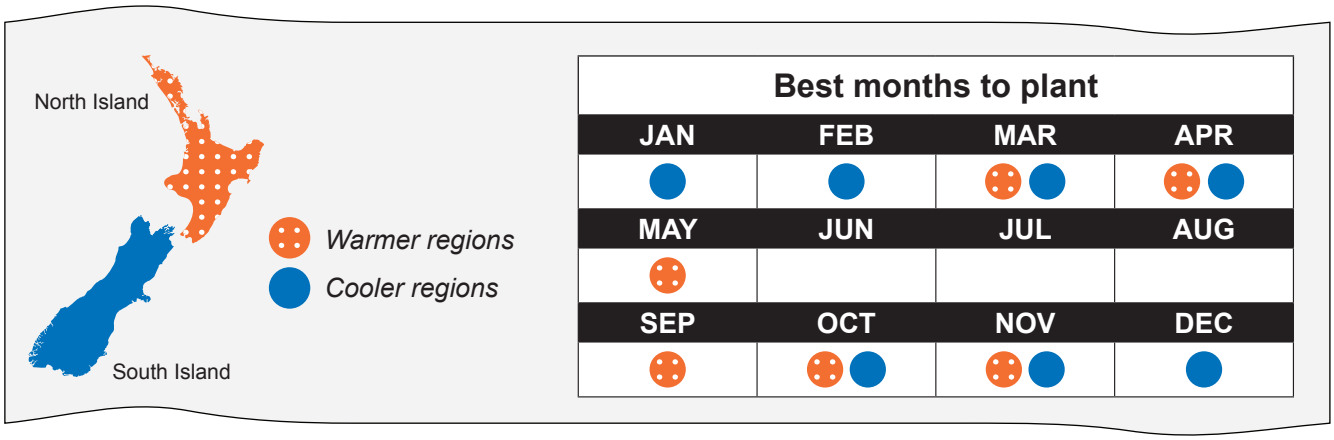
(ii) ◯ ‘AUKUTE

(iii) ◯ TEPETEMA

(iv) ◯ ‘OKOTOPA

(v) ◯ NOEMA

The image below is from the back of a packet of carrot seeds. It shows the best months to plant the seeds in the different regions of New Zealand.



You buy the carrot seeds in **June**.

(b) What is the earliest month after buying that you should plant the carrot seeds in the North Island?

Select (✓) the correct month.

(i) ◯ JUL

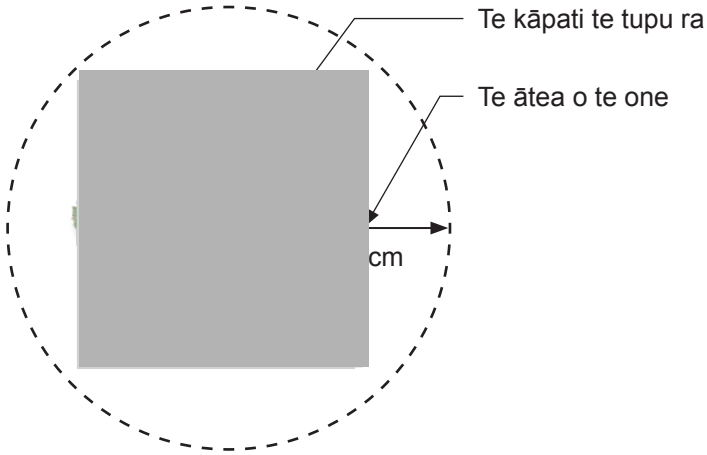
(ii) ◯ AUG

(iii) ◯ SEP

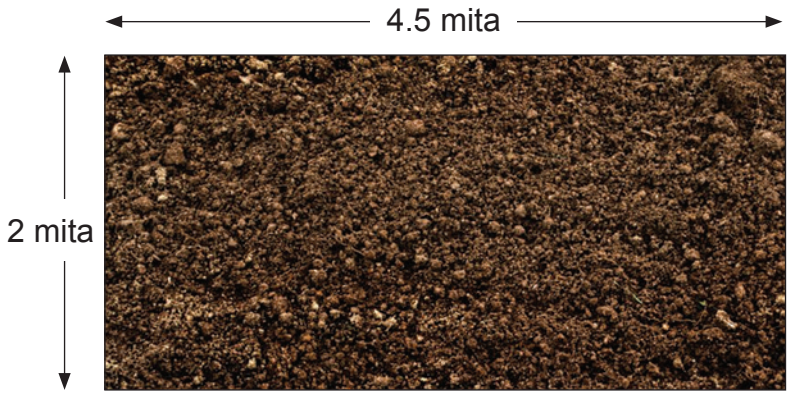
(iv) ◯ OCT

(v) ◯ NOV

Ka tupu meitaki te kāpati, me koropiniʻia rātou e to rātou ʻuāʻorāi one, mei te radius 25 centimetres.



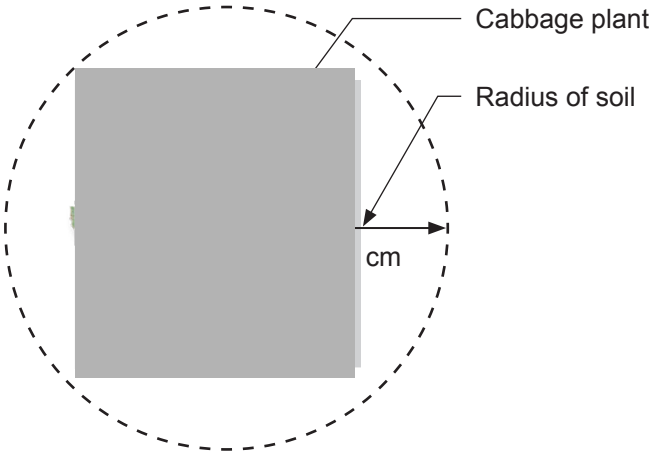
E 2 mita, e te 4.5 mita te vāito o tetaʻi ʻāua-kai mei te poʻo rāi.



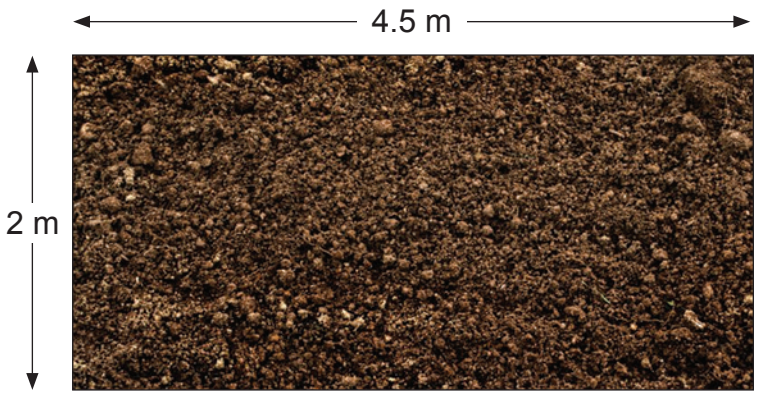
(c) Eaʻa i reira te tārēʻanga maʻata rava atu o te kāpati, te ka tau kia tanuʻia ki roto i te ʻaua-kai, kia tupu meitaki?

☐ te au kāpati

Cabbages grow well when they have their own circle of soil with a radius of about 25 centimetres.



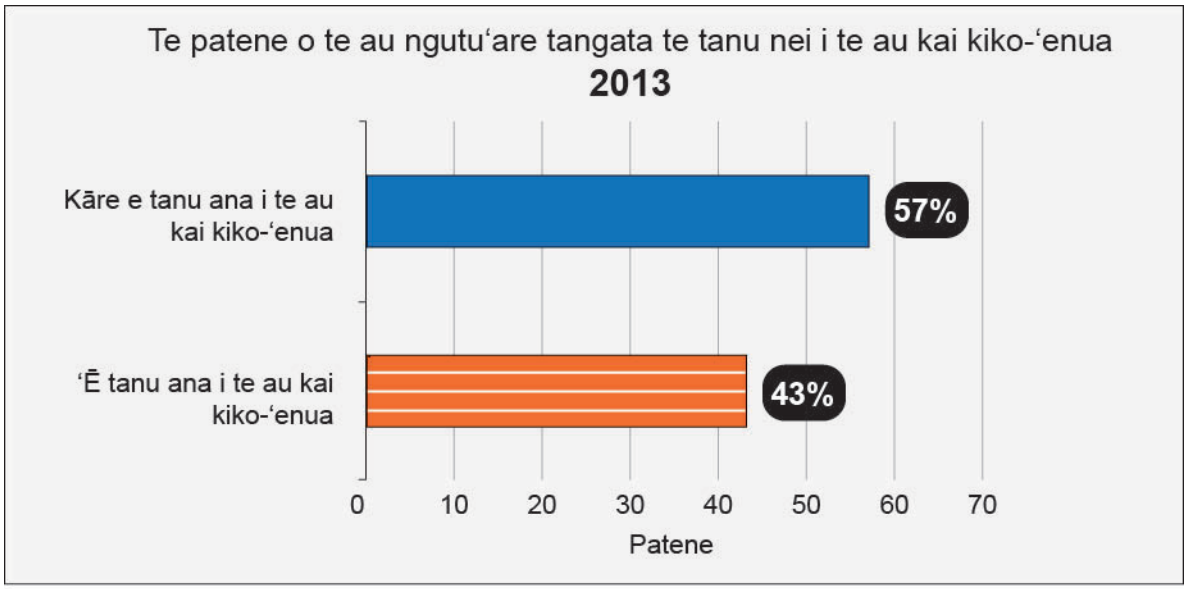
A rectangle-shaped garden measures 2 metres by 4.5 metres.

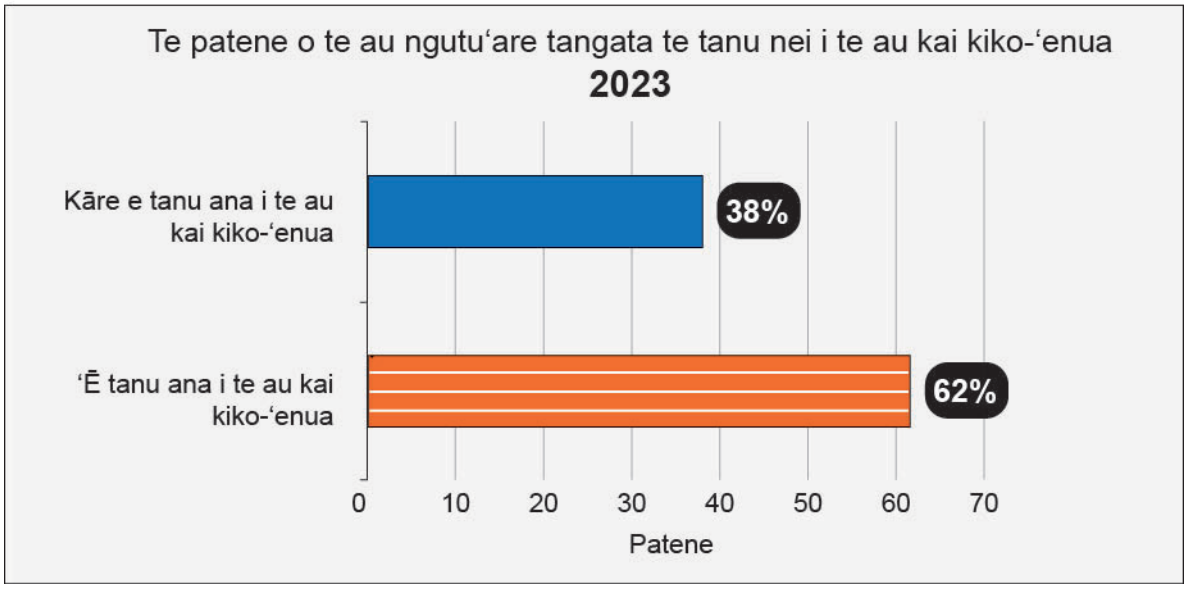


(c) What is the greatest number of cabbages that can be planted in the garden, so that they grow well?

[ ] cabbages

Te ʻakaāri mai nei te au graph i raro ake nei, i te patene o te au ngutuʻare tangata i roto i Aotearoa, tei tanu kai kiko-ʻenua i roto i te mataʻiti 2013, e te mataʻiti 2023.





(d) ʻIkiʻia (✓) **ʻokotaʻi** tātāʻanga **te taʻangaʻanga meitaki ana** i te ʻakakitekiteʻanga mei roto i te au graph.

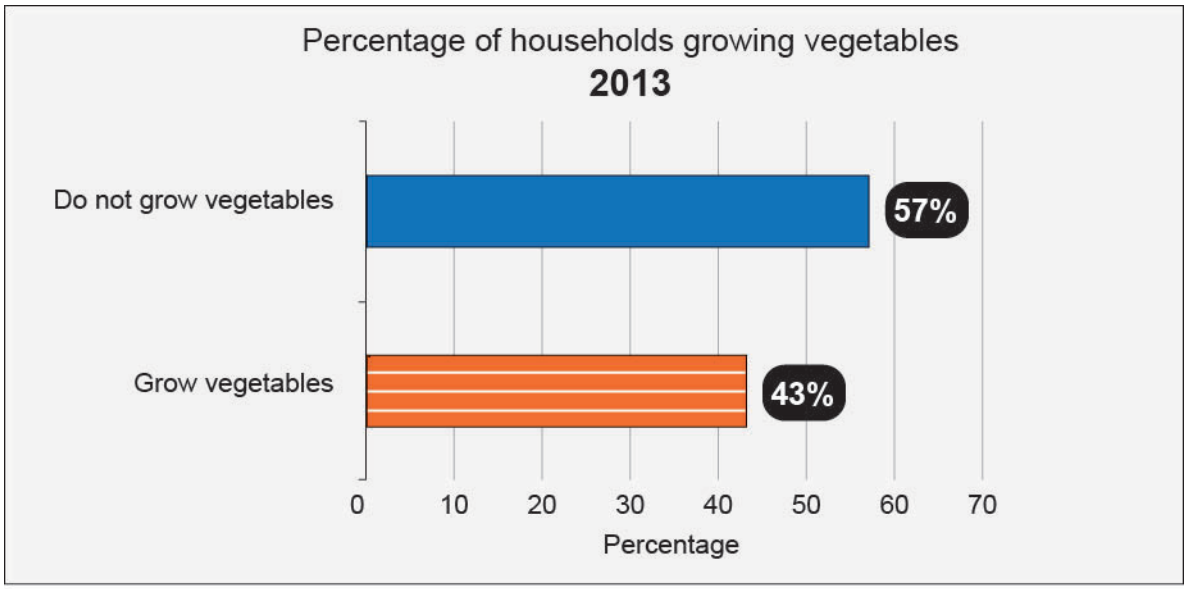
(i) ◯ Tei raro ake te tārēʻanga o te au ngutuʻare tangata tei kai kiko-enua, i roto i te mataʻiti 2013, i te mataʻiti 2023.

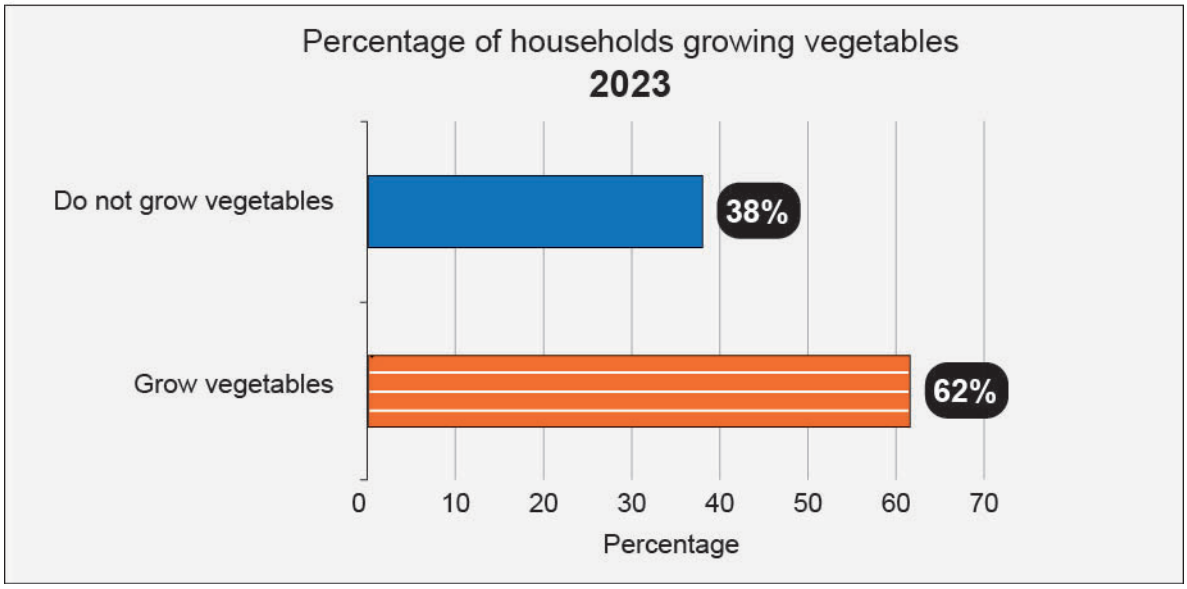
(ii) ◯ Mei teta'i toru, i roto i te au ngutuʻare tangata e rima, tei tanu kai kiko-ʻenua i roto i te mataʻiti 2023.

(iii) ◯ I roto i teta'i 10 mataʻiti, kua kake teta'i 62% o te au ngutuʻare tangata te tanu nei i te kai kiko-ʻenua.

(iv) ◯ Tei raro ake te tārēʻanga o te au ngutuʻare tangata tei tanu kai kiko-enua, i roto i te mataʻiti 2023, i te mataʻiti 2013.

The graphs below show the percentage of households in New Zealand that grew vegetables in 2013 and 2023.





(d) Select (✓) **one** statement that **correctly uses** information from the graphs.

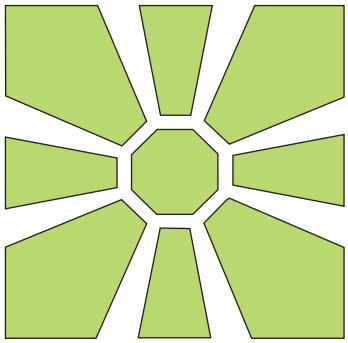
(i) ◯ Households ate less vegetables in 2013 than in 2023.

(ii) ◯ About three in every five households grew vegetables in 2023.

(iii) ◯ Within 10 years, there was a 62% increase in households growing vegetables.

(iv) ◯ Fewer households grew vegetables in 2023 than in 2013.

Te ʻakaāri mai nei teia tūtū, i teta‘i ʻakapapa‘anga no teta‘i āua kai kiko-ʻenua.

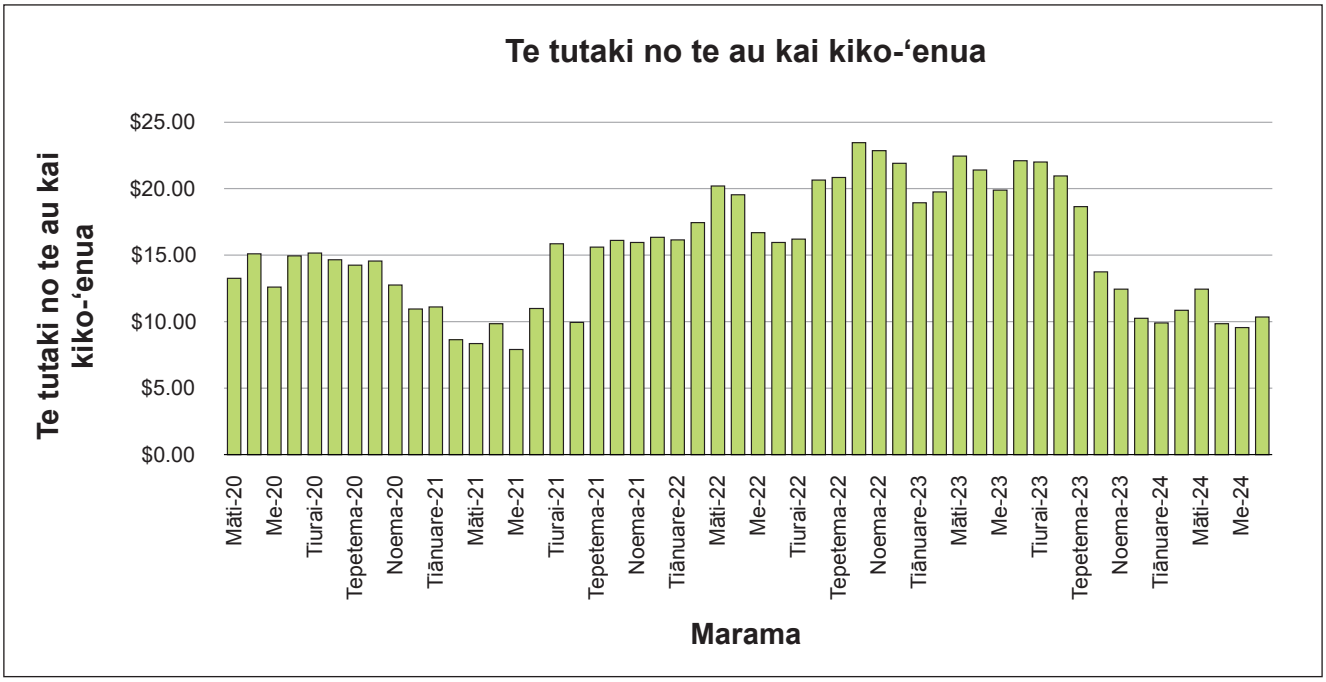


(e) ʻĒ‘ia rāina symmetry i roto i teia ʻakapapa‘anga?

☐ te au rāina symmetry

Te ʻakaāri mai nei teia graph, i te tauī‘anga o te tutaki no te au kiko-ʻenua, na roto i te tuātau.

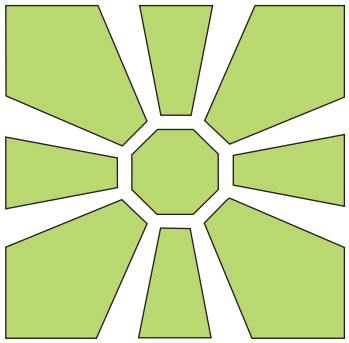
E tauī ana te tutaki no te au kai kiko-ʻenua, na roto i te mata‘iti, i roto i Aotearoa, tei runga ʻua i te turanga o te reva.



Te karanga nei teta‘i online post, “I te ma‘ata‘anga o te taime, ko te marama o Mē te tuātau ʻoko māmā rava atu i te kai kiko-ʻenua.”

(f) Kua tano āinei te tumu manako? Ta‘anga‘anga‘ia te au marama, e te au tutaki, mei roto i te graph, i te ʻakamārama i ta‘au pa‘u‘anga.

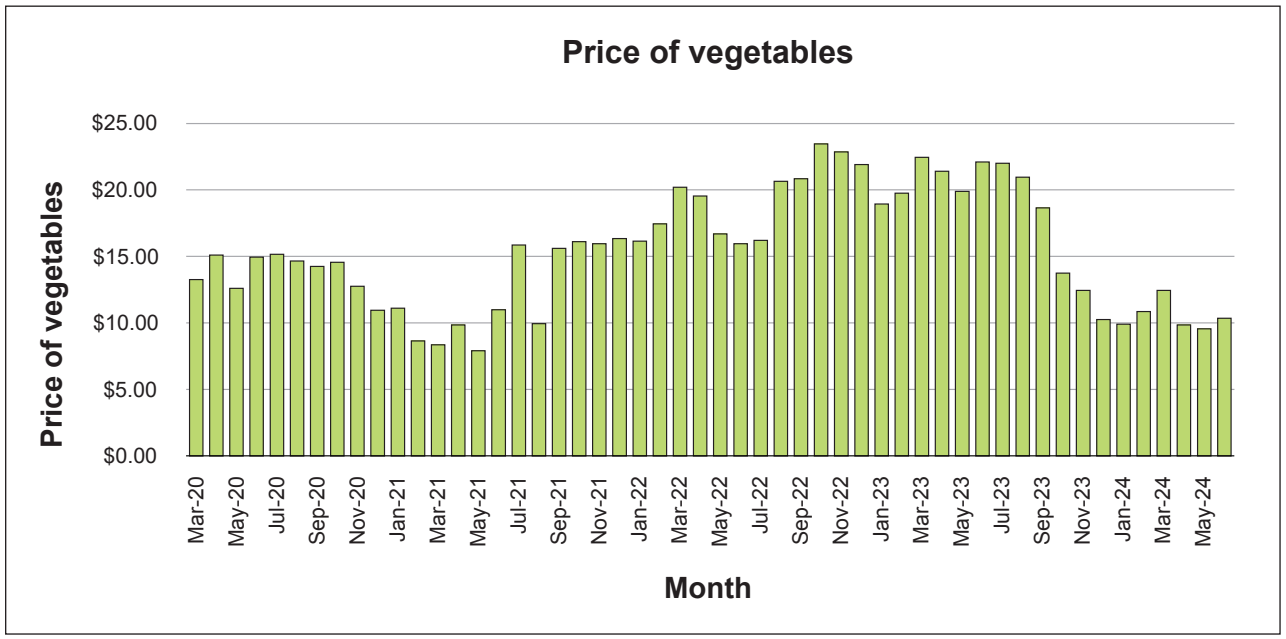
This image shows a design for a vegetable garden.



(e) How many lines of symmetry does this design have?

[ ] lines of symmetry

This graph shows how the price of vegetables has changed over time.



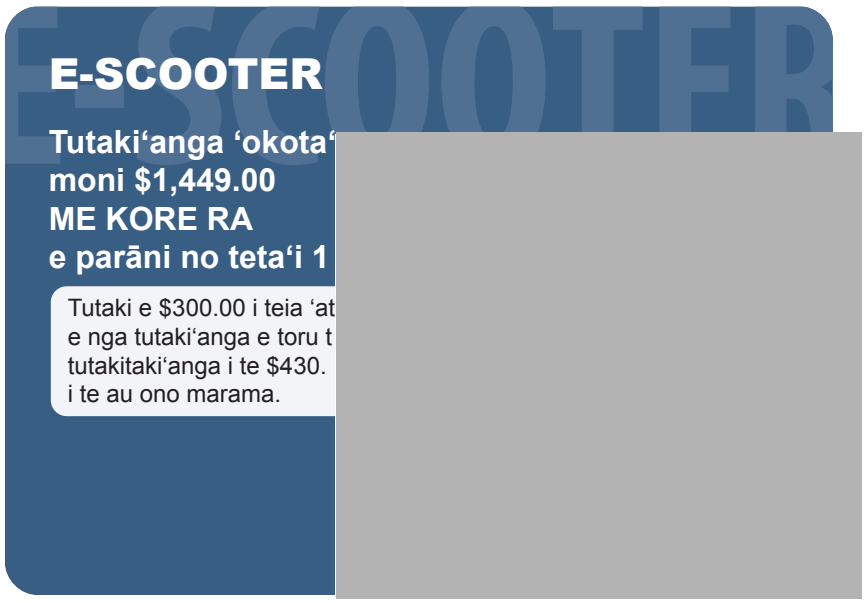
The price of vegetables in New Zealand changes during the year, depending on the weather.

An online post reads, "Vegetable prices are usually lowest in May."

(f) Is the headline correct? Use months and prices from the graph to explain your answer.

UIʻANGA ʻĀ: E-scooters

Ka rauka i te ʻoko i tetaʻi e-scooter, na roto i te tutakiʻanga pouroa i te moni, me kore ra, na roto i te tutakiʻanga na roto i tetaʻi 18 marama.

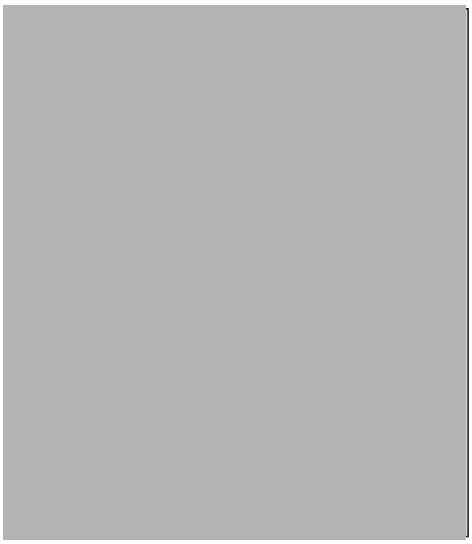


(a) Eaʻa i reira te **maʻata atu** i te tutaki, no te taʻangaʻangaʻanga i te 18-month plan, me ʻakaʻāiteʻia ki te tutakiʻanga pouroa ?

$ ☐

ʻĒ 36 tene i te miniti, e te $1.20 no te taraʻuʻanga i tetaʻi e-scooter, ei ʻakaʻoro na Gina.

Kua ʻakaʻoro ʻaia i tetaʻi e-scooter, no tetaʻi 18 miniti.

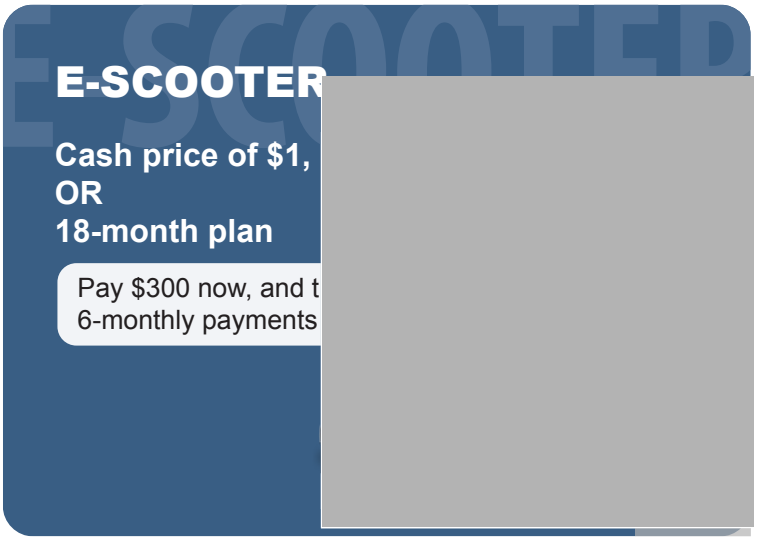


(b) Eaʻa i reira ta Gina ka tutaki?

$ ☐

QUESTION FOUR: E-scooters

An e-scooter can be bought by paying the cash price or by paying it off over 18 months.



(a) How much **more** does it cost to use the 18-month plan than paying the cash price?

$ ☐

It costs 36 cents per minute plus $1.20 hire fee for Gina to ride an e-scooter.

She rides the e-scooter for 18 minutes.

(b) How much does Gina pay?

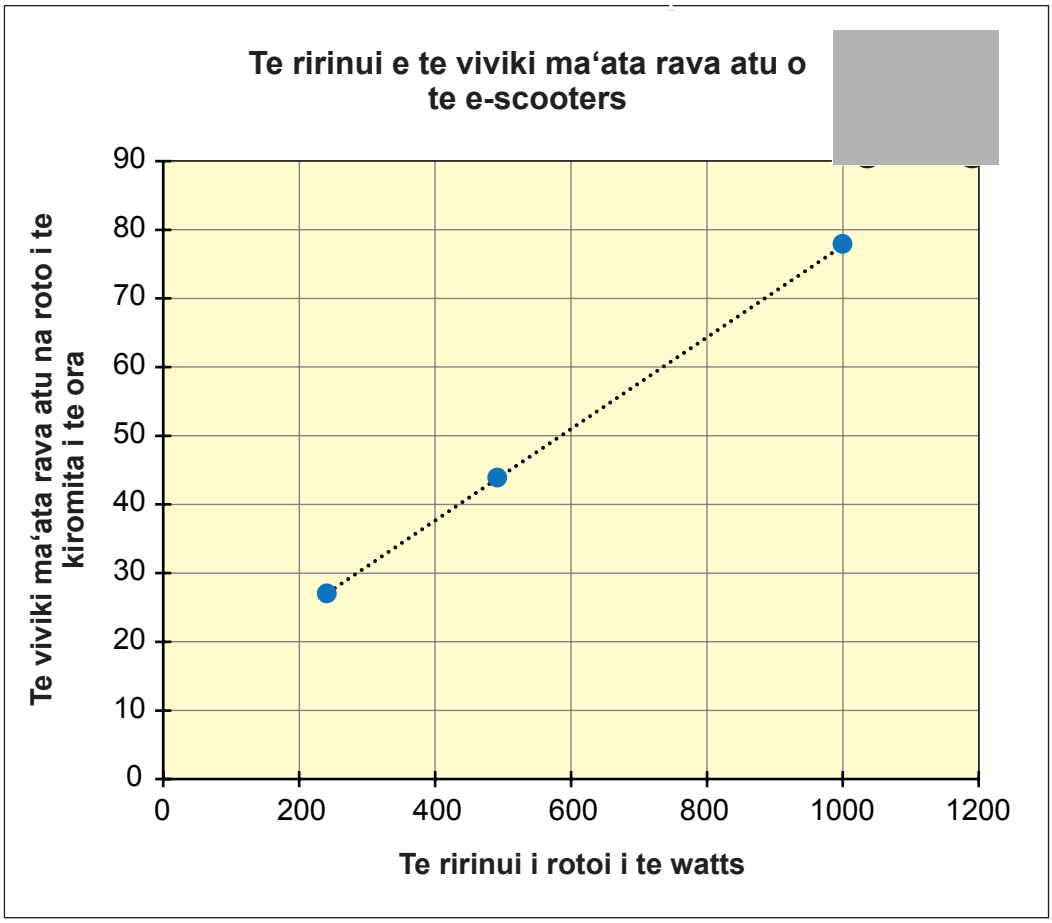
$ ☐

Kua teretere teta‘i tangata no teta‘i 5 kiromita, na runga i te e-scooter. Kua ‘aka‘oro rātou i te viviki, tei ‘āverēti, ki te 20 kiromita i te ora.

(c) ‘Ē‘ia **miniti** no teia teretere‘anga?

[ ] au miniti

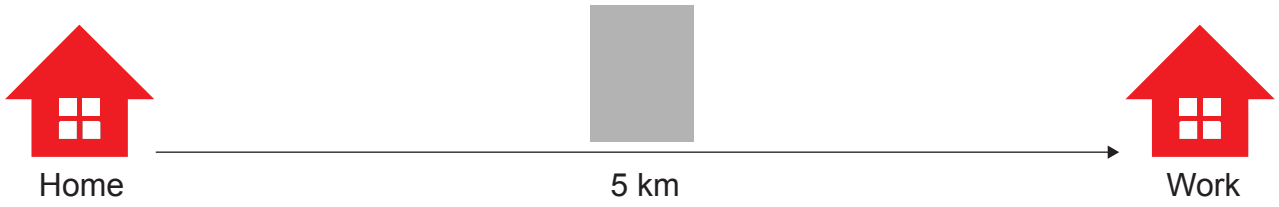
Te ‘akaāri mai nei te graph i raro ake nei, i te ririnui, e te viviki o te e-scooter.



(d) Ta‘anga‘anga‘ia te graph i runga ake nei, i te tāmanako i te viviki o te e-scooter e **300** watts te ririnui. ‘Ōronga‘ia mai ta‘au pa‘u‘anga, ei numero katoa.

[ ] kiromita i te ora

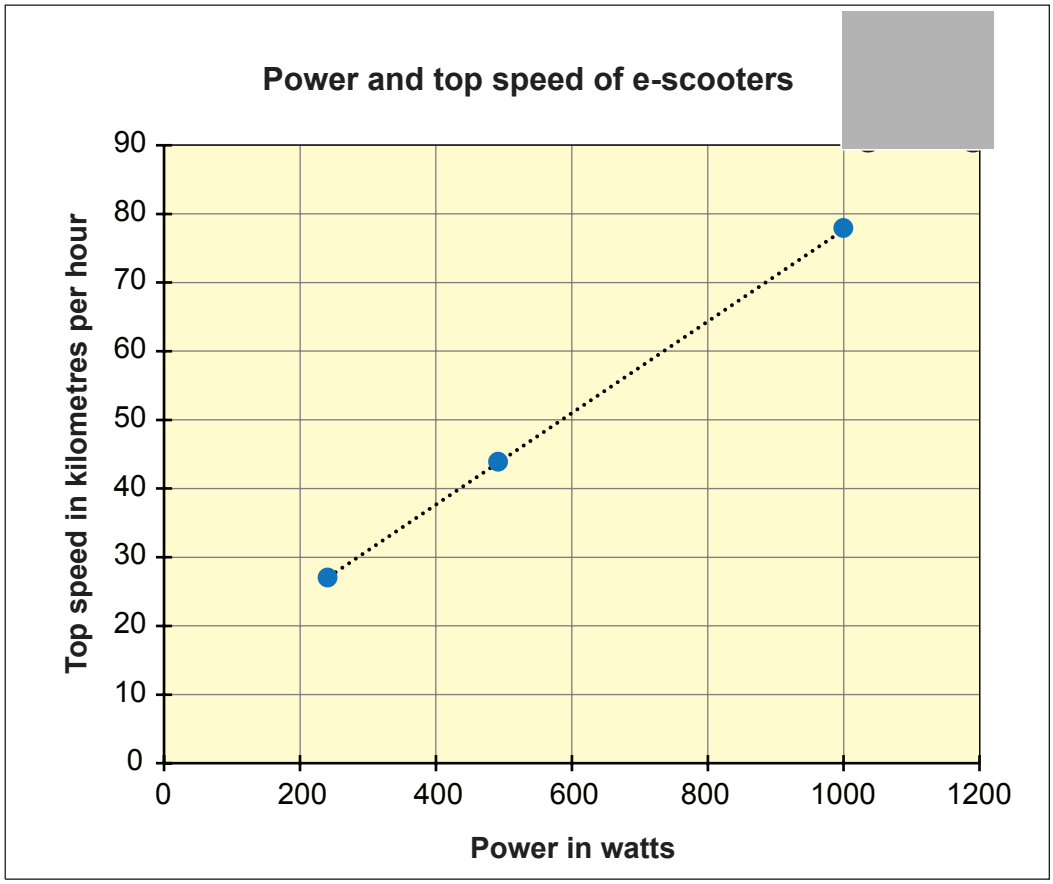
A person travels 5 kilometres on an e-scooter. They ride an average speed of 20 kilometres per hour.



(c) About how many **minutes** does the trip take?

[ ] minutes

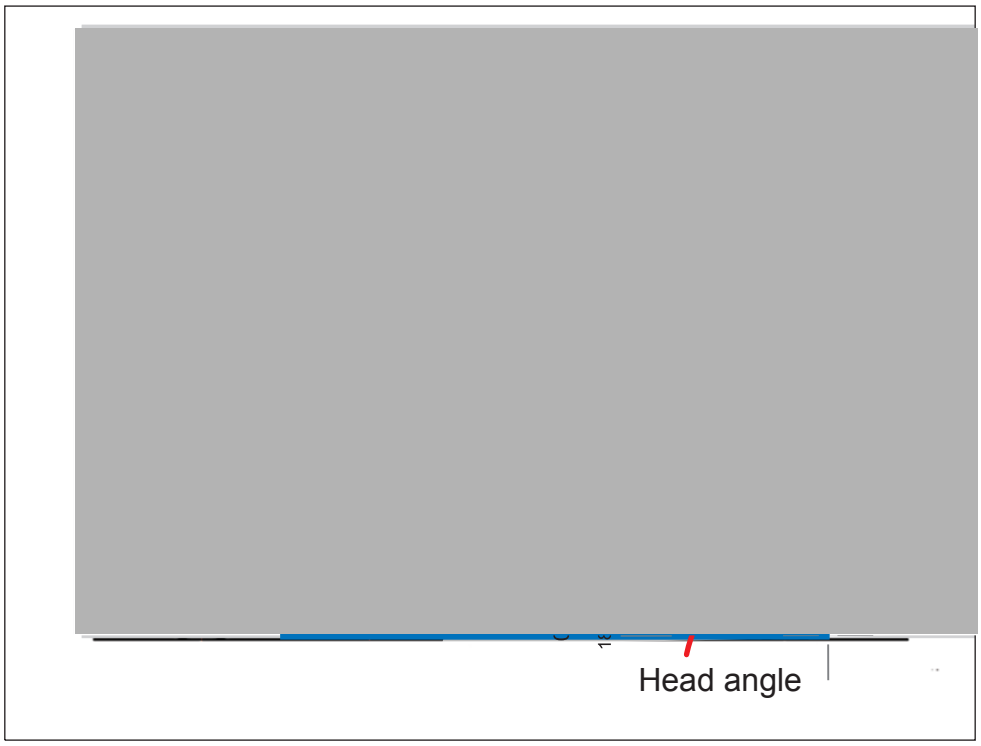
Below is a graph showing e-scooter power and speed.



(d) Use the graph above to estimate the top speed of an e-scooter that has **300** watts of power. Give your answer as a whole number.

[ ] kilometres per hour

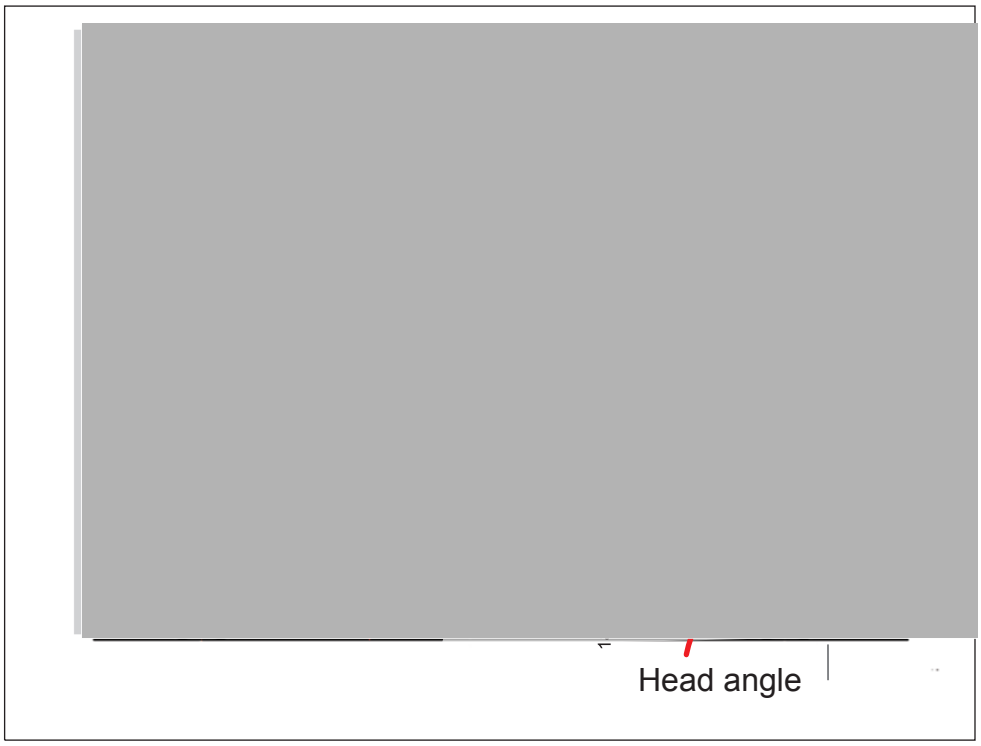
Teia teta‘i parāni ‘ākara‘anga na te pae, o teta‘i e-scooter.



(e) Vāito‘ia te head angle o te e-scooter. ‘Ōronga‘ia mai ta‘au pa‘u‘anga, ei numero katoa.

[ ] °

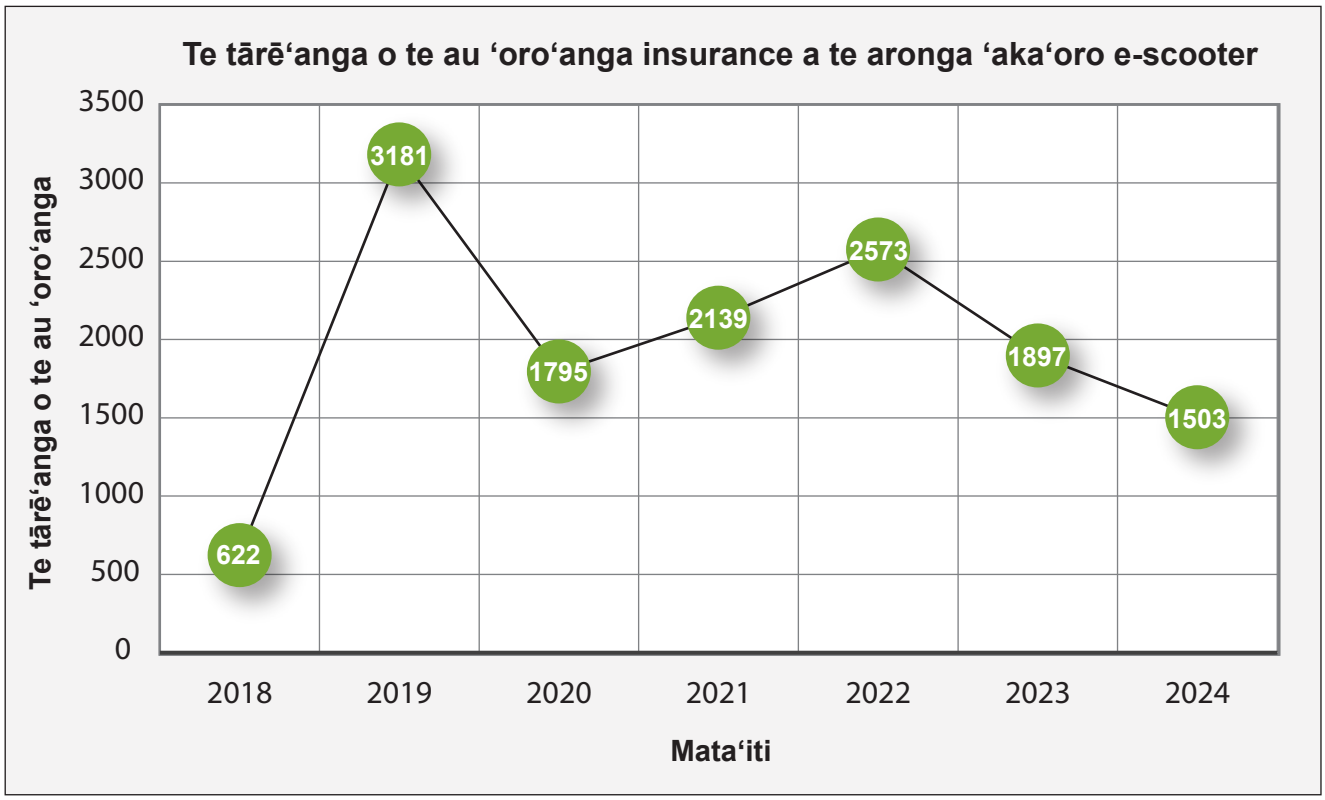
Here is a side view diagram of an e-scooter.



(e) Measure the head angle of the e-scooter. Give your answer as a whole number.

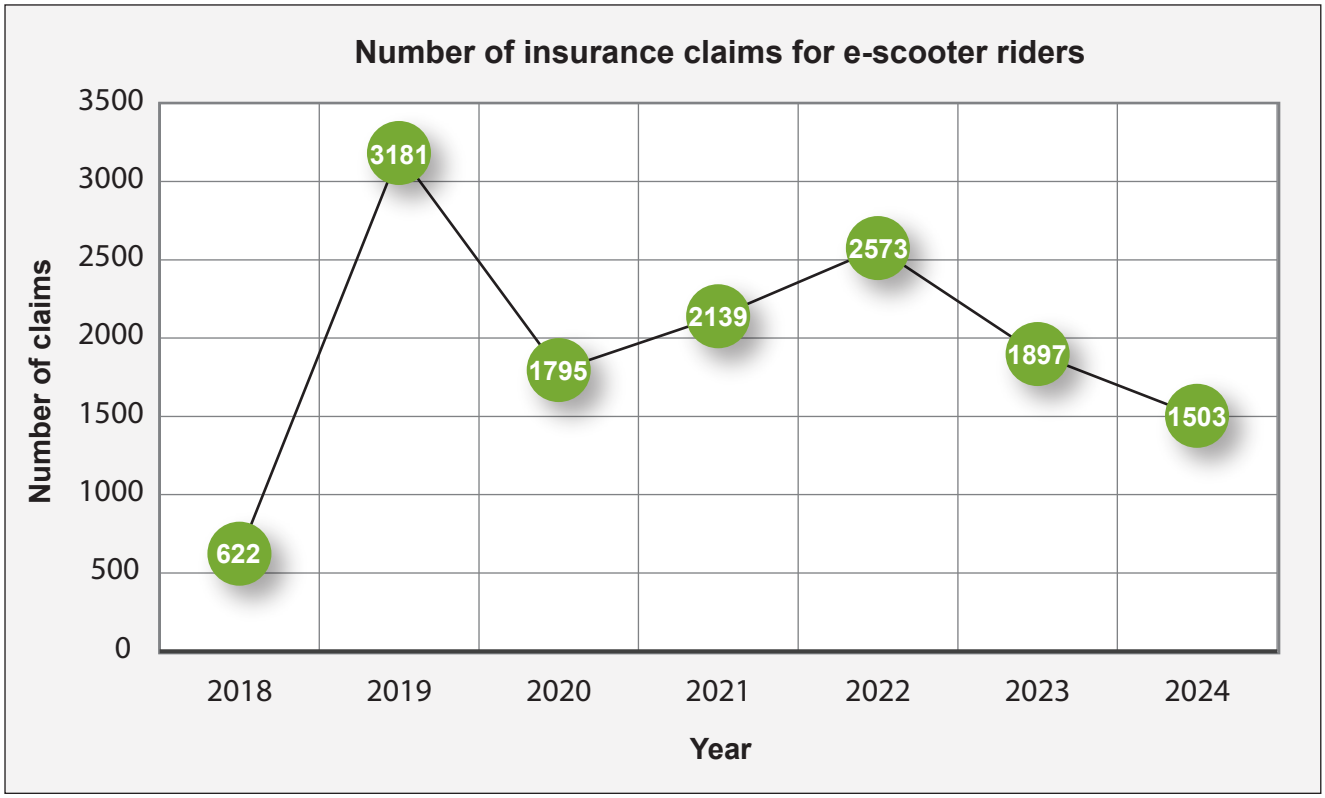
[ ] °

Te ʻakaāri mai nei te graph e āru mai nei, i te tārēʻanga o te au ʻoroʻanga insurance, tei ʻoroʻia e te aronga ʻakaʻoro e-scooter, mei te mataʻiti 2018, ki te mataʻiti 2024.



(f) Te ʻakaāri āinei te graph, me te maʻata mai nei te au ʻoroʻanga insurance, mei ko i te aronga ʻakaʻoro e-scooter, na roto i te tuātau? Taʻangaʻangaʻia te ʻakakitekiteʻanga mei roto mai i te graph, i te ʻakamārama i taʻau paʻuʻanga.

The following graph shows the number of insurance claims made by e-scooter riders from 2018 to 2024.



(f) Does the graph show that e-scooter riders are making more insurance claims over time? Use information from the graph to explain your answer.

UI‘ANGA RIMA: Te kau‘anga

Mei te 4,044,600 tangata i roto i te Ika-a-Māui. Ka kite teta‘i 69% o rātou i te kau, me kore ra, i te ‘akapāpānu i roto i te vai.

(a) ‘Ē‘ia i reira tangata i roto i te Ika-a-Māui, te ka kite i te kau, me kore ra, i te ‘akapāpānu i roto i te vai?

(i) ◯ 1.3 mirioni

(ii) ◯ 2.0 mirioni

(iii) ◯ 2.4 mirioni

(iv) ◯ 2.8 mirioni

(v) ◯ 3.9 mirioni

QUESTION FIVE: Swimming

The North Island has about 4,044,600 people. About 69% of them can swim or float in water.

(a) In the North Island, about how many people can swim or float in water?

(i) ◯ 1.3 million

(ii) ◯ 2.0 million

(iii) ◯ 2.4 million

(iv) ◯ 2.8 million

(v) ◯ 3.9 million

I roto i te tūtū i raro ake nei, te to ra te rima o te tangata-kau ki roto i te vai mei tetatʻi angle rāi.

(b) Te vāito āinei te angle ki te 30°? I roto i taʻau paʻuʻanga, ʻakamārama mai i taʻau tāmanakoʻanga i te vāito o te angle, ma te kore i te taʻangaʻanga i te protractor.

In the image below, the swimmer's arm dips into the water at an angle.

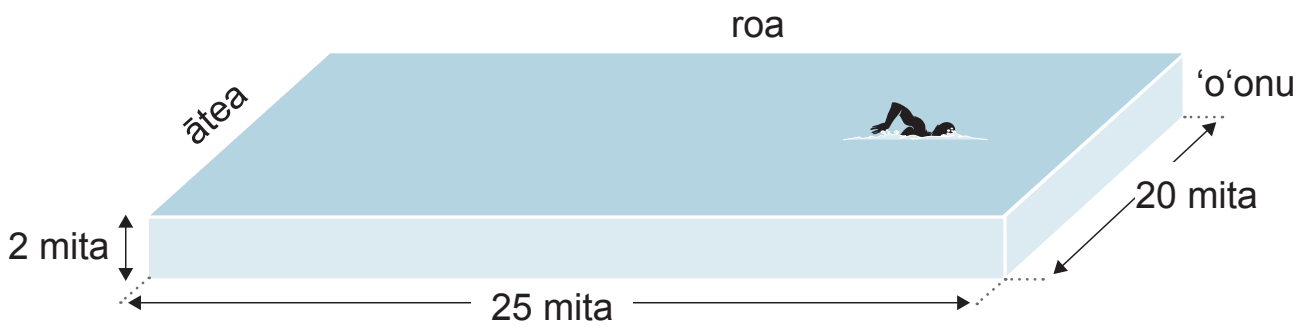
(b) Does the angle measure 30°? In your answer, explain how the angle can be estimated without using a protractor.

Kua kau a Tui no teta‘i 50 mita, i roto i teta‘i 40 seconds.

(c) Ea‘a i reira te ‘āverēti o te viviki i te kau a Tui, i roto i te tārē‘anga mita, i roto i te second ‘okota‘i.

[ ] te tārē‘anga mita, i roto i te second ‘okota‘i.

Te ‘akaāri mai nei te parāni i raro ake nei, i te au vāito o teta‘i swimming pool.



(d) E‘ia i reira cubic mita (m^3) vai i roto i te pool?

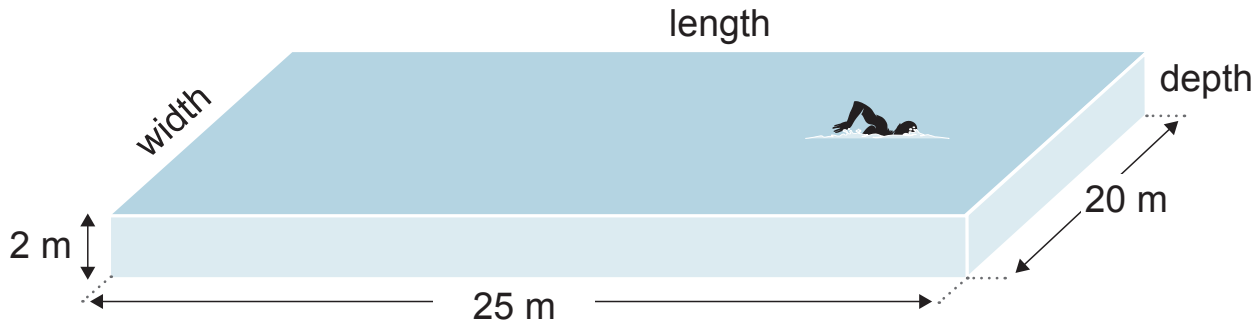
[ ] m^3

Tui swims 50 metres in 40 seconds.

(c) What is Tui's average swimming speed, in metres per second?

☐ metres per second

The diagram below shows the dimensions of a swimming pool.



(d) How many cubic metres (m^3) of water are in the pool?

☐ m^3

E tūtū teia no te tārērē kau no teta‘i 100-mita kau‘anga ‘openga, i ko i te Olympics i te mata‘iti 2024.

Te ‘akaāri mai nei teia ‘akapapa‘anga, i te viviki o te aronga e toru, tei ‘autu i te mētera Olympic.

Metera ‘auro	Mētera ‘ārio	Mētera kapa
49.90 seconds	**49.99** seconds	**50.45** seconds

(e) “Tei muri ‘ua ake te tangata tei ‘autu i te mētera ‘ārio **no teta‘i ‘okota‘i second i roto i te nga‘uru** mārie ake i te tangata tei ‘autu i te mētera kōro.”

Te tano āinei teia tātā‘anga? Ta‘anga‘anga‘ia te decimals, i roto i te ‘akamārama‘anga mai i ta‘au kimikimi‘anga.

Here is an image of a 100-metre swimming final at the 2024 Olympics.

This table shows the swimming times of the three Olympic medal winners.

Gold medal	Silver medal	Bronze medal
49.90 seconds	**49.99** seconds	**50.45** seconds

(e) "The silver medallist was only **one tenth of a second** slower than the gold medallist."

Is that statement correct? Use a calculation with decimals to explain your answer.

E 12 rāi o Caitlin O'Reilly mataʻiti, i tona kauʻanga ʻia Cook Strait. Te ʻakaāri mai nei te rāina rengarenga i te ara tei kau ʻaia. Kua ʻakamata ʻaia i te pae i Te Whanganui-a-Tara.

(f) Eaʻa te kaveinga, te ʻakamārama meitaki rava mai ra, i tōna ara na roto i te Strait?

(i) ◯ Rotopu i te Maoake e te Akarau

(ii) ◯ Rotopu i te Pārapu e te ʻIku

(iii) ◯ Rotopu i te Maoake e te Marangai

(iv) ◯ Rotopu i te Pārapu e te Akarau Iku

Caitlin O'Reilly swam across Cook Strait at the age of 12. The yellow line in the picture shows the path she took. She started near Wellington.

(f) Which direction best describes her path across the Strait?

(i) ◯ Between East and North-east

(ii) ◯ Between West and South-west

(iii) ◯ Between East and South-east

(iv) ◯ Between West and North-west

Teta‘i atu ngā‘i ātea, me ka ‘inangaro‘ia.
Tātā‘ia te numero (au numero) o te ui‘anga me ka tau.

TE NUMERO O TE UI'ANGA	

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

QUESTION NUMBER

Au ʻakameitakiʻanga

Kua ʻakatanotanoʻia te au ʻapinga no roto mai i te au turanga e āru mai nei, no teia vāitoʻanga:

Uiʻanga Taʻi

Kapi 2, Kapi 6: Tūtū mamaʻata no te teata, tei ʻangaʻia na roto i te taʻangaʻangaʻanga i te AI
Kapi 8: Popcorn combo, https://www.hebervalleyentertainment.com/product-page/combo-lrg-popcorn-2-drinks-refillable
Kapi 8: Ice cream cone, https://toppng.com/free-image/vanilla-ice-cream-png-PNG-free-PNG-Images_129571
Kapi 8: Popcorn box, https://bcsfoodpak.co.nz/products/food-packaging/paper-cardboard-products/popcorn-boxes

Uiʻanga Rua

Kapi 12: Head proportions diagram, https://www.researchgate.net/figure/Changes-in-body-proportions-from-birth-to-adulthood-in-years-and-the-differences-in-head_fig9_342526922
Kapi 14: AED, https://reliancemedical.co.nz/collections/aed
Kapi 14: CPR, https://www.drugs.com/cg/adult-cpr-steps.html
Kapi 18: Sunscreen, https://cosmocosmetics.in/products/sunblock-cream-spf-50

Uiʻanga Toru

Kapi 20: Healthy plate, https://www.oxfordmartin.ox.ac.uk/blog/official-healthy-food-guide-hasnt-changed-in-20-years-five-things-that-need-updating
Kapi 24: Cabbage seedling, https://media.istockphoto.com/id/176821347/photo/cabbage-sprout.jpg

Uiʻanga ʻĀ

Kapi 30: E-scooter, https://electricscootershop.co.nz/collections/scooters
Kapi 30: Girl on e-scooter, https://www.pbtech.co.nz/product/HEASGW0036/Segway-Ninebot-ES1L-Kick-Scooter---Dark-Grey-Max-S
Kapi 32: Silhouette of man on scooter, https://www.vectorstock.com/royalty-free-vector/silhouette-of-a-man-riding-an-electric-scooter-vector-53899289
Kapi 32: Scooter icon in graph, https://www.freepik.com/premium-vector/electric-scooter-black-icon-e-bike-flat-style-vector-illustration-isolated_38126735.htm
Kapi 34: E-scooter diagram, https://swiftyscooters.com/blogs/journal/e-scooter-safety-and-design

Uiʻanga Rima

Kapi 38: Person floating, https://www.wikihow.com/Float-on-Your-Back#/Image:Float-on-Your-Back-Step-9-Version-2.jpg
Kapi 40: Person swimming, Freestyle Swimming. (2025, 5 June). Freestyle Rotation: Rock Not Roll? [video]. YouTube. https://www.youtube.com/watch?v=5eDQ6QlVFEw
Kapi 44: Swimming final, https://olympic.ca/wp-content/uploads/2024/08/CAW04268.jpg
Kapi 46: Cook Strait map, https://images.squarespace-cdn.com/content/v1/5d573fbd76eb470001e99543/1569363325875-RBJ18AE9B8P7TNB9YCZA/Cook+strait.jpg

Acknowledgements

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

Question One

Page 3, Page 7: Movie poster, created using generative AI
Page 9: Popcorn combo, https://www.hebervalleyentertainment.com/product-page/combo-lrg-popcorn-2-drinks-refillable
Page 9: Ice cream cone, https://toppng.com/free-image/vanilla-ice-cream-png-PNG-free-PNG-Images_129571
Page 9: Popcorn box, https://bcsfoodpak.co.nz/products/food-packaging/paper-cardboard-products/popcorn-boxes

Question Two

Page 13: Head proportions diagram, https://www.researchgate.net/figure/Changes-in-body-proportions-from-birth-to-adulthood-in-years-and-the-differences-in-head_fig9_342526922
Page 15: AED, https://reliancemedical.co.nz/collections/aed
Page 15: CPR, https://www.drugs.com/cg/adult-cpr-steps.html
Page 19: Sunscreen, https://cosmocosmetics.in/products/sunblock-cream-spf-50

Question Three

Page 21: Healthy plate, https://www.oxfordmartin.ox.ac.uk/blog/official-healthy-food-guide-hasnt-changed-in-20-years-five-things-that-need-updating
Page 25: Cabbage seedling, https://media.istockphoto.com/id/176821347/photo/cabbage-sprout.jpg

Question Four

Page 31: E-scooter, https://electricscootershop.co.nz/collections/scooters
Page 31: Girl on e-scooter, https://www.pbtech.co.nz/product/HEASGW0036/Segway-Ninebot-ES1L-Kick-Scooter---Dark-Grey-Max-S
Page 33: Silhouette of man on scooter, https://www.vectorstock.com/royalty-free-vector/silhouette-of-a-man-riding-an-electric-scooter-vector-53899289
Page 33: Scooter icon in graph, https://www.freepik.com/premium-vector/electric-scooter-black-icon-e-bike-flat-style-vector-illustration-isolated_38126735.htm
Page 35: E-scooter diagram, https://swiftyscooters.com/blogs/journal/e-scooter-safety-and-design

Question Five

Page 39: Person floating, https://www.wikihow.com/Float-on-Your-Back#/Image:Float-on-Your-Back-Step-9-Version-2.jpg
Page 41: Person swimming, Freestyle Swimming. (2025, 5 June). Freestyle Rotation: Rock Not Roll? [video]. YouTube. https://www.youtube.com/watch?v=5eDQ6QlVFEw
Page 45: Swimming final, https://olympic.ca/wp-content/uploads/2024/08/CAW04268.jpg
Page 47: Cook Strait map, https://images.squarespace-cdn.com/content/v1/5d573fbd76eb470001e99543/1569363325875-RBJ18AE9B8P7TNB9YCZA/Cook+strait.jpg

English translation of the wording on the front cover

Numeracy 2025

32406 Apply mathematics and statistics in a range of everyday situations

Credits: Ten

32406

WEEK TWO | 8–12 SEPTEMBER 2025

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 2–51 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.