

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

NSN

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Te Numero o te 'Āpi'i
(School Code)

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NA TE ARONGA 'AKATERETERE I
TE TĀRĒRĒ'ANGA ANAKE

See back cover for an English
translation of this cover

32406C TU'ANGA 'API'I (TERM 2)

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

+



Mana Tohu Mātauranga o Aotearoa
New Zealand Qualifications Authority

Numero 2025

32406C Ta'anga'anga'ia te au numero, e te statistics
kia tau i te au mea mātau'ia na roto i te au ra tatakitā'i

Credits: Ta'i nga'uru

'EPETOMA TA'I |
RA 19–23 O MĒ 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 tatakitā'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.

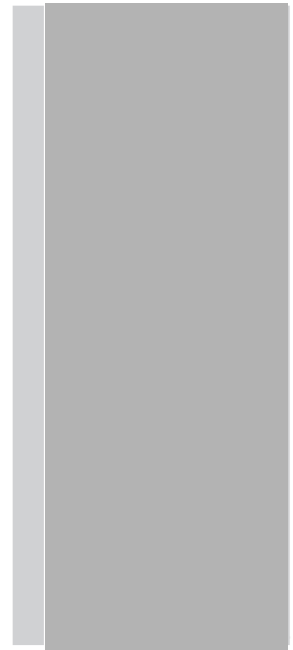
KIA 'ŌRONGA ATU KOE I TEIA PUKA, KI TE TANGATA 'AKATERETERE I TE TĀRĒRĒ, ME OTI TEIA TĀRĒRĒ'ANGA.

UI'ANGA TA'I: Te anoano tauturu nei a Māmī

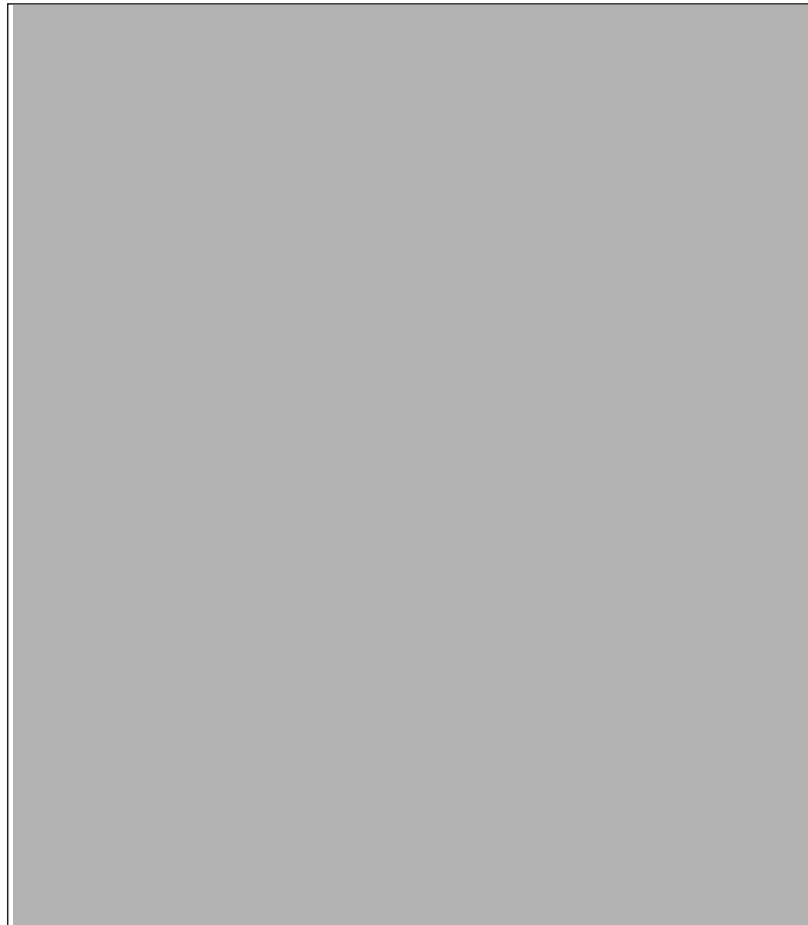
E nga tokotoko (crutches) to Māmī, no teta'i toru 'epetoma.

Te karanga nei 'aia, "Mei te 30,000 miniti, te toru 'epetoma".

- (a) Kua tano āinei tāna? Tā'anga'anga'ia te kimikimi'anga ora (time calculations), i te 'akamārama i ta'au pa'u'anga.



Ka anoano'ia nga tokotoko (crutches) o Māmī, kia 'akatano'ia kia 'āmingi tōna rima ki te ta'a (angle) tano.



- (b) 'Ē'ia i reira, tikirī (degrees) te ta'a tano?

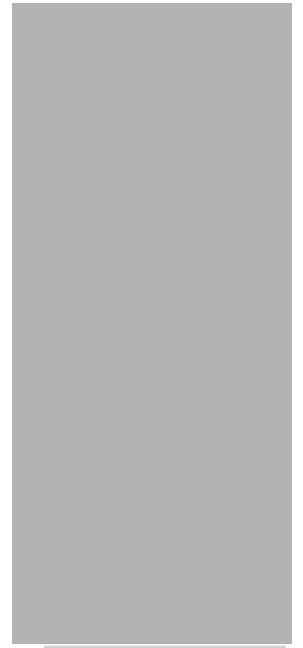
 °

QUESTION ONE: Mum needs help

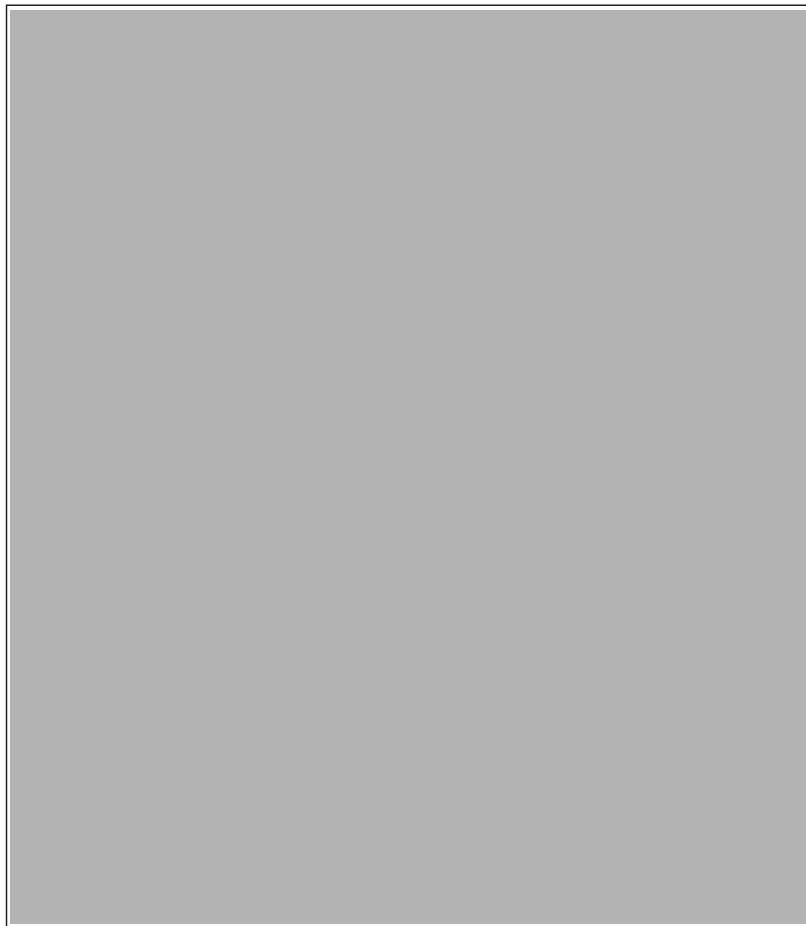
Mum will be on crutches for three weeks.

She says, "Three weeks is about 30,000 minutes".

- (a) Is she right? Use time calculations to explain your answer.



Mum's crutches need to be set so that her arm is bent at the correct angle.



- (b) How many degrees is the correct angle?

°

Te 'aka'ā'aere nei teta'i taeake, i te puakaāoa a Māmi. Te 'akaāri mai nei, te rāina potopoto i runga i te māpu, i te ara ka āru rāua.

Te 'akairo mai nei te **X**, i teta'i 400 mita o te ara, mei te 'akamata'anga o te 'ā'aere'anga.



(c) Pata'ia te pi'a (✓) te 'akaāri ra i te ma'ata'anga tano no teia māpu.

A ☐

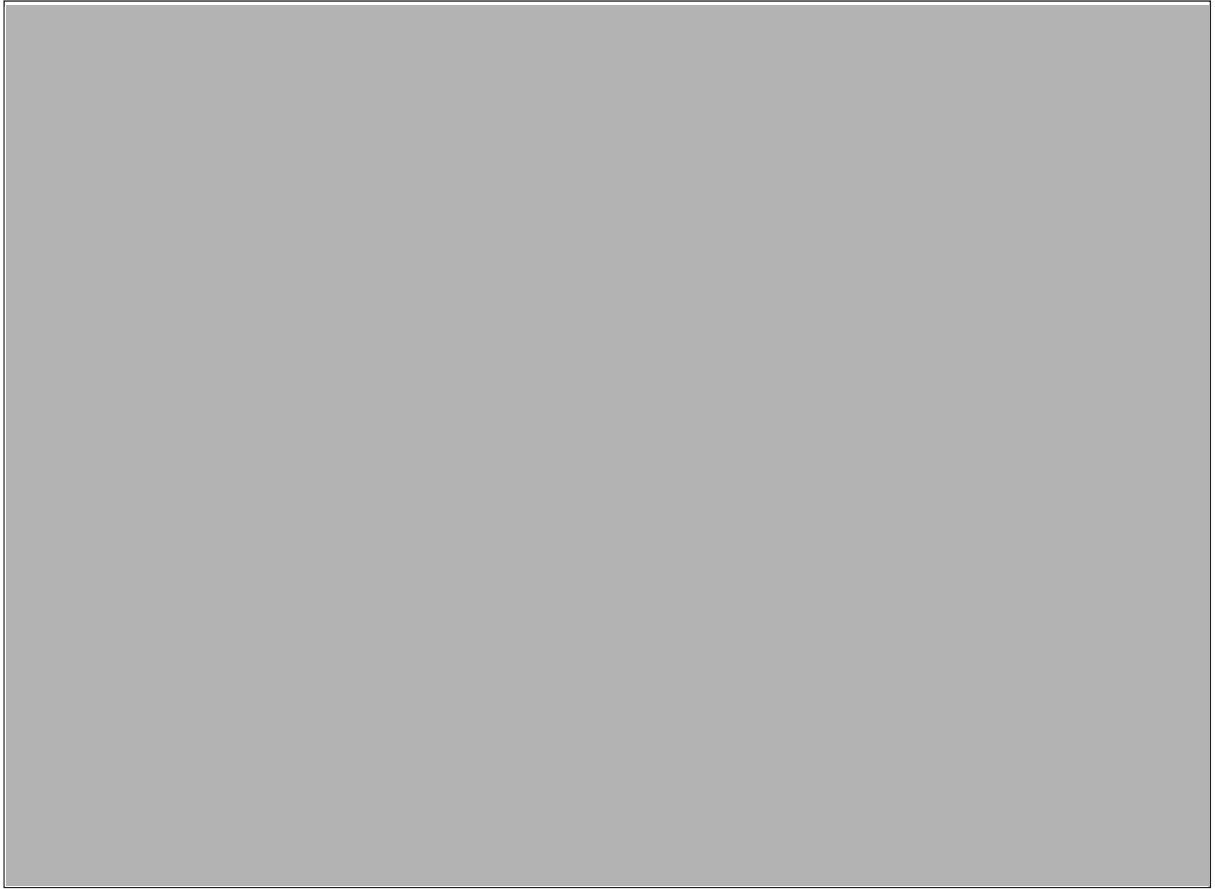
B ☐

C ☐

D ☐

E ☐

A friend takes Mum's dog for a walk. The dashed line on the map shows the path they take. The **X** marks about 400 metres along the path from the start of the walk.



(c) Tick (✓) the letter that shows the correct scale for this map.

A ☐

B ☐

C ☐

D ☐

E ☐

Te anoano nei a Māmi i teta'i pi'a tanutanu, kia 'akakī'ia ki te one, no te tanu kiko-'enua.



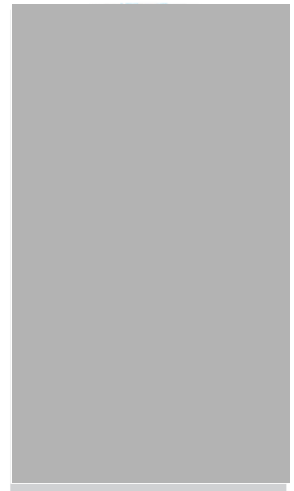
- (d) 'Ēa'a i reira, te ma'ata i roto i te cubic metres, (m^3) o te one, te ka anoano'ia?

 m^3

Te tāru nei a Tētī, e 7 kilograms kāka'u, ki roto i te matīni pu'a kāka'u.

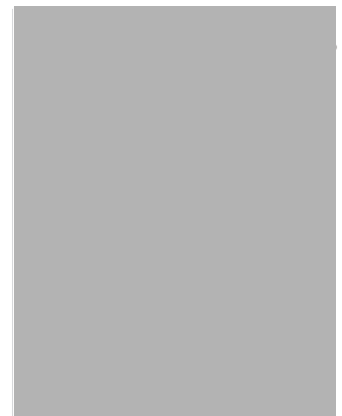
Me mā te kāka'u i te pu'a, e 1.8 taime, te teima'a atu, o te kāka'u mā'ū, i te kāka'u marō.

- (e) 'Ēa'a i reira te teima'a o te kāka'u **mā'ū** i roto i te tāre'anga kilograms?

 kg


Te kite atu ra a Māmī ē, 'ē $\frac{2}{3}$ te ki o te vairanga-tītā 240-litre.

- (f) 'Ēa'a i reira i roto i te tāre'anga litres, **toe** i roto i te vairanga-tītā?

 L


Mum needs to have a garden box filled with dirt to grow vegetables.



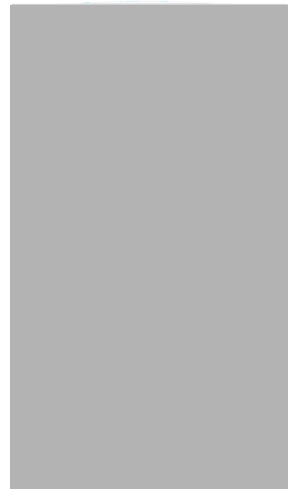
- (d) How many cubic metres (m^3) of dirt are needed?

 m^3

Dad puts 7 kilograms of clothes into the washing machine.

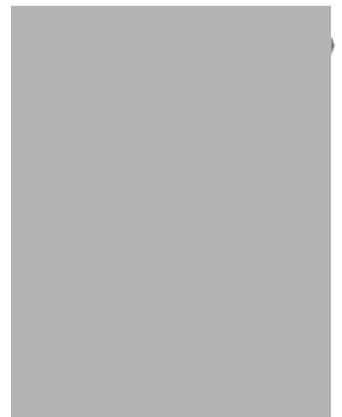
After washing, the wet clothes weigh 1.8 times as much as the dry clothes did.

- (e) How much do the **wet** clothes weigh, in kilograms?

 kg


Mum notices that the 240-litre rubbish bin is $\frac{2}{3}$ full.

- (f) How much space, in litres, is **left** in the bin?

 L


UI'ANGA RUA: Pereue

E tūkētūkē te ma'atama'ata o te au pereue.

Te vāito	Umauma (cm)	Kōpu (cm)	Rima roa (Sleeve) (cm)
Meangiti atu (X-Small)	86–88	71–73	81–83
Meangiti (Small)	89–95	74–76	84–85
Tau 'ua (Medium)	96–105	77–84	86–88
Ma'atama'ata (Large)	106–111	85–94	89–90
Ma'atama'ata atu (X-Large)	112–122	95–101	91–93

E 91 cm te vāito i to Tiāki rima (sleeve length), 'ē, e 110 cm te vāito i tōna umauma.



Te tāmanako nei a Tiāki e, ko te pereue 'Large' te ma'ama'ata meitaki rava atu i te 'oko.

- (a) Te 'akatika āinei koe? Tā'anga'anga'ia te au vāito'anga mei roto i te 'akapapa'anga, i te 'akamārama i ta'au pa'u'anga.

QUESTION TWO: Jackets

Jackets come in different sizes.

Size	Chest (cm)	Waist (cm)	Sleeve (cm)
X-Small	86–88	71–73	81–83
Small	89–95	74–76	84–85
Medium	96–105	77–84	86–88
Large	106–111	85–94	89–90
X-Large	112–122	95–101	91–93

Jack’s arm (sleeve length) measures 91 cm, and his chest measures 110 cm.



Jack thinks that a size ‘Large’ will be the best jacket size to buy.

(a) Do you agree? Use measurements from the table to explain your answer.

‘Ē \$189, te tutaki no teia pereue, i te ma‘ata‘anga o te taime.

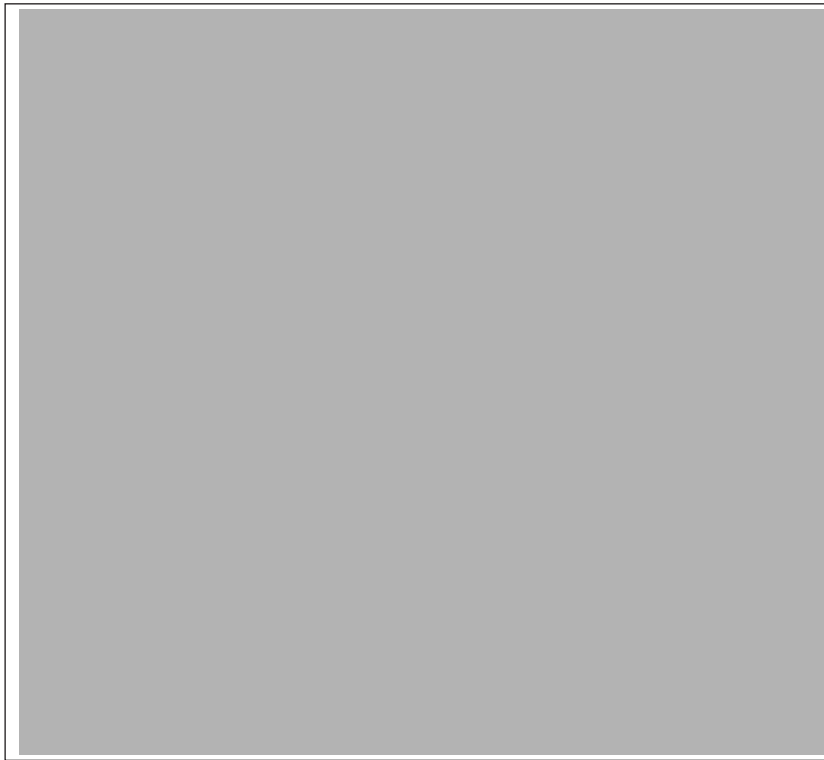
Me ‘oko pātē, ka tipu‘ia no‘ou teta‘i 25%.

(b) ‘Ēa‘a i reira te tutaki ‘ōko pātē o te pereue?

\$



I teta‘i taime, e arataki‘anga teta‘i no te vāito‘anga i te temperature-range.



Te arataki‘anga no te temperature-range o te pereue.

(c) Pata‘ia te pi‘a (✓) no te vāito‘anga i te temperature range tau no te pereue tei ma‘ani‘ia no te medium weight.

- (i) 10 °C ki te 20 °C ☐
- (ii) −1 °C ki te 10 °C ☐
- (iii) −6 °C ki te −1 °C ☐
- (iv) −20 °C ki te −6 °C ☐
- (v) −30 °C ki te −20 °C ☐

The price of this jacket is usually \$189.

On sale, you get 25% off.

(b) What is the sale price of the jacket?

\$



Sometimes, jackets have a temperature-range guide.



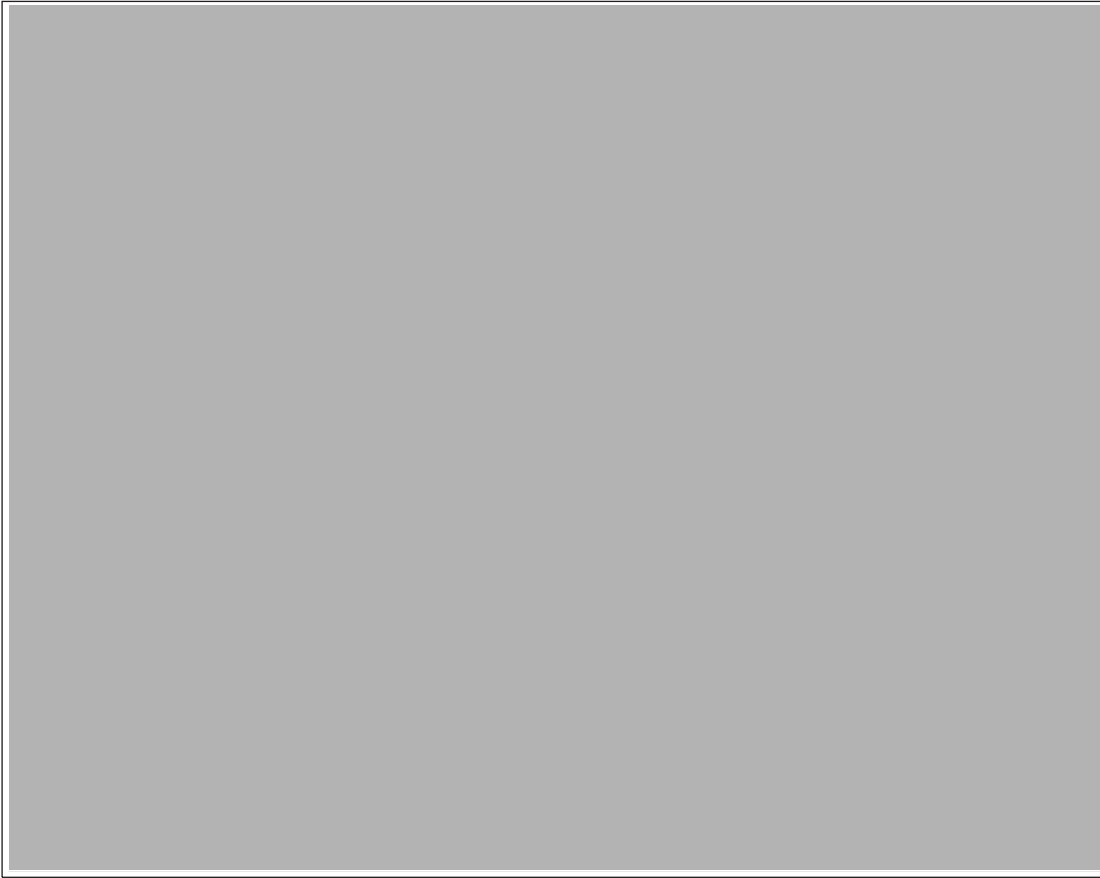
Jacket temperature-range guide.

(c) Tick (✓) the temperature range that a medium-weight jacket is made for.

- (i) 10 °C to 20 °C ☐
- (ii) -1 °C to 10 °C ☐
- (iii) -6 °C to -1 °C ☐
- (iv) -20 °C to -6 °C ☐
- (v) -30 °C to -20 °C ☐

Ka 'akamā'ana atu teta'i pereue iā koe, me e turanga teitei atu, to te 'apinga i 'akaki'ia ai (higher fill quality) (FQ).

Teia te au ui'anga ui putuputu 'ia (FQs), te teima'a, e te tutaki no te au pereue e toru.



- (d) 'E tika āinei te karanga'ia nei e, 'e ma'ata atu te tutaki i te au "Pereue high FQ, māri ra, e māmā ake te teima'a i te au Pereue low-FQ"?

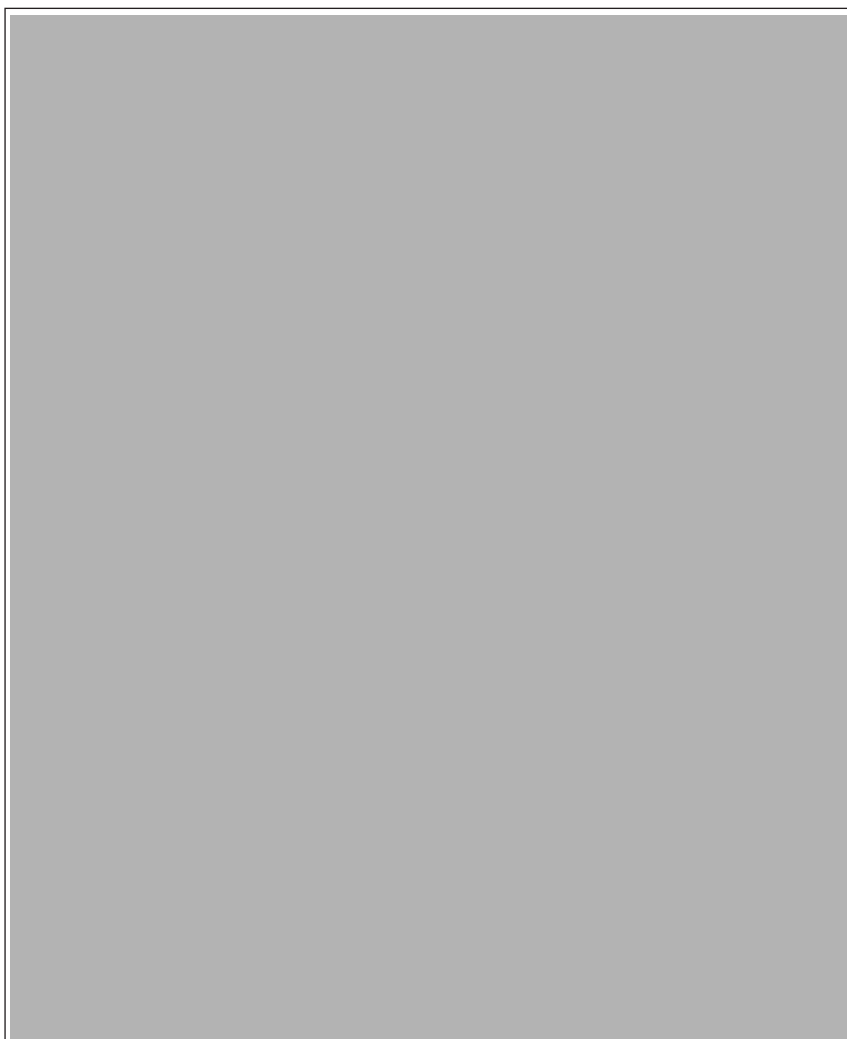
Tā'anga'anga'ia te au numero 'akairo (tags) no runga i teta'i 'ua ake o nga pereue e rua, i te 'akamārama i ta'au pa'u'anga.

A jacket keeps you warmer if it has a higher fill quality (FQ).

Here are the FQs, weights, and prices of three jackets.



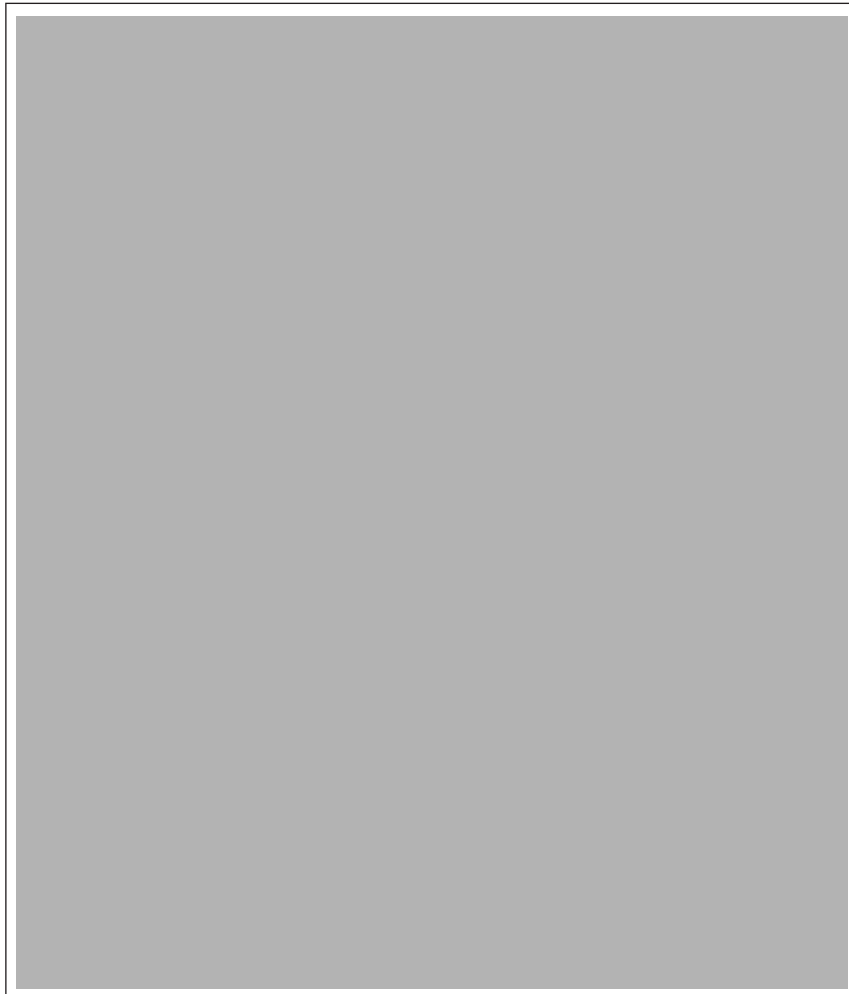
- (d) Is it true to say “Jackets with high FQ cost more, but weigh less, than low-FQ jackets”?
Use numbers from any two jacket tags to explain your answer.



I te tuātau tāmātamata'anga i teta'i pereue, ē $15.1\text{ }^{\circ}\text{C}$, te ma'ana 'iā roto i te pereue. 'E $-2.8\text{ }^{\circ}\text{C}$, te ma'ana iā va'o.

(e) 'Ēa'a i reira te tūkē i rotopu i te $15.1\text{ }^{\circ}\text{C}$ 'ē te $-2.8\text{ }^{\circ}\text{C}$?

$^{\circ}\text{C}$

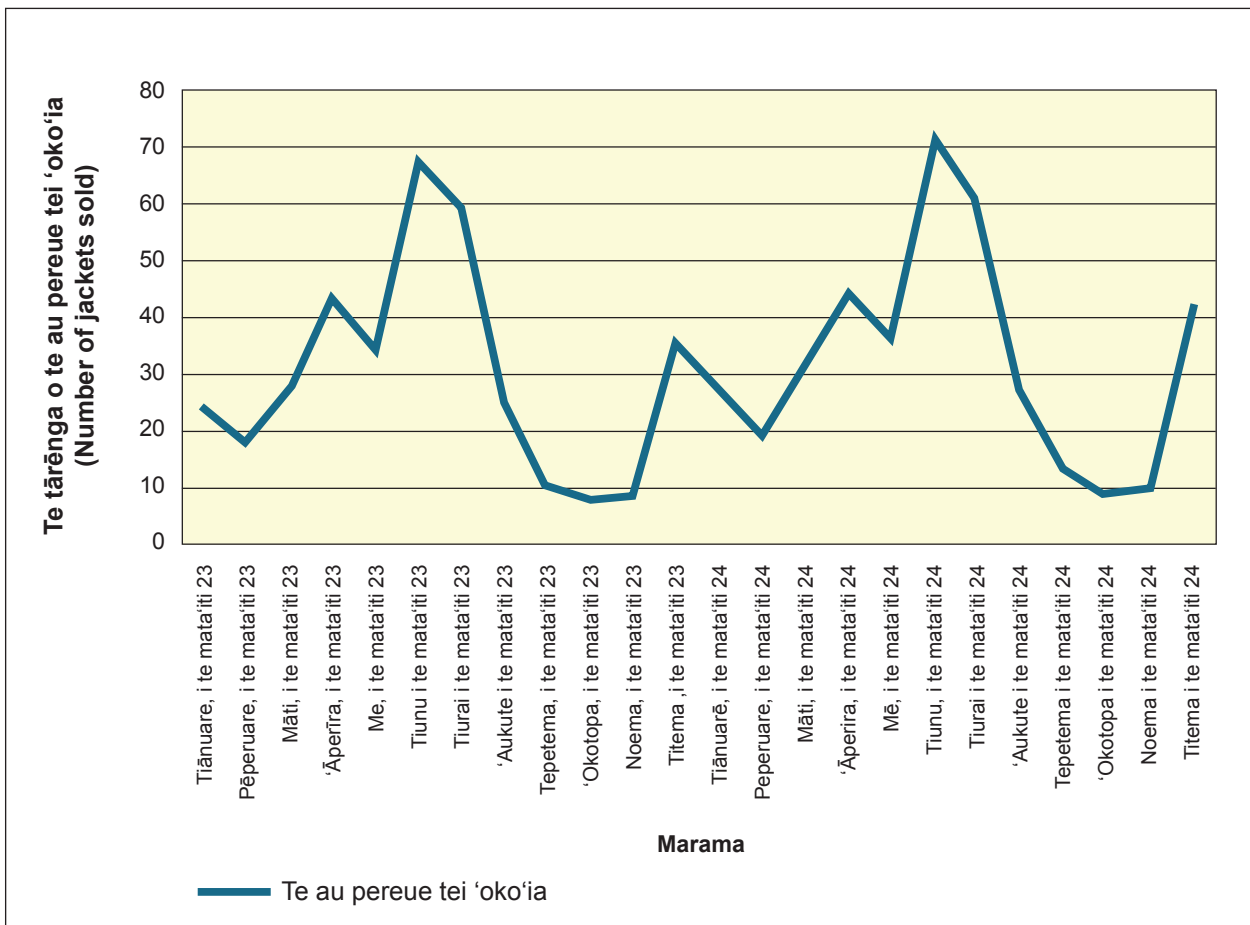


While testing a jacket, the inside temperature of the jacket was measured at 15.1°C . The outside temperature was measured at -2.8°C .

- (e) What is the difference between 15.1°C and -2.8°C ?

 $^{\circ}\text{C}$

Te ‘akaāri mai nei te graph i raro ake nei, i te tāre‘anga o te au pereue, tei ‘oko‘ia i roto i teta‘i toa, i te mata‘iti 2023, e te mata‘iti 2024.

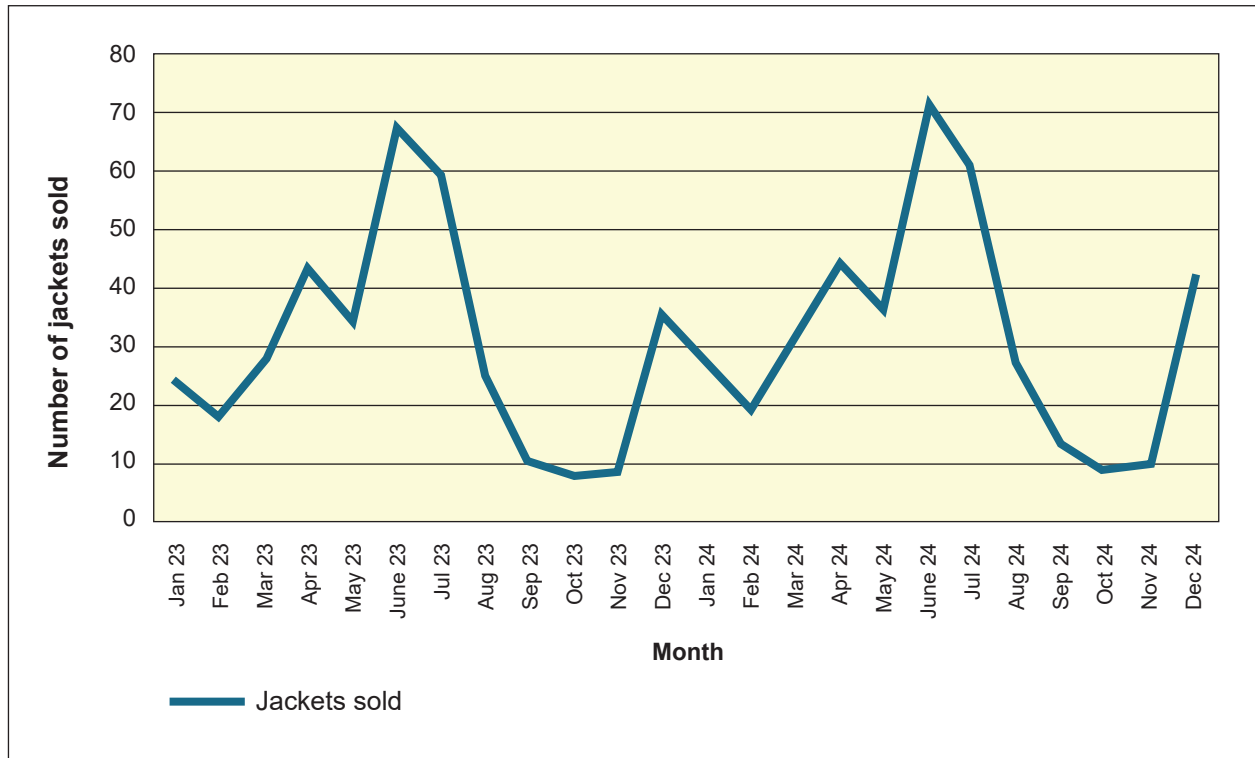


‘Akamatakite‘anga: Ko te au marama, Tiunū, Tiurāi, e ‘Aukute, te au marama anu rava atu. Ko te au marama, Titema, Tiānuare, e Pēperuare te au marama vera rava atu.

“E mā‘ata atu te au pereue, e ‘oko‘ia ana, me anu te reva, me ‘aka‘aite‘ia ki te tuātau vera.”

- (f) Te ‘akatika āinei koe? Ta‘anga‘anga‘ia te ‘akakitekite‘anga mei roto mai i te graph, i te ‘akamārama i ta‘au pa‘u‘anga.

The graph below shows how many jackets are sold at a shop during 2023 and 2024.



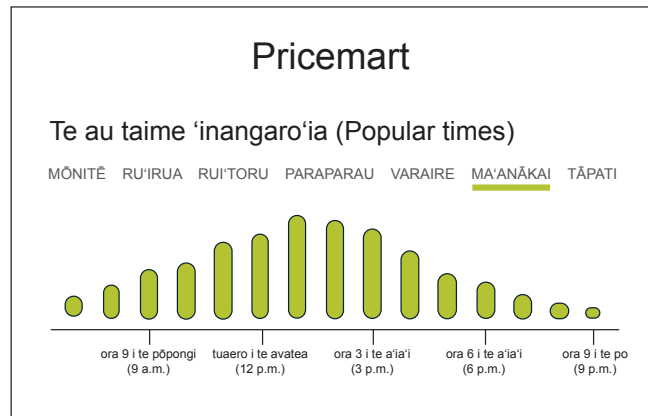
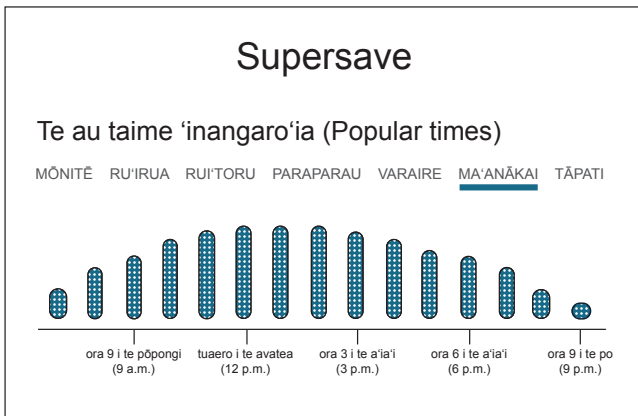
Note: June, July, and August are the coldest months. December, January, and February are the hottest months.

“More jackets are sold when the weather is cold than when it is hot.”

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

UI'ANGA TORU: Te 'oko'oko'anga i ko i te toa 'oko kai (supermarket)

Te 'inangaro ra koe, i te 'aere ki ko i te toa a teta'i Ma'anākai, i teta'i 'ua atu taime, i muri ake i te 12 p.m. E reka ana koe i te toa 'oko kai (supermarket), e ma'ata te tangata i roto.



- (a) 'Ēa'a i reira ta'au toa 'oko kai (supermarket) ka 'iki, ko te Supersave, me kore ra, ko te Pricemart, 'ē, 'ēa'a te taime tau no'ou i te 'aere?

Tā'anga'anga'ia te 'akakitekite'anga mei roto mai i te au graphs, i te 'akamārama i ta'au pa'u'anga.

'Ē \$3.29 i te kilogram, te moni no te meika.

- (b) 'Ēa'a i reira te tutaki no teta'i tā meika, e 685 grams te teima'a? 'Akataeria ta'au pa'u'anga, ki te tene waitata rava atu.

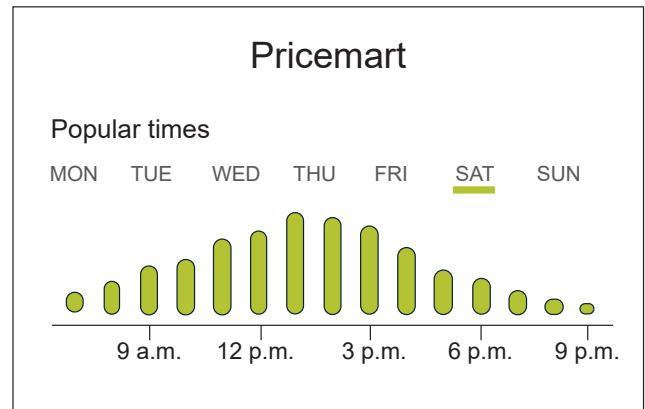
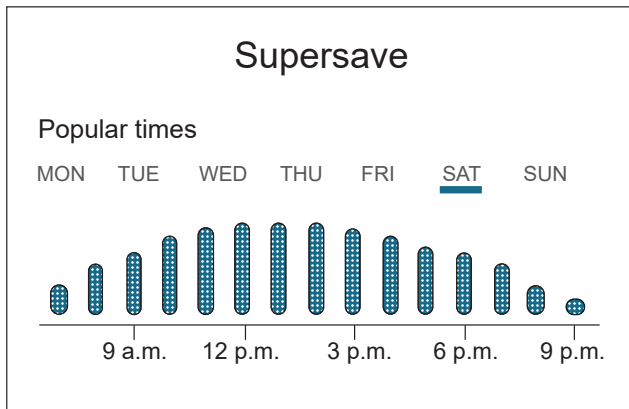


\$



QUESTION THREE: Supermarket shopping

You want to shop on a Saturday any time after 12 p.m. You like a supermarket with lots of people in it.



- (a) Which supermarket should you choose, Supersave or Pricemart, and what time should you go?

Use information from the graphs to explain your answer.

The price of bananas is \$3.29 per kilogram.

- (b) How much will it cost for a bunch of bananas that weighs 685 grams? Round your answer to the nearest cent.

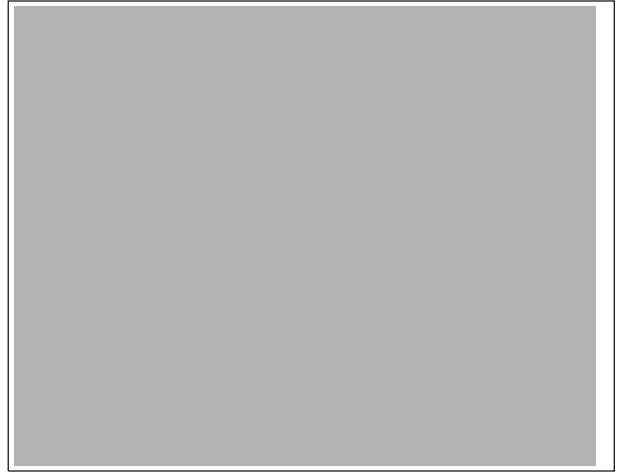
\$



‘Ē 192 centimetres te roāngarere, no teta’i rāina pere’ō supermarket e **rima**.



‘Ē 144 centimetres te roāngarere, no teta’i rāina pere’ō supermarket e **toru**.



Te kite ra koe, ka ō te pere’ō tātakita’i ki roto i te mea i mua.

- (c) Me tāru’ia atu ‘okota’i ‘aka’ōu pere’o, ki teta’i ‘ō nga rāina, ‘ēa’a i reira te ‘akakake’anga o te roāngarere o te rāina? Tātā’ia ta’au pa’u’anga, ki roto i te centimetres.

 cm

A ‘Ē \$13.79 -te tutaki i te 1 kilogram, potonga tīti ‘ē \$8.19, te tutaki no teta’i 500-gram potonga, o taua tīti rāi, ‘ē, e \$6.19 te tutaki no teta’i 250-gram potonga, o taua tīti katoa.



- (d) Ko te’ea i reira te potonga tīti māmā rava atu, me vāito na roto i te 100 grams? Tā’anga’anga’ia te teima’a, e te tutaki, i te ‘akamārama i ta’au pa’u’anga.

A line of **five** supermarket trolleys is 192 centimetres long.



A line of **three** supermarket trolleys is 144 centimetres long.



Notice how each trolley fits inside the one in front.

- (c) When one extra trolley is added to either line, how much does the total length of the line increase by? Write your answer in centimetres.

cm

A 1-kilogram block of cheese costs \$13.79, a 500-gram block of the same cheese costs \$8.19, and a 250-gram block of the same cheese costs \$6.19.



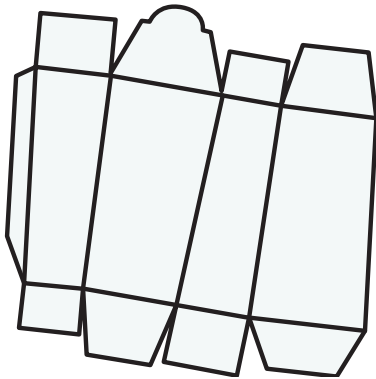
- (d) Which block of cheese is the cheapest per 100 grams? Use the weights and prices to explain your answer.

Te 'akaāri mai nei te tūtū i raro ake nei i teta'i paeketi Cadbury *Favourites*.

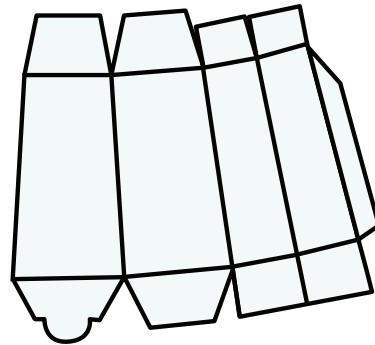


(e) Pata'ia te pi'a (✓) te kupenga (flat pattern) te ka rauka i te 'a'atu, i te ma'ani i te paeketi *Favourites*.

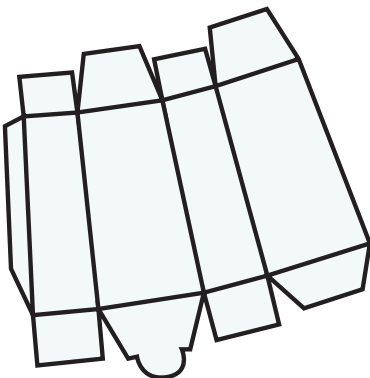
(i) ☐



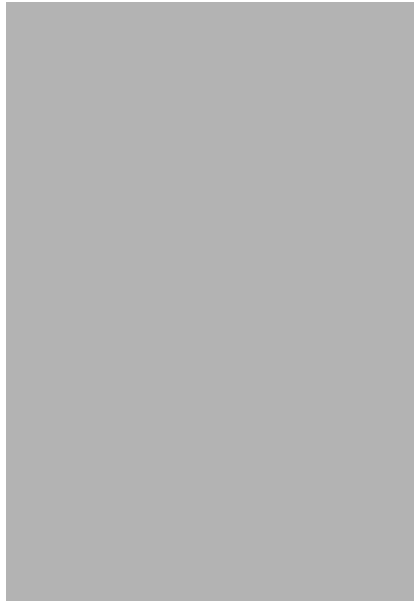
(ii) ☐



(iii) ☐

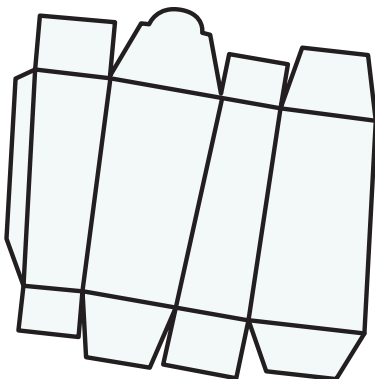


The image below shows a Cadbury *Favourites* packet.

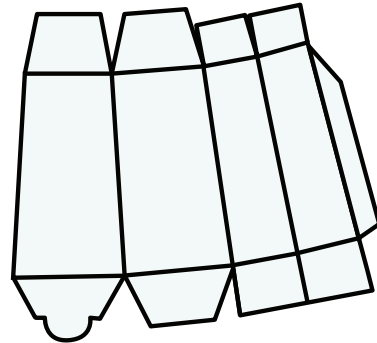


(e) Tick (✓) the net (flat pattern) that would fold to make the *Favourites* packet.

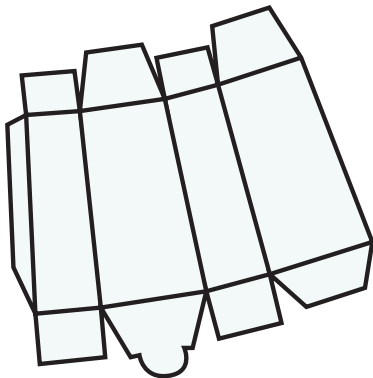
(i) ☐



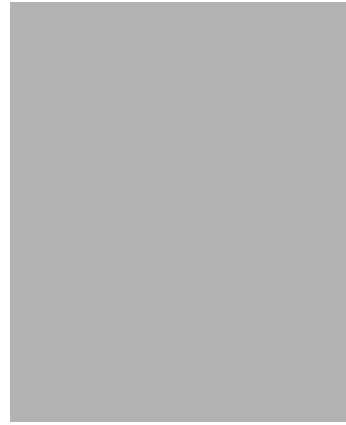
(ii) ☐



(iii) ☐



Ka mou te vairanga, e 'akaāri'ia mai nei i raro ake, ē 900 grams ū-marō, na te pēpē.



'okota'i kapu ū-marō a te pēpē.

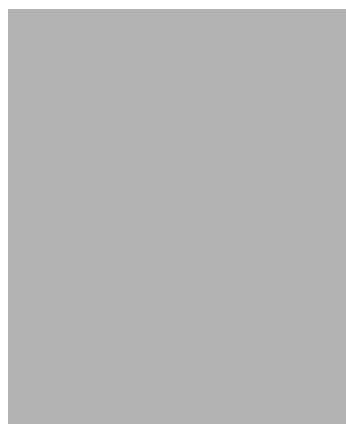
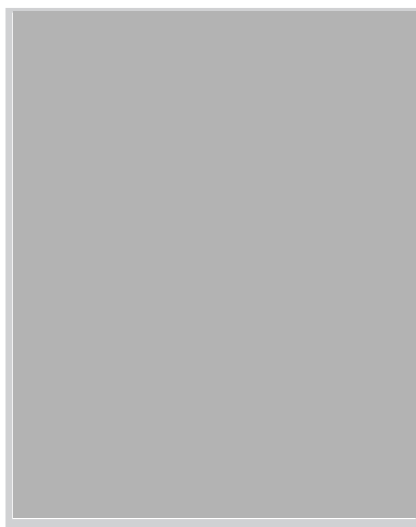
Ka rauka iā koe i te ma'ani, i te 'okota'i 'āngai'anga na te pēpē, mei roto i te kā'iro'anga, e rua kapu ū-marō, ki te vai.

'Ē 16 grams, te katoa'anga o te teima'a o nga kapu ū-marō e rua.

(f) 'Ē'ia i reira 'āngai'anga, te ka rauka kia ma'ani'ia, mei roto i te vairanga 900 gram?

au 'āngai'anga

The container shown below holds 900 grams of baby formula.



One scoop of baby formula.

You can make one feed for a baby from two scoops of formula mixed with water.

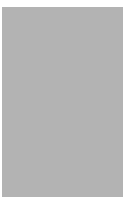
Two scoops of formula weigh 16 grams in total.

- (f) How many feeds can be made from the 900 gram container?

feeds

UI'ANGA 'Ā: Music

Kua ma'ani'ia te ruturutu (beat) i roto i te music, e te au tangi'anga tūkētūkē te roa.

	= 1 ruturutu (beat)		= ½ ruturutu (beat)		= ¼ ruturutu (beat)
Crotchet		Quaver		Semiquaver	

- (a) Pata'ia te pi'a (✓) te 'akapapa'anga tangitangi (notes), me kāpipiti'ia i te ma'ani i teta'i **ruturutu'anga katoa** e 'ā.

(i)



(ii)



(iii)

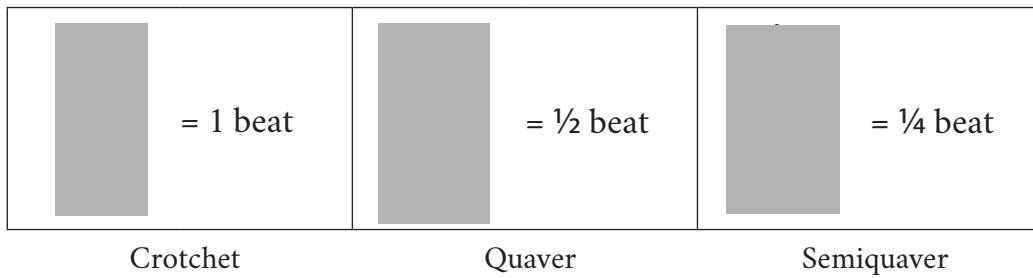


(iv)



QUESTION FOUR: Music

The beat in music is made up of notes of different lengths.



(a) Tick (✓) the set of notes that adds together to make a **total** of four beats.

(i)

☐

(ii)

☐

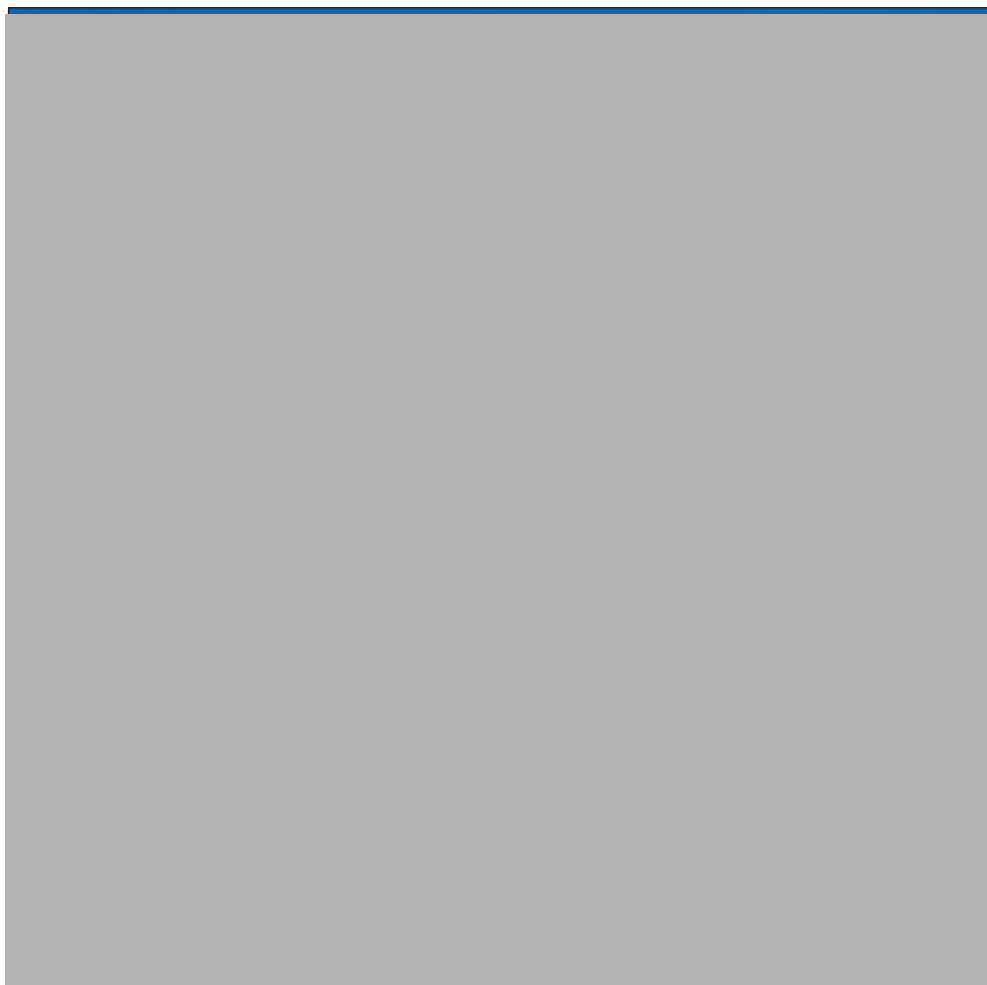
(iii)

☐

(iv)

☐

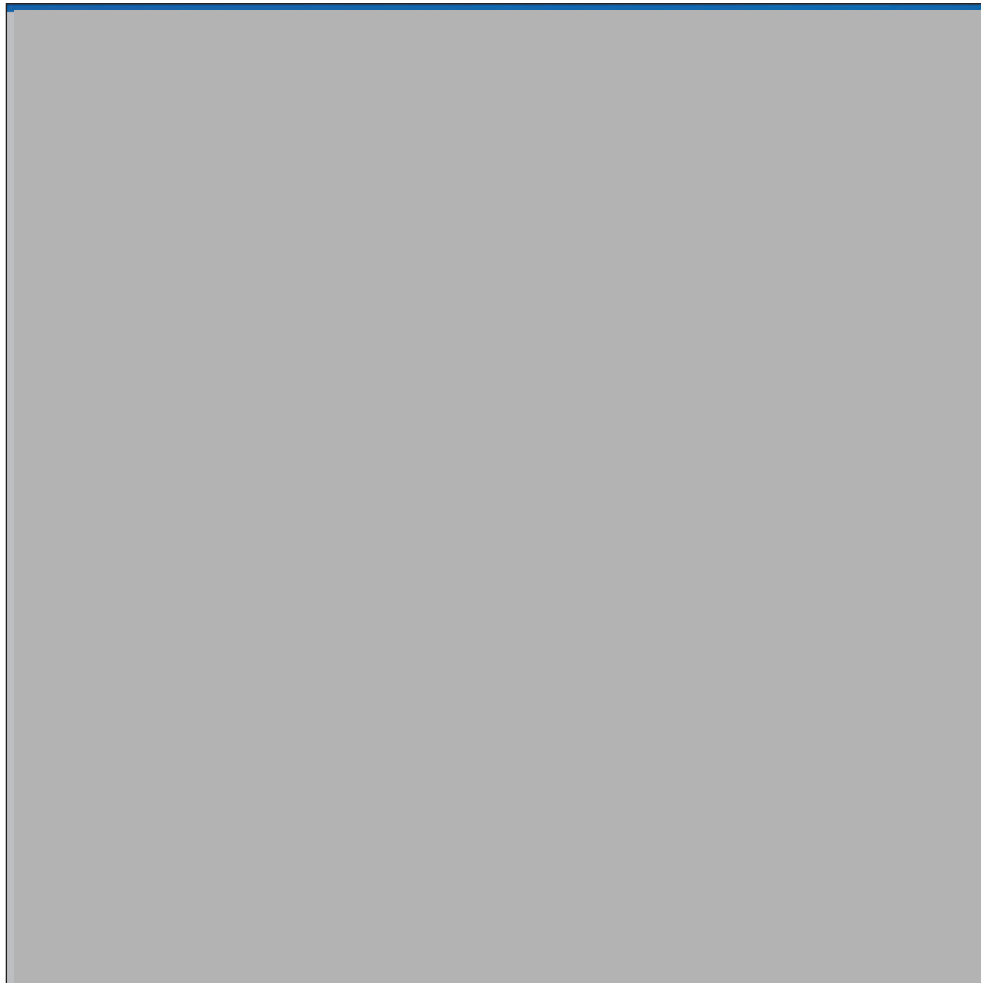

E auvaro album rongonui teia. 'E mānganui 'ua atu te mirror symmetry, i runga i teia auvaro.



(b) 'Ākara meitaki i te auvaro. Mei roto mai i te 'akapapa'anga i raro ake nei, pata'ia te pi'a (✓) nga tu'anga e RUA o te tūtū e mirror symmetry to rāua.

- (i) Te mata ☐
- (ii) Te au tumu rākau ☐
- (iii) Te rangi ☐
- (iv) Te 'are ☐
- (v) Te au putāngi'u ☐

This is a famous album cover. The cover has a lot of mirror symmetry.



(b) Look carefully at the cover. From the list below, tick (✓) the TWO parts of the picture **that have** mirror symmetry.

- | | |
|---------------|-----------------------|
| (i) Eyes | ☐ |
| (ii) Trees | ☐ |
| (iii) Sky | ☐ |
| (iv) Building | ☐ |
| (v) Noses | ☐ |

Me āru'ia te 'āverēti, e 'akarongo ana te tangata, e 988 ora music i te mata'iti. 'Ē 52 'epetoma i roto i te mata'iti 'okota'i.

- (c) Me āru'ia te 'āverēti, 'ē'ia i reira ora **i te 'epetoma**, e 'akarongo ana te tangata ki te music?

te ora i te 'epetoma

Te 'akaāri mai nei te 'akapapa'anga i raro ake nei, i te au tu 'īmene tūkētūkē, i runga i teta'i 'akakpapa'anga 'akatangi (playlist). 'Ē 200 'īmene, i te katoa'anga.

Te tu 'īmene (Type)	Te tāre'anga (Count)
Pop	50
Rock	46
Rap	34
Teta'i atu (Other)	70

- (d) Me 'iki pērā 'ua'ia (random) teta'i 'īmene, ko te 'irinaki'anga'ia e, ka riro pa'a ko te pop song?

Tātā'ia ta'au pa'u'anga ei patene (percentage)

%

On average, people listen to 988 hours of music per year. There are 52 weeks in one year.

- (c) How many hours **per week**, on average, do people listen to music?

hours per week

The table below shows the different types of songs on a playlist. There are 200 songs altogether.

Type	Count
Pop	50
Rock	46
Rap	34
Other	70

- (d) If one song is picked at random, what is the probability that it will be a pop song?

Write your answer as a percentage.

%

Te ‘akaāri mai nei te ‘akapapa‘anga i raro ake nei, i te tutaki no teta‘i artist, i te au taime tātakita‘i, me stream teta‘i tangata i ta ratou ‘imene. ‘Ē ‘itu ta‘ua tūkētūkē no te streaming.



“‘Ē ‘ōronga ana te Amazon Music i te tutaki meitaki rava atu ki te artist.”

- (e) Te ‘akatika āinei koe? Tā‘anga‘anga‘ia te au numero mei roto mai i te ‘akapapa‘anga, i te ‘akamārama i ta‘au pa‘u‘anga.

The table below shows how much an artist gets paid each time someone streams their song. There are seven different streaming platforms.

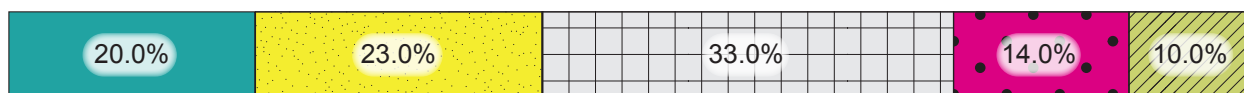


“Amazon Music gives artists the best deal.”

(e) Do you agree? Use numbers from the table to explain your answer.

Te 'aka'āite nei te graph, i te music e 'oko'ia ana i roto i te au toa, ki te music e 'oko'ia ana na runga i te au ta'ua streaming.

Te patene o te music tei 'oko'ia na roto i te 'oko-pātē, e tōna tu, i roto i te mata'iti 2024



'Oko'ia ki roto i te toa



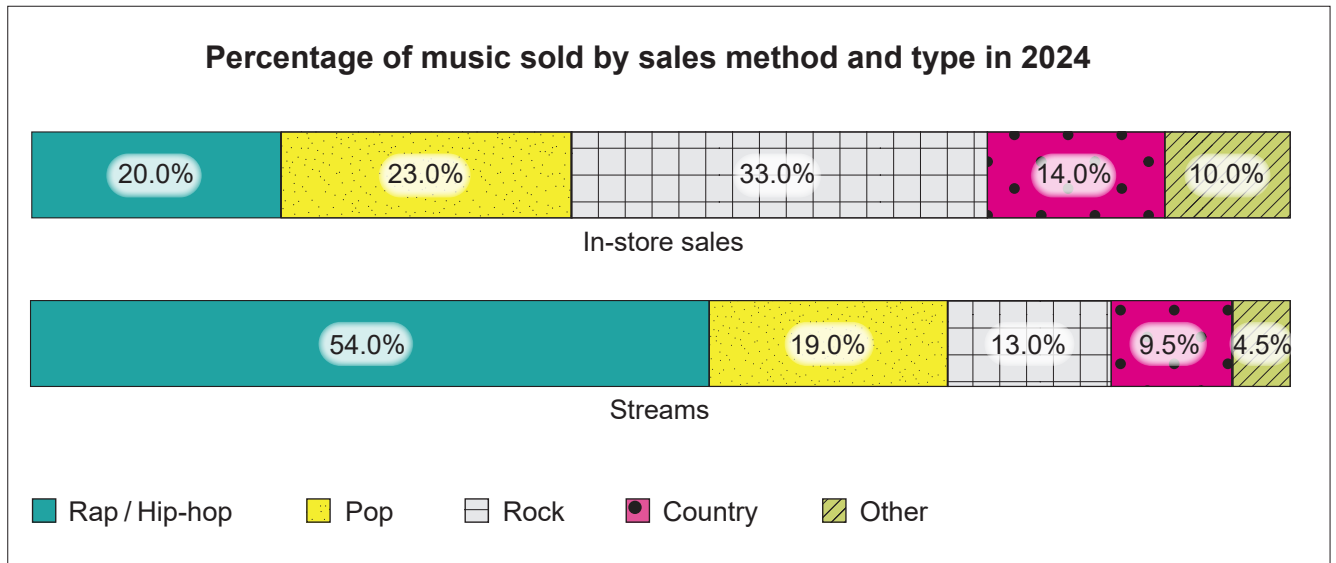
Streams

■ Rap / Hip-hop
 ■ Pop
 ■ Rock
 ■ Country
 ■ Teta'i

(f) Mei roto mai i te 'akapapa'anga i raro ake nei, pata'ia te pi'a (✓) o nga statements e RUA te 'akakite ra i te tika.

- (i) Kua tere atu i te $\frac{1}{2}$ o te streams, ei rap / hip-hop. ☐
- (ii) Kua tere atu i te $\frac{1}{5}$ o te streams ei pop. ☐
- (iii) 'Ē 'oko'ia ana, e $\frac{3}{4}$ o te music kātōatoa, ki roto i te toa. ☐
- (iv) Mei te $\frac{1}{3}$ o te mea 'oko'ia i roto te toa, e rock. ☐
- (v) Tei raro ake i te 10% o te mea 'oko'ia i roto i te toa, e country. ☐

This graph compares the music sold in stores with the music sold by streaming platforms.



(f) From the list below, tick (✓) the TWO statements that are true.

(i) Over $\frac{1}{2}$ of streams are rap / hip-hop.

☐

(ii) More than $\frac{1}{5}$ of streams are pop.

☐

(iii) $\frac{3}{4}$ of all music is bought in-store.

☐

(iv) About $\frac{1}{3}$ of in-store sales are rock.

☐

(v) Less than 10% of in-store sales are country.

☐

UI'ANGA RIMA: Seals

'Ē 1.26 metres te roāngarere i te tinana seal.

'Ē 0.45 metres, te roāngarere o tāna punua 'ānau 'ōu.

- (a) 'Ē'ia taime i reira, te **roāngarere'anga atu** o te tinana seal, i tāna punua?

te taime
roāngarere'anga atu



'E tinana seal, e tāna punua.

'Ē tau kia kai te seal i te kai mei te 4% e te 6% o te teima'a o to rātou kopapa, i te au ra tātakita'i.

'Ē 160 kilograms te teima'a o te seal.



- (b) 'Ēa'a i reira te kai **kotinga iti** e tau kia kai te seal, i te au ra tātakita'i?

kg

QUESTION FIVE: Seals

A mother seal is 1.26 metres long.

Her newborn pup is 0.45 metres long.

- (a) How many times **longer** is the mother seal than her pup?

times longer



A mother seal and her pup.

Seals must eat between 4% and 6% of their body weight in food each day.

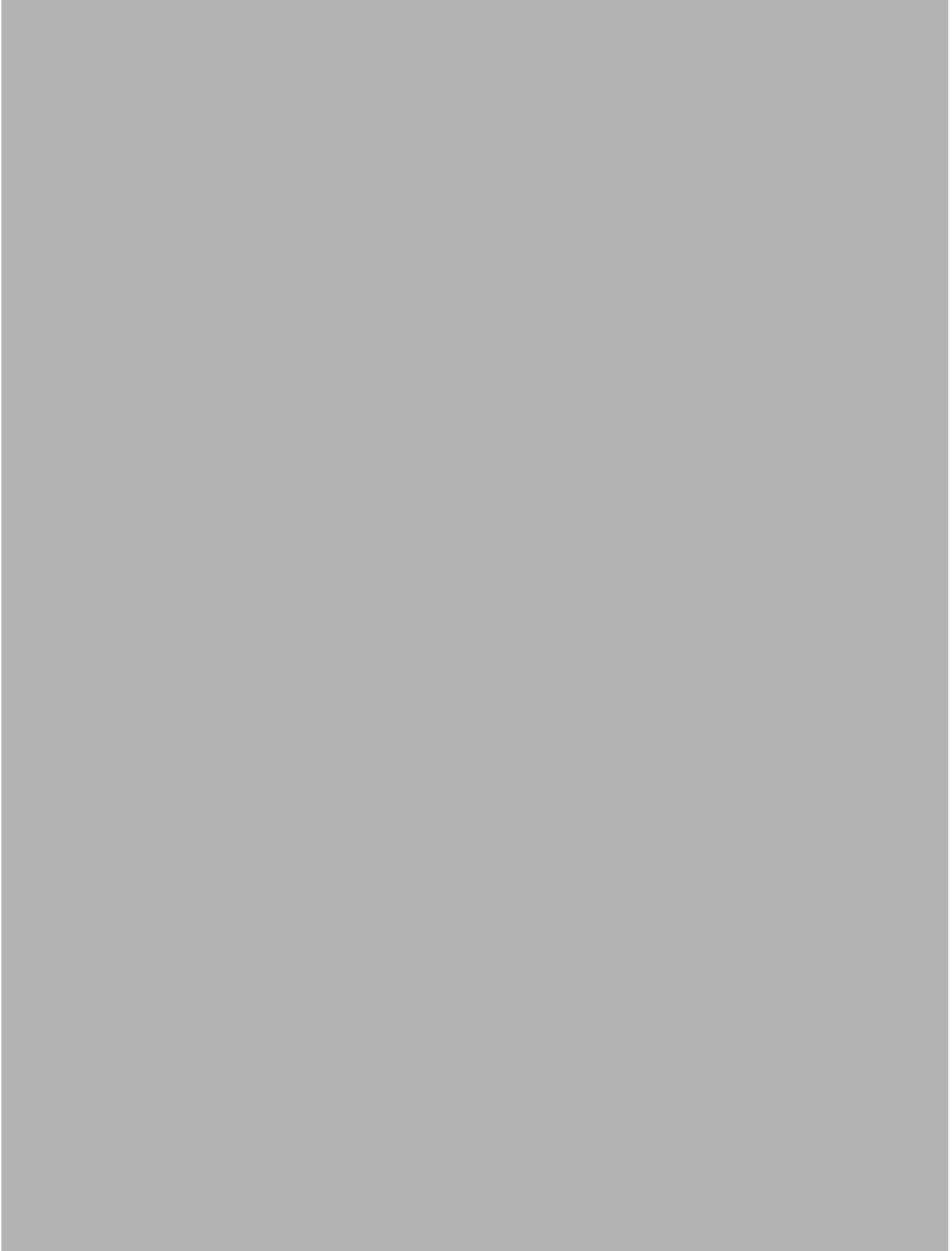
This seal weighs 160 kilograms.



- (b) What is the **minimum** amount of food this seal must eat each day?

kg

Te ‘akaāri‘ia mai nei te au ngā‘i e kitea‘ia ana te seal, e te au reta, i runga i te māpu i raro ake nei.



(c) Pata‘ia te pi‘a (✓) te ngā‘i e kitea‘ia ana te seal, i te 42.4° S e te 173.7° E.

A ☐

B ☐

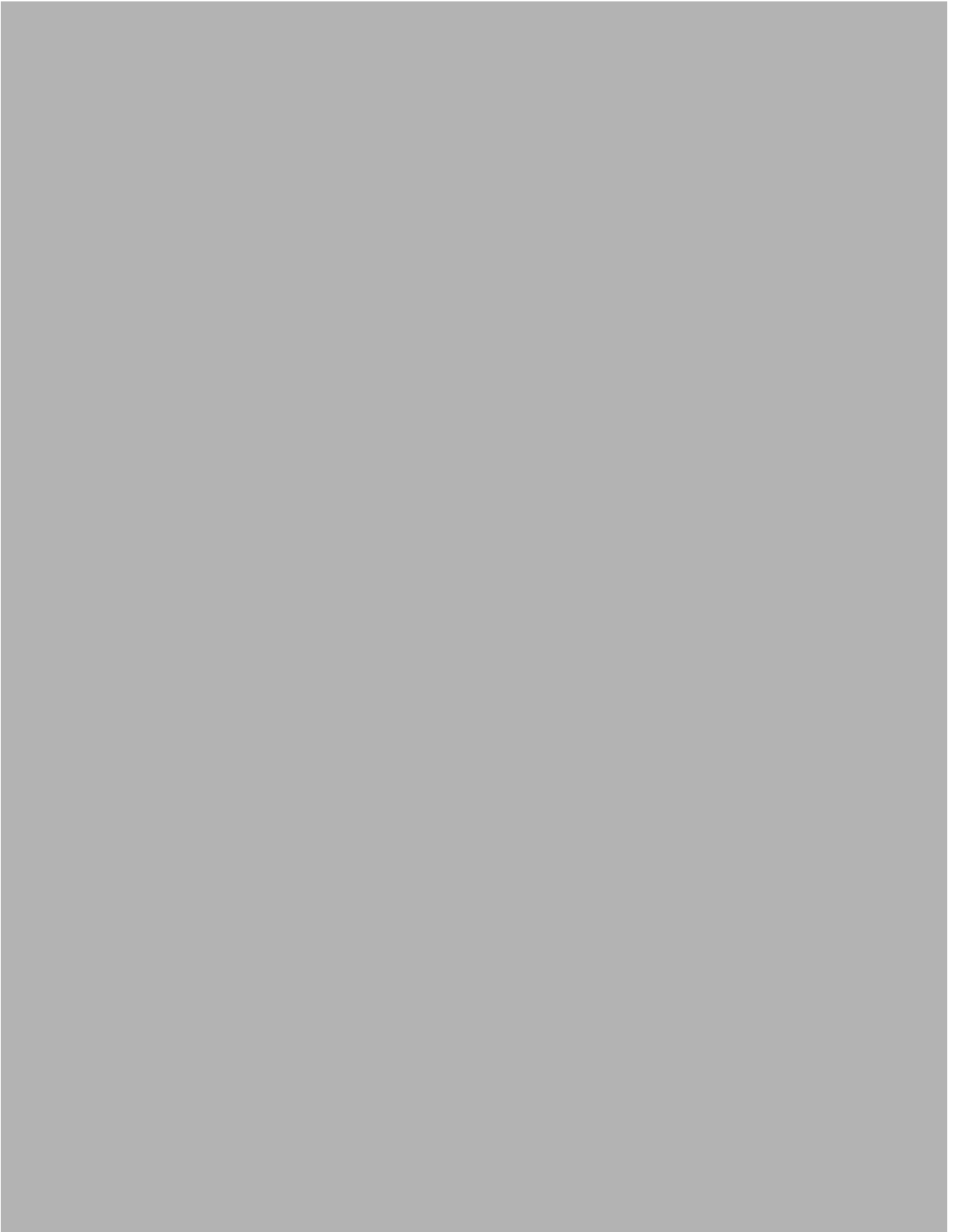
C ☐

D ☐

E ☐

F ☐

Places where seals can be found are shown as letters on the map below.



(c) Tick (✓) where seals can be found at 42.4° S and 173.7° E.

A ☐

B ☐

C ☐

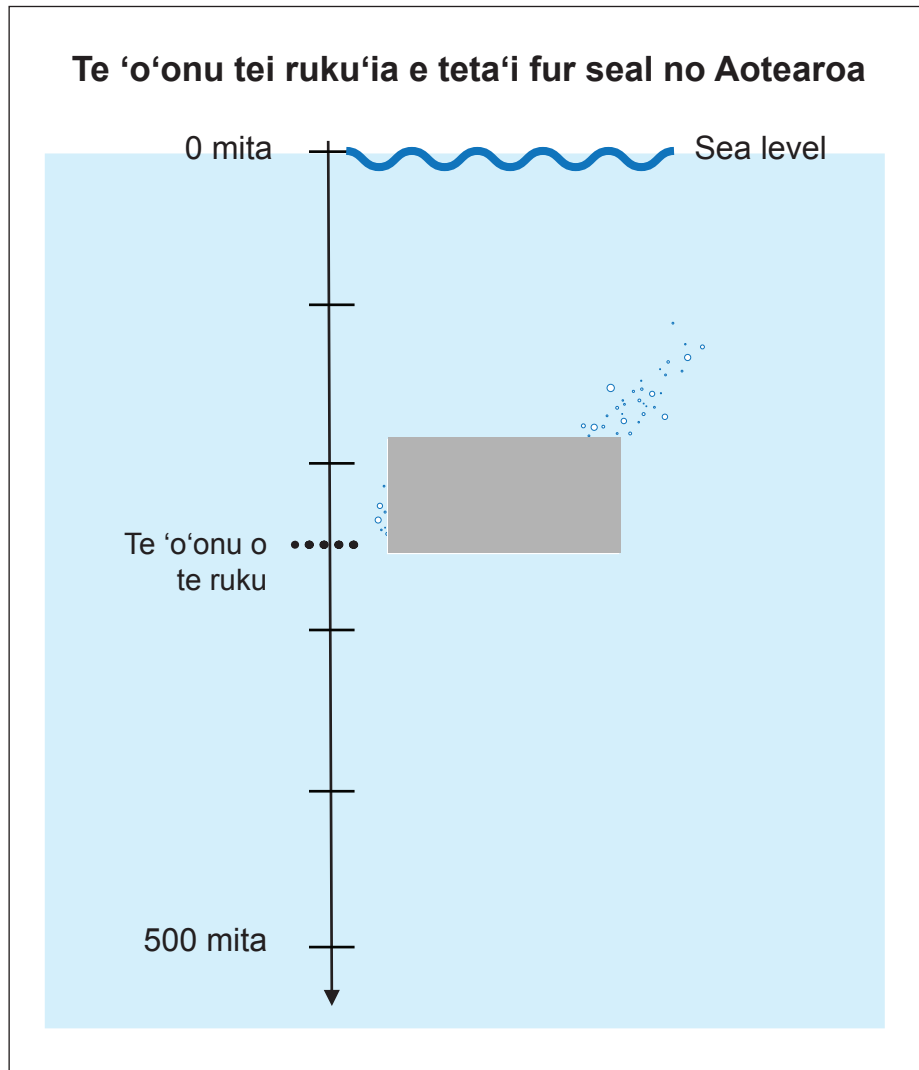
D ☐

E ☐

F ☐

‘E ‘apinga ‘ua atu rāi te seal i te ruku.

Te ‘akaāri mai nei te rāina numero, i te ‘o‘onu e ruku‘ia ana e teta‘i fur seal no Aotearoa.

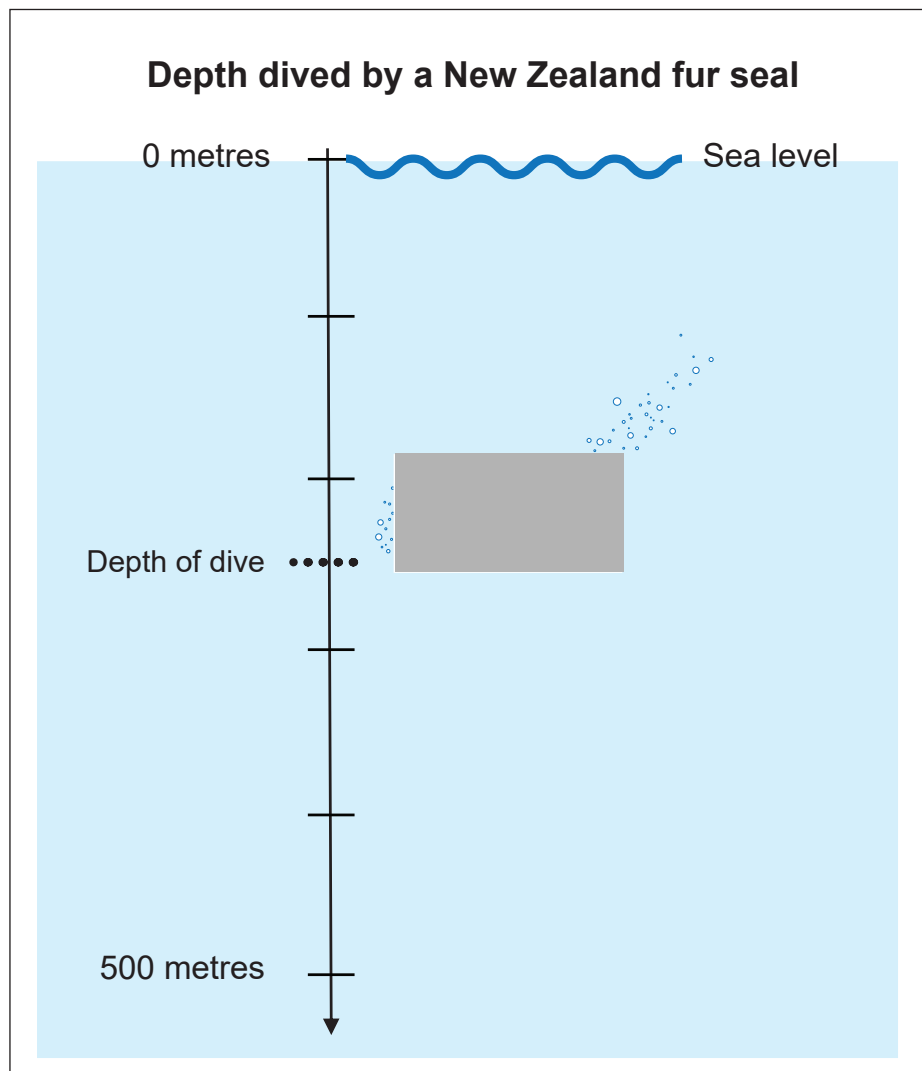


(d) Tāmanako‘ia mai (estimate) te ‘o‘onu, tei ruku‘ia e te fur seal.

te au mita i raro ake i te tai

Seals are excellent divers.

This number line shows the depth dived by a New Zealand fur seal.

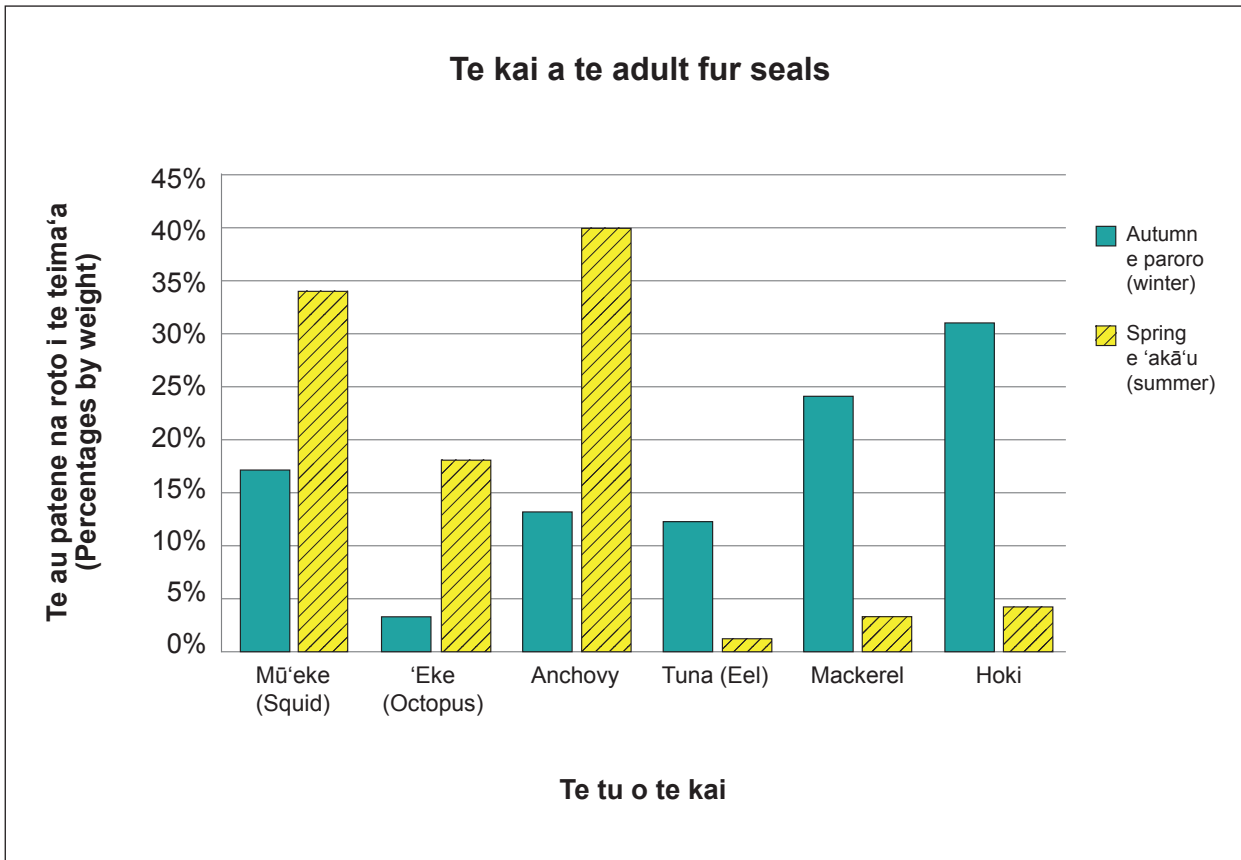


- (d) Estimate the depth the fur seal dived to.

metres below sea level

Te ‘akaāri mai nei te graph, i te tu kai, e kai ana te seal, i te au tuātau tūkētūkē o te mata‘iti.

Te ‘akaāri mai nei te au bar kara tūkētūkē, i te ‘āpa tūkē o te mata‘iti.

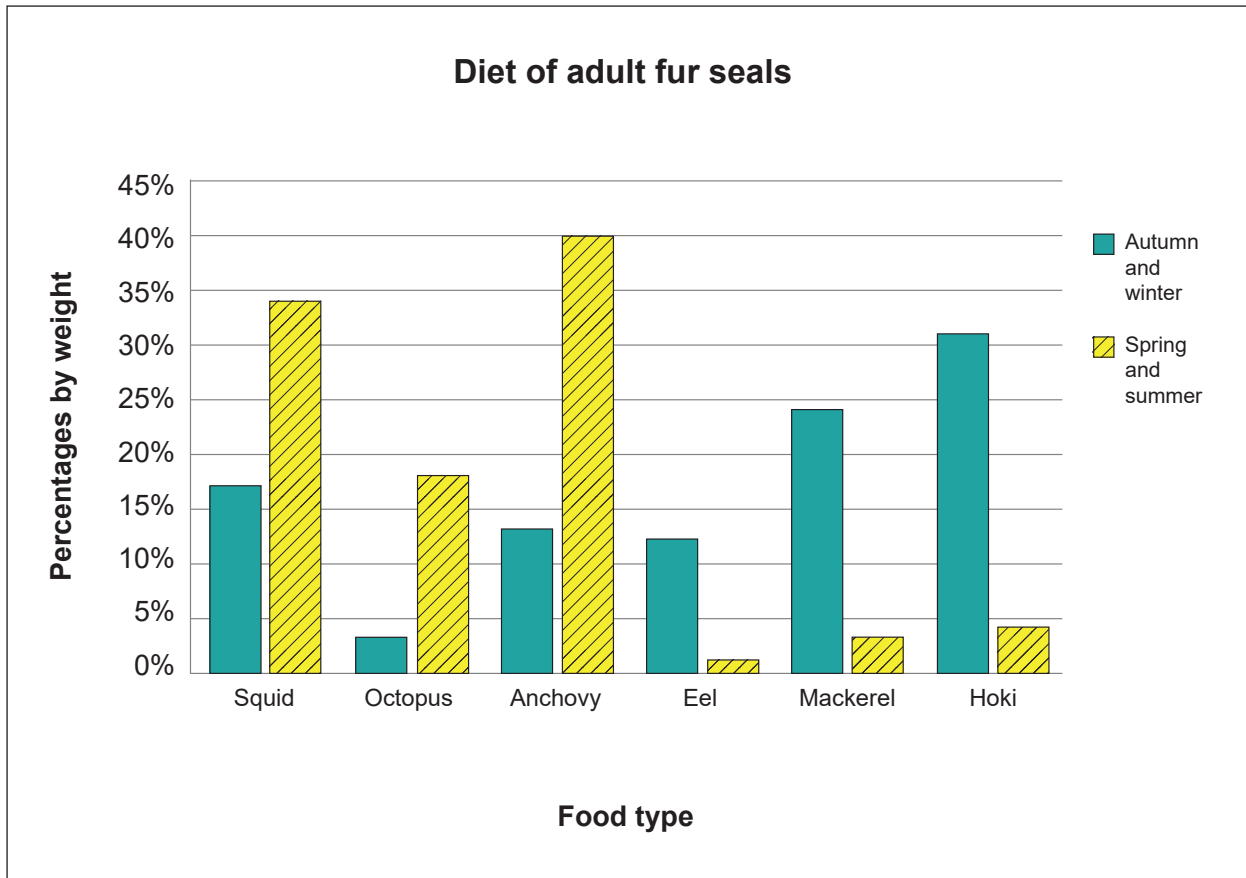


“I roto i te tuātau aka‘au (spring), e te tuātau vera (summer), i te ma‘ata‘anga o te taime, e kai ana te seal i te, mū‘eke (squid), te ‘eke (octopus), e te anchovy.”

- (e) Te ‘akatika āinei koe? Tā‘anga‘anga‘ia te au patene mei runga i te graph, i te ‘akamārama i ta‘au pa‘u‘anga.

This graph shows what kind of food seals eat at different times of the year.

The different coloured bars show different halves of the year.



“In spring and summer, seals eat mostly squid, octopus, and anchovy.”

(e) Do you agree? Use percentages from the graph to explain your answer.

Te 'akaāri mai nei te au topatapata'anga i runga i te māpu, i te au ngā'i, e no'o ana te seals, e karanga'ia ana e, ko Ohau Point.

Te 'akaāri'ia mai nei a Ohau Point e te 'ētū rengarenga.

Te 'akaāri mai nei, te topata teatea, i te ngā'i mamao rava atu i kau ana teta'i seal.



- (f) Tā'anga'anga'ia te scale i runga i te māpu, i te tāmānako (estimate) i te mamao mei Ohau Point ki te topata teatea.

km

The dots on the map show where seals have been located around a place called Ohau Point.

Ohau Point is shown by the yellow star.

The white dot shows the furthest distance a seal swam to.



- (f) Use the scale on the map to estimate the distance from Ohau Point to the white dot.

km

**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.

**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 'akameitaki'anga

Kua 'akatanotano'ia te au 'apinga no roto mai i te au turanga e āru mai nei, no teia vaito'anga:

Ui'anga Ta'i

Kapi 2: E va'ine tei runga i nga tokotoko, <https://stock.adobe.com/nz/images/woman-practicing-walking-on-crutches/249827144>

Kapi 2: Figure outline, <https://static1.squarespace.com/static/54d96b48e4b04bc268f6fde7/t/552b3b68e4b043705b2a7386/1428896616631/Sizing+and+Using+Forearm+or+Elbow+Crutches.pdf>

Kapi 2: Tokotoko, <https://www.mobilitycentre.co.nz/shop/crutches-walking-sticks/crutches/coopers-elbow-crutches-adult-single-adjustable-pair/>

Kapi 2: Protractor, <https://stock.adobe.com/images/protractor-protractor-grid-for-measuring-degrees-tilt-angle-meter-measuring-tool-ai10/196681142>

Kapi 4: Sports park, <https://www.landscapearchitecture.nz/landscape-architecture-aotearoa/2018/3/22/new-zealands-first-sustainable-sports-park-setting-a-new-direction>

Kapi 6: Pi'a tanu kai (garden box), <https://stock.adobe.com> (created using generative AI)

Kapi 6: Matini pu'a kaka'u (washing machine), <https://extremeappliances.co.nz/samsung-10kg-top-load-washer-wa10a8376gw/>

Kapi 6: Vairanga titā (bin), <https://rotaform.co.nz/products/wheelie-bin-80-litre>

Ui'anga Rua

Kapi 8: Umauma tāne (man's chest), <https://taperedmenswear.com/blogs/tapered-blog/how-to-measure-chest-size>

Kapi 10: Pereue (jacket), <https://dwights.co.nz/products/womens-rab-microlight-alpine-jacket?variant=48720739533095> (created using generative AI)

Kapi 10: Sale label, <https://stock.adobe.com/images/set-of-red-sale-banners-on-white-background-ribbons-and-stickers-paper-scrolls-vector-illustration/384987350>

Kapi 10: Thermometer, <https://stock.adobe.com/images/thermometer-graphics/80656743>

Kapi 12: E toru pereue (three jackets), <https://stock.adobe.com> (adapted using generative AI)

Kapi 12: Clothing label, <https://stock.adobe.com/images/white-cardboard-clothing-price-tag-isolated/529658651>

Kapi 14: Body temperature thermometer, <https://stock.adobe.com/images/meteorological-thermometer-glass-tube-with-mercury-and-graphic-scale-degree-vertical-indoor-or-outdoor-temperature-measuring-tool-isolated-on-white-background-vector-flat-illustration/550138686>

Ui'anga Toru

Kapi 18: Ta meika (bunch of bananas), <https://stock.adobe.com/images/5-five-bananas/27448166>

Kapi 20: Pere'ō supermarket (supermarket trolley), <https://www.dreamstime.com/stock-illustration-shopping-carts-icon-line-sketch-doodle-style-metal-trolley-purchases-supermarket-white-background-symbol-sign-image81850982>

Kapi 22: *Favourites* packet, <https://www.woolworths.co.nz/shop/productdetails?stockcode=631296&name=cadbury-chocolates-favourites>

Kapi 24: Ū marō na te pēpē (baby formula), <https://www.davidjonespharmacy.com.au/assets/full/847151.jpg>

Kapi 24: Kapu (scoop), <https://smartmedia.digital4danone.com/is/image/danonecs/baby-formula-scoop-1-3>

Ui'anga Ā

Kapi 26: Music notes, <https://stock.adobe.com/images/music-notes-icon-set-music-notes-symbol-vector-illustration/439874275>

Kapi 28: Auvaro album (album cover), <https://store.sonymusic.co.za/products/pink-floyd-the-division-bell-2016-version-2-lp>

Kapi 32: Streaming, <https://latinwmg.com/que-es-musica-en-streaming/>

Kapi 32: Terepōni 'āpaipai (cellphone), <https://stock.adobe.com/templates/smartphone-infographic-with-teal-ribbons/296420050>

Ui'anga Rima

Kapi 36: 'E tinana seal e te punua (mother seal and pup), <https://www.travelnaturephotography.com/prints/new-zealand-fur-seal-mum-pup>

Kapi 36: 'E seal tei runga i te toka (seal on rock), <https://animalia.bio/new-zealand-fur-seal/1000>

Kapi 38: 'E māpu no Aotearoa (NZ map), https://as1.ftcdn.net/v2/jpg/02/67/07/84/1000_F_267078483_VKxnOzM0gpF4VVD892jNfhoEIRRX2h2O.jpg

Kapi 40: 'E seal te ruku ra (diving seal), https://as1.ftcdn.net/v2/jpg/00/90/53/02/1000_F_90530260_7SzOXdDW4zElbEq7XhldBmIBfxXmozYl.jpg

Kapi 44: Māpu no te au seals o Ohau (Ohau seals map), <https://www.doc.govt.nz/globalassets/documents/conservation/marine-and-coastal/marine-protected-areas/monitoring-factsheets/fur-seals-tracking-technology.pdf>

Acknowledgements

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

Question One

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- Page 7: Bin, <https://rotaform.co.nz/products/wheelie-bin-80-litre>

Question Two

- Page 9: Man's chest, <https://taperedmenswear.com/blogs/tapered-blog/how-to-measure-chest-size>
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Question Three

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Question Five

- Page 37: Mother seal and pup, <https://www.travelnaturephotography.com/prints/new-zealand-fur-seal-mum-pup>
- Page 37: Seal on rock, <https://animalia.bio/new-zealand-fur-seal/1000>
- Page 39: NZ map, https://as1.ftcdn.net/v2/jpg/02/67/07/84/1000_F_267078483_VKxnOzM0gpF4VVD892jNfhoElRRX2h2O.jpg
- Page 41: Diving seal, https://as1.ftcdn.net/v2/jpg/00/90/53/02/1000_F_90530260_7SzOXdDW4zElbEq7XhIDbMIBfxXmozYl.jpg
- Page 45: Ohau seals map, <https://www.doc.govt.nz/globalassets/documents/conservation/marine-and-coastal/marine-protected-areas/monitoring-factsheets/fur-seals-tracking-technology.pdf>

English translation of the wording on the front cover

Numeracy 2025

32406 Apply mathematics and statistics in a range of everyday situations

Credits: Ten

WEEK ONE | 19–23 MAY 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.