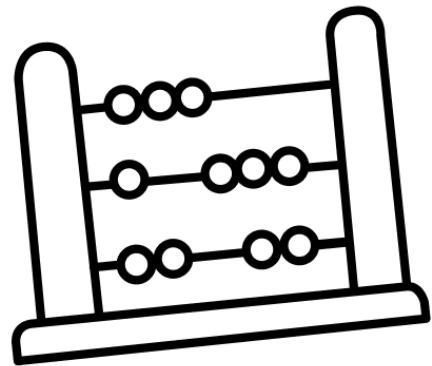


Samaynta safar



Maths

Unit Xisaabta iyo deegaanka

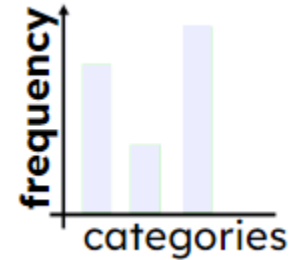
Natiijo

Waxaan qiimeyn karaa saamaynta samaynta safar siyaabo kala duwan.

Socdaal (commute) waa safar joogto ah oo inta badan la sameeyo inta u dhaxaysa guriga qofka iyo goobta uu ka shaqeeyo.

Erayada muhiimka ah

Jaantuska tiirarka (bar chart) waa jaantus ka kooban tiirar oo si muuqaal ah u muujinaya inta jeer ee walxaha a



Xawaaruhu (Speed) waa heerka uu wax ku socdo. Waxaa lagu qiyaasaa masaafada la socdo qayb wakhti ah.

Samaynta safar



Xisaabinta wakhtiga safarka gaadiidka kala duwan



Xisaabinta bixinta (emission) kaarboon ee safarrada



Xisaabinta kharashka safarka

Jadwalku wuxuu muujinayaa xogta tirakoobka ee Xafiiska Tirakoobka Qaranka (ONS) ee ku saabsan masaafada ay dadku ku socdaan 2021.

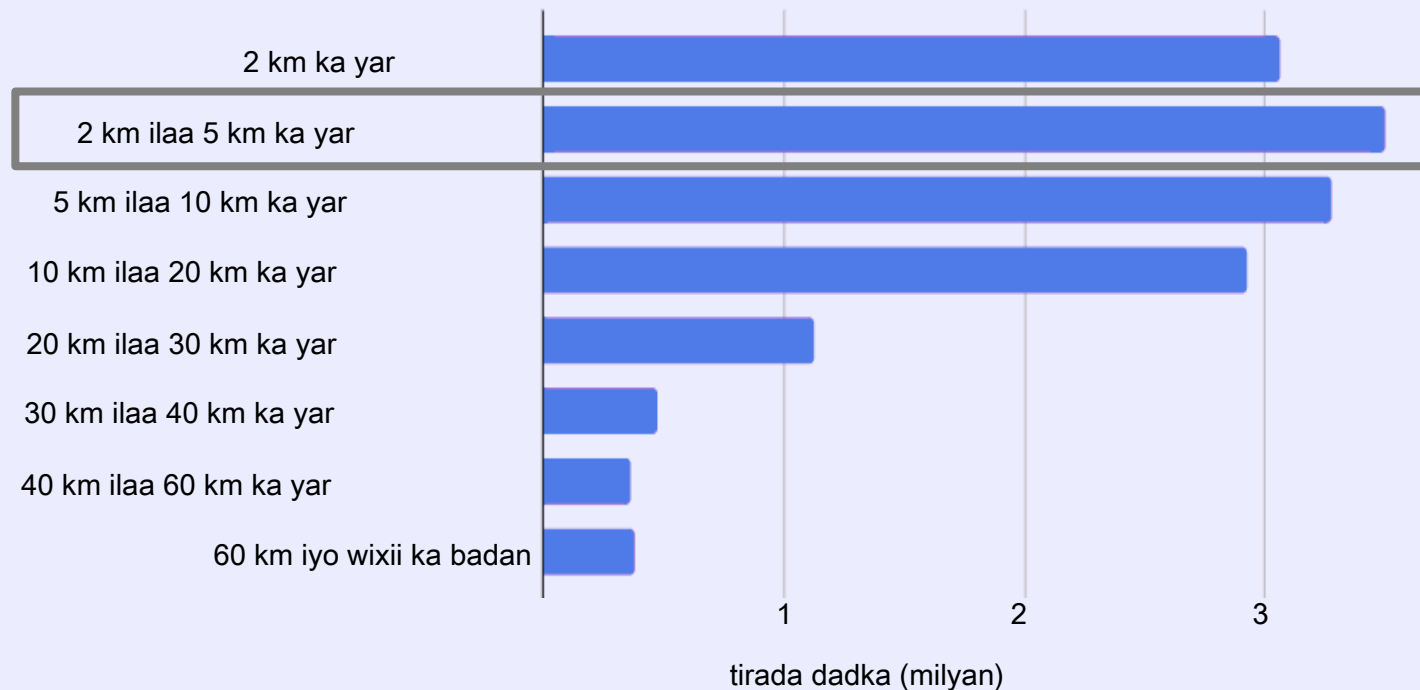
masaafada (d km)	Inta jeer (Frequency)
$d < 2$	3,057,913
$2 \leq d < 5$	3,499,333
$5 \leq d < 10$	3,273,927
$10 \leq d < 20$	2,924,547
$20 \leq d < 30$	1,127,371
$30 \leq d < 40$	470,353
$40 \leq d < 60$	358,932
$60 \leq d$	382,608

Waxaa laga yaabaa inay fududaato in xogtan la fahmo haddii loo muujiyo si muuqaal ah.

Jaantuska tiirarka (bar chart) wuxuu muujinayaa isla xogta ku saabsan masaafada ay dadku ku socdaan 2021.



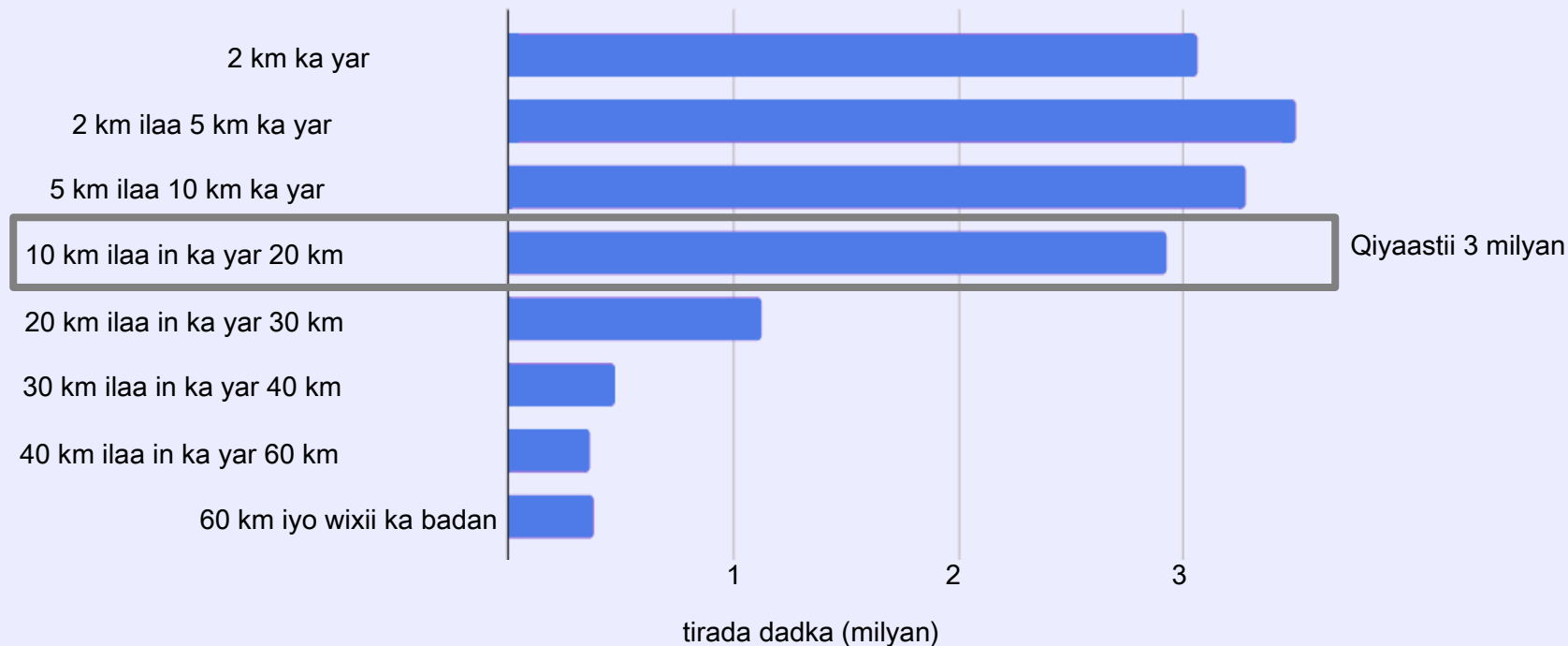
Waa kuma kooxda mood (modal group)?



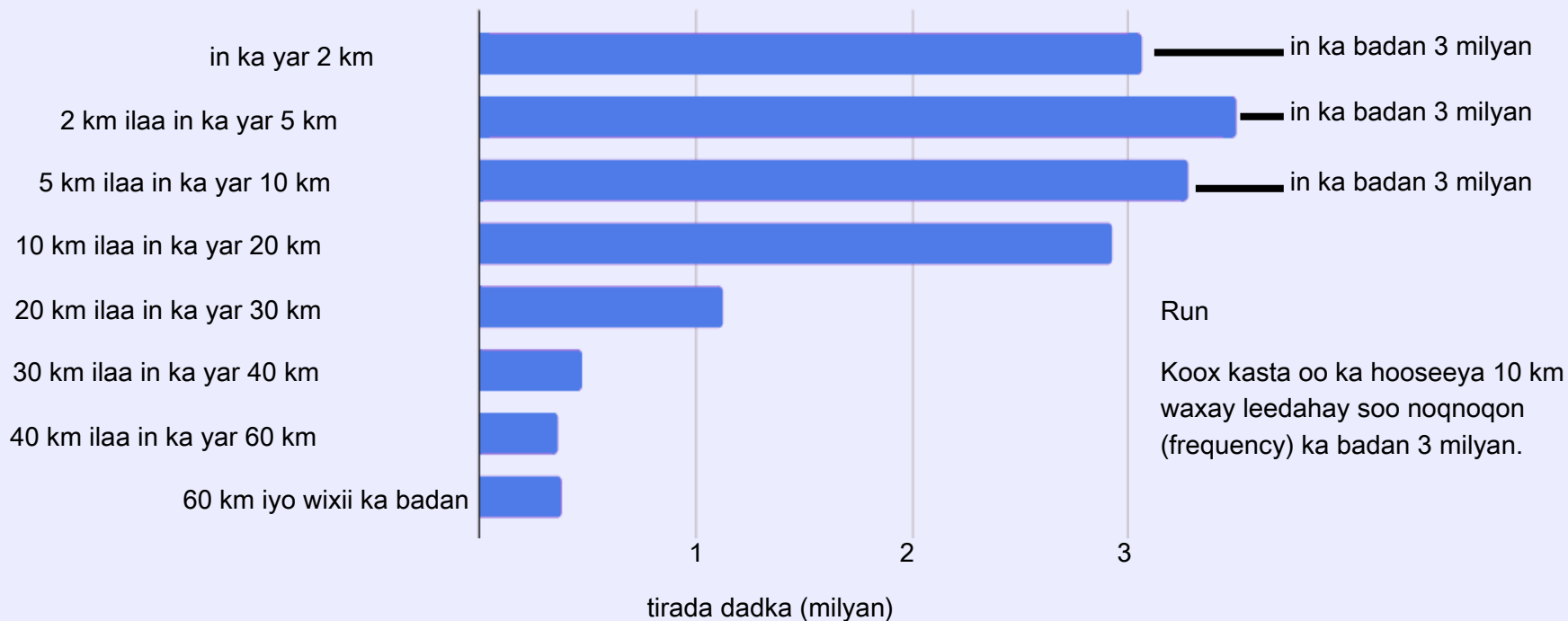
Xisaabinta wakhtiga safarka ee gaadiidka kala duwan



Qiyaas ahaan imisa qof ayaa u safra inta u dhaxaysa 10 km iyo 20 km (ilaa 1 lambar muhiim ah)?



Run ama been? In ka badan 9 milyan oo dad ah ayaa ku safra in ka yar 10 km si ay u shaqeeyaan. Sharax jawaabtaada.



Jadwalku wuxuu muujinayaa xawaaraha celceliska (average speeds) ee saddex hababka gaadiidka, marka la safarayo meelaha magaalooyinka ah.

Qof wuxuu ku nool yahay 1.5 km meesha shaqadiisa.

Xisaabi wakhtiga safarka (journey time) ee la filanayo hab kasta oo gaadiid ah.

habka gaadiidka (method of transport)	xawaaraha celceliska (km/h) (average speed)
socod (walk)	5
baaskiil (cycle)	20
baabuur (drive)	35

$$\text{xawaaraha (speed) = } \frac{\text{masaafada (distance)}}{\text{wakhtiga (time)}}$$

Jadwalku wuxuu muujinayaa xawaaraha celceliska (average speeds) ee saddex hababka gaadiidka, marka la safarayo meelaha magaalooyinka ah.

Qof wuxuu ku nool yahay 1.5 km meesha shaqadiisa.

Xisaabi wakhtiga safarka (journey time) ee la filanayo hab kasta oo gaadiid ah.

habka gaadiidka (method of transport)	xawaaraha celceliska (km/h) (average speed)
socod (walk)	5
<u>baaskiil</u> (cycle)	<u>20</u>
baabuur (drive)	35

$$\text{waqti} = \frac{\text{fogaansho (distance)}}{\text{xawaare (speed)}}$$

socod:

$$1.5 \div 5 = 0.3 \text{ saacadood}$$

$$0.3 \times 60 = 18 \text{ daqiiqo}$$

Jadwalku wuxuu muujinayaa xawaaraha celceliska ah ee saddex hab oo gaadiid, marka lagu safrayo meelaha magaalooyinka.

Qof wuxuu ku nool yahay 1.5 km meesha uu ka shaqeeyo.

Xisaabi waqtiga safarka ee hab kasta oo gaadiid.

habka gaadiidka	xawaaraha celceliska (km/h)
socod	5
baaskiil	20
wadista	35

$$\text{waqti} = \frac{\text{fogaansho (distance)}}{\text{xawaare (speed)}}$$

baaskiil:

$$1.5 \div 20 = 0.075 \text{ saacadood}$$

$$0.075 \times 60 = 4.5 \text{ daqiiqo}$$

Jadwalku wuxuu muujinayaa xawaaraha celceliska ah ee saddex hab oo gaadiid, marka lagu safrayo meelaha magaalooyinka.

Qofku wuxuu ku nool yahay 1.5 km meesha shaqadiisa.

Xisaabi wakhtiga safarka ee la filayo qaab kasta oo gaadiid ah.

qaabka gaadiidka (method of transport)	xawaaraha celceliska (km/h) (average speed)
socod (walk)	5
baaskiil (cycle)	20
baabuur (drive)	35

$$\text{wakhti (time)} = \frac{\text{masafo (distance)}}{\text{xawaare (speed)}}$$

baabuur
(drive):

$$1.5 \div 35 = 0.042... \text{ saacadood (hours)}$$

$$0.042... \times 60 = 3 \text{ daqiiqo (minutes) (tirada ugu dhow)}$$

Qofku wuxuu ku nool yahay 4 km meesha shaqadiisa.

Waa imisa wakhti ay filan karaan inay ku qaataan safarka haddii ay baaskiil u tagaanshaqada? Jawaabta ku bixi saacadood (hours).

qaabka gaadiidka (method of transport)	xawaaraha celceliska (km/h) (average speed)
socod (walk)	5
baaskiil (cycle)	20
baabuur (drive)	35

$$\text{waqti} = \frac{\text{fogaansho (distance)}}{\text{xawaare (speed)}}$$

socod:

$$4 \div 20 = 0.2 \text{ saacadood}$$

Qof wuxuu ku nool yahay 4 km meesha uu ka shaqeeyo.

Waxay qaadataa 0.2 saacadood inuu baaskiil ku tago shaqada. Inta daqiiqo ayay tahay?

qaabka gaadiidka	xawaaraha celceliska (km/h)
socod	5
baaskiil	20
gaari	35

$$0.2 \times 60 = 12 \text{ daqiiqo}$$

Qof wuxuu ku nool yahay 4 km meesha uu ka shaqeeyo.

Inta waqti ayuu filan karaa inuu ku qaato safarka hadduu gaari ku tago?

Jawaabta ugu dhow daqiiqada.

qaabka gaadiidka	xawaaraha celceliska (km/h)
socod	5
baaskiil	20
gaari	35

$$\text{wakhtiga} = \frac{\text{fogaanta (distance)}}{\text{xawaaraha (speed)}}$$

wadista
(drive):

$$4 \div 35 = 0.1142... \text{ saacadood}$$

$$0.1142... \times 60 = 7 \text{ daqiiqo}$$

(daqiiqada ugu dhow)

1) Jadwalku wuxuu muujinayaa fogaanta (distance) saddex safar oo shaqo.

Buuxi meelaha bannaan ee jadwalka adigoo xisaabinaya wakhtiga safarka ee qiyaasta ah iyadoo la adeegsanayo hab kasta oo gaadiidka.

habka gaadiidka	xawaaraha celceliska (km/h)	wakhtiga safarka ee qiyaasta ah (daqiiqada ugu dhow)		
		safar 2 km	safar 8 km	safar 16 km
socod (walk)	5			
baaskiil (cycle)	20			
wadista (drive)	35			

Habkee baad u dooran lahayd gaadiidka safar kasta oo dhererkiisu kala duwan yahay?

1) Jadwalku wuxuu muujinayaa masaafooyinka saddex safar oo shaqo.

Buuxi meelaha bannaan ee jadwalka adigoo xisaabinaya waqtiyada safarka ee la qiyaasay iyadoo la adeegsanayo hab kasta oo gaadiid.

habka gaadiidka	celceliska xawaaraha (km/h)	waqtiyada safarka lagu qiyaaso (ilaa daqiiqada ugu dhow)		
		safar 2 km	safar 8 km	safar 16 km
socod	5			
baaskiil	20			
Jawaabaha: baabuur	35			

Habkee gaadiidka ayaad dooran lahayd inaad u isticmaasho dherer kasta oo safar ah?

Jawaabuhu way kala duwanaa karaan iyadoo ku xiran doorashada shakhsiga.

habka gaadiidka	celceliska xawaaraha (km/h)	waqtiyada safarka lagu qiyaaso (ilaa daqiiqada ugu dhow)		
		safar 2 km 24	safar 8 km 96	safar 16 km 192
		6	24	48
socod	5	3	14	27
baaskiil	20			
baabuur	35			

Waxaan doorbidi lahaa inaan had iyo jeer isticmaalo habka ugu dhaqsaha badan ee gaadiidka.

Habkee baad dooran lahayd inaad u isticmaasho safar kasta oo dhererkiisu kala duwan yahay?

Jawaabuhu way kala duwanaa karaan iyadoo ku xiran doorashooyinka shakhsiga ah.

habka gaadiidka (method of transport)	xawaaraha celceliska (km/h) (average speed (km/h))	wakhtiyada safarka ee qiyaasta (daqiiqada ugu dhow) (estimated journey times (to the nearest minute))		
		safarka 2 km (2 km journey)	safarka 8 km (8 km journey)	safarka 16 km (16 km journey)
socod (walk)	5	24	96	192
		6	24	48
baaskiil (cycle)	20	3	14	27
wadista baabuurka (drive)	35			

Waxaan jeclahay socodka. Laakiin socodka in ka badan saac waxaa laga yaabaa inuu noqdo mid aan ku habboonayn safarka shaqada. Sidaa darteed, waxaan baaskiil ku qaadi lahaa safarro dhaadheer.



Yacquub

Habka gaadiidka ee aad dooran lahayd mid kasta oo ka mid ah dhererka safarka?

Jawaabuhu way kala duwanaan karaan iyadoo ku xiran doorashada shakhsiga.

habka gaadiidka (method of transport)	xawaaraha celceliska (km/h) (average speed (km/h))	wakhtiyada safarka ee qiyaasta (daqiiqada ugu dhow) (estimated journey times (to the nearest minute))		
		safarka 2 km (2 km journey)	safarka 8 km (8 km journey)	Safarka 16 km
socod	5	24	96	192
baaskiil	20	6	24	48
wadid	35	3	14	27



Caasha

Waxaan jeclaan lahaa in aan waqti yar ku qaato safarka, laakiin aan dheerayn. Waqtiga ugu habboon ee aniga waa inta u dhaxaysa 15 iyo 30 daqiiqo.

Samaynta safar



Xisaabinta waqtiyada safarka ee gaadiidka kala duwan



Xisaabinta bixinta (emission) kaarboon ee safarrada



Xisaabinta kharashka safarka

Marka gaadiidka shidaalka ama naaftada ay safar sameeyaan, waxay isticmaalaan shidaal.

Waa maxay arrimaha saameyn kara xadiga shidaalka la isticmaalo inta lagu jiro safarka?

Tusaalooyinka waxaa ka mid noqon kara:

- dhererka safarka;
- haddii lagu wado magaalada ama waddo weyn;
- cabirka gaadiidka;
- cabirka matoorka;
- nooca shidaalka.

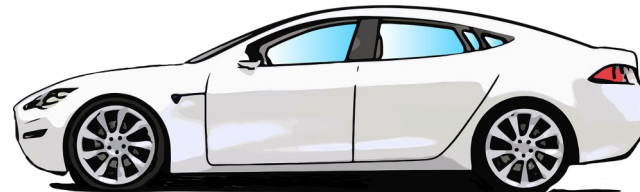
Xisaabinta bixinta (emission) kaarboon ee safarrada (journeys)

Qaar ka mid ah gaadiidka waxay u isticmaalaan shidaalka si hufan marka loo eego kuwa kale.

Hufnaanta shidaalka (fuel efficiency) baabuurka waxaa badanaa lagu muujiyaa (expressed) miles per gallon (mpg). Tani waa celceliska (average) tirada miles ee uu baabuurku safro (travels) isagoo isticmaalaya 1 gallon shidaal. Ingiriiska, gallon-ku waxaa loola jeedaa imperial gallon (taas oo kala duwan US gallon).



Baabuur yar (small car) waxa uu celcelis ahaan u safri karaa 50 mpg.



Baabuur weyn (larger car) waxa uu celcelis ahaan u safri karaa 35 mpg.

Xisaabinta bixinta (emission) kaarboon ee safarrada (journeys)



Shidaalka la isticmaalay inta lagu jiro safarka (journey) wuxuu soo saaraa (produces) bixin (emission) CO₂.

Waxaan qiyaasi karnaa (estimate) xaddiga bixinta (emission) CO₂ halkii mile anagoo adeegsanayna qaaciddadan (formula) soo socota:

hufnaanta shidaalka (fuel efficiency) baabuurka (mpg)

Xisaabinta bixinta (emission) kaarboon ee safarrada (journeys)

Celceliska bixinta (emission) CO2 ee baabuurta shidaalka (petrol) waa 9 kg halkii gallon.

Celceliska hufnaanta shidaalka (fuel efficiency) ee baabuurka yari waa 50 mpg.

Imisa bixin (emission) CO2 ayuu soo saaraa halkii mile?

hufnaanta shidaalka (fuel efficiency) baabuurka (mpg)

Baabuurku wuxuu soo saaraa 180 grams oo ah bixin (emission) CO2 halkii mile.

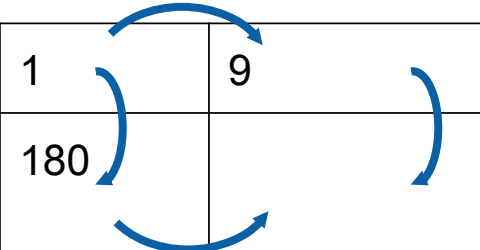
Xisaabinta bixin (emission) kaarboon ee safarrada

Baabuurka qofka wuxuu soo saaraa 180 grams oo ah bixin (emission) CO2 halkii mile.

Waxay ku nool yihiin 9 miles meeshii ay ka shaqeeyaan.

Imisa bixin (emission) ayuu baaburku soo saaraa inta lagu jiro safarka (journey) shaqada?

fogaanta (mayl)	1	9
bixin (emission) CO2 (garaam)	180	



Safar kastaa wuxuu soo saaraa 1.62 kg oo ah bixin (emission) CO2.

Qofku wuxuu sameeyaa 2 safar oo gaari ah maalintii: shaqada tagista; shaqada ka soo noqoshada.

Safar kastaa wuxuu soo saaraa 1.62 kg oo ah bixin (emission) CO₂.

Waxay ka shaqeeyaan 225 maalmood sannadkii.

Intee in le'eg ayay gaarigu soo saaraa bixin (emission) CO₂ sannadkii, isagoo u socda shaqada iyo ka soo noqoshada?

$$1.62 \times 2 \times 225 = 729 \text{ kg}$$

Gaarigu wuxuu soo saaraa qiyaastii 729 kg oo ah bixin (emission) CO₂ sannadkii inta uu shaqada ku socdo.

Xisaabinta bixin (emission) kaarboon ee safarrada



Celceliska bixin (emission) CO₂ ee gaariga shidaalka (petrol) waa 9 kg galaan kii.

Celceliska waxtarka shidaalka ee gaariga weyn waa 35 mpg.

$$\text{bixin (emission) mayl kii (garaam)} = \frac{\text{CO}_2 \text{ galaan kii oo shidaal (garaam)}}{\text{waxtarka shidaalka ee gaariga (mpg)}}$$

Intee in le'eg ayuu bixin (emission) CO₂ soo saaraa mayl kii? Jawaabta sii sax ah ilaa 3 tirooyin muhiim ah.

$$9000 \div 35 = 257.142\dots$$

Gaarigu wuxuu soo saaraa 257 garaam oo ah bixin (emission) CO₂ mayl kii.

Xisaabinta bixinta (emission) kaarboon ee safarrada



Gaariga qofku wuxuu soo saaraa 257 garaam oo ah bixin (emission) CO2 mayl kii.

Waxay ku nool yihiin 13 mayl oo ay u jiraan goobta shaqada.

Intee in le'eg oo bixin (emission) ah ayuu baabuurku soo saaraa safar keliya oo shaqo (hal dariiq)?
Jawaabta ku bixi kiilogaraam.

Safar kastaa wuxuu soo saaraa 3.341 kg oo bixin (emission) CO2 ah.

Xisaabinta bixinta (emission) kaarboon ee safarrada



Qofku wuxuu sameeyaa 2 safar oo baabuur ah maalintii: shaqo tagid; shaqo ka soo noqosho.

Safar kastaa wuxuu soo saaraa 3.341 kg oo bixin (emission) CO₂ ah.

Waxay shaqeeyaan 192 maalmood sannadkii.

Intee in le'eg oo bixin (emission) CO₂ ah ayuu baabuurku soo saaraa sannad dhan isagoo shaqo u socda oo ka soo noqonaya?

Baabuurku wuxuu soo saaraa qiyaastii 1280 kg oo bixin (emission) CO₂ ah sannadkii marka la safarayo.

1) Qadarka bixinta (emission) CO2 ee mayl kasta waxaa lagu qiyaasi karaa iyadoo la isticmaalayo qaacidada:

$$\text{bixinta (emission) maylkii (garaam)} = \frac{\text{CO2 gallonkii shidaalka (garaam)}}{\text{waxtarka shidaalka baabuurka (mpg)}}$$

Qofku wuxuu ku nool yahay 6 mayl meesha shaqadiisa wuxuuna ku safraa baabuur. Bixinta (emission) CO2 celceliska ah ee baabuur shidaal (petrol) waa 9 kg gallonkii. Celcelis ahaan, baabuurkiisu wuxuu safraa 45 mayl gallonkii. Waxay shaqeeyaan 223 maalmood sannadkii.

Xisaabi qadarka bixinta (emission) CO2 ee sannadkii laga soo saaro safarka baabuurka. Jawaabta ku bixi kiilogaraam oo u sax 3 tirooyin muhiim ah (significant figures).

2) Qadarka bixinta (emission) CO2 ee mayl kasta waxaa lagu qiyaasi karaa iyadoo la isticmaalayo qaacidada:

$$\text{bixin (emission) halkii mayl (grams) = } \frac{\text{CO2 halkii gallon oo shidaal ah (grams)}}{\text{waxtarka shidaalka ee gaariga (mpg)}}$$

40 qof ayaa ku nool 6 mayl meesha shaqadooda waxayna ku safraan isla baska. Bixinta (emission) CO2 celceliska ah ee bas naafto (diesel) waa 10 kg gallonkii. Celcelis ahaan, basku wuxuu safraa 8 mayl gallonkii. Waxay shaqeeyaan 223 maalmood sannadkii.

Xisaabi qadarka bixinta (emission) CO2 ee rakaabkiiba sannadkii laga soo saaro safarka baska. Jawaabta ku bixi kiilogaraam oo u sax 3 tirooyin muhiim ah (significant figures).

1) Qadarka bixinta (emission) CO2 halkii mayl waxaa lagu qiyaasi karaa iyadoo la isticmaalo qaacidada:

$$\text{bixin (emission) halkii mayl (grams) = } \frac{\text{CO2 halkii gallon oo shidaal ah (grams)}}{\text{waxtarka shidaalka ee gaariga (mpg)}}$$

Qof wuxuu ku nool yahay 6 mayl oo u jira goobtiisa shaqada wuxuuna ku safraa gaari. Celceliska bixinta (emission) CO2 ee gaariga shidaalka (petrol) waa 9 kg halkii gallon. Celcelis ahaan, gaarigiisu wuxuu socdaa 45 mayl halkii gallon. Wuxuu shaqeeyaa 223 maalmood sannadkii.

Xisaabi qadarka bixinta (emission) CO2 ee la soo saaro sannadkii ee ka imanaya safarka shaqada. Si jawaabtaada ugu bixi kiilogaraam waxaana ku qaab 3 tirooyin muhiim ah.

Qof wuxuu ku nool yahay 6 mayl oo u jira goobtiisa shaqada wuxuuna ku safraa gaari. Celceliska bixinta (emission) CO2 ee gaariga shidaalka (petrol) waa 9 kg halkii gallon. Celcelis ahaan, gaarigiisu wuxuu socdaa 45 mayl halkii gallon. Wuxuu shaqeeyaa 223 maalmood sannadkii.

Habka 1:

Bixinta (emission) halkii mayl:

$$9000 \div 45 = 200 \text{ grams oo CO2 ah halkii mayl}$$

Bixinta (emission) halkii safar:

$$200 \times 6 = 1200 \text{ grams oo CO2 ah halkii safar (1.2 kg)}$$

Bixinta (emission) halkii sannad:

$$= 535 \text{ kg oo CO2 ah sannadkii (ilaa 3 s.f.)}$$

Qof ayaa 6 mayl u jira meesha shaqadiisa wuxuuna ku safraa baabuur. Bixin (Emission)-ka CO2 celceliska ah ee baabuurta shidaalka waa 9 kg galaan kasta. Baabuurkiisu celcelis ahaan wuxuu ku socdaa 45 mayl galaan kasta. Waxay shaqeeyaan 223 maalin sannadkii.

Habka 2-aad:

Mayl maalintii:

Mayl sannadkii:

Bixin (Emission) maylkii:

Bixin (Emission) sannadkii:

$$2676 \times 200 = 535\,200 \text{ garaam oo CO}_2 \text{ ah sannadkii}$$

$$= 535 \text{ kg oo CO}_2 \text{ ah sannadkii (ilaa 3 s.f.)}$$

2) Qadarta bixin (emission)-ka CO2 maylkii waxaa lagu qiyaasi karaa iyadoo la isticmaalayo qaacidada (formula):

$$\text{bixin (emission) maylkii (garaam)} = \frac{\text{CO2 galaan shidaalka (garaam)}}{\text{waxtarka shidaalka gaariga (mpg)}}$$

40 qof ayaa 6 mayl u jira meesha shaqadooda waxayna ku safraan isla bas. Bixin (Emission)-ka CO2 celceliska ah ee baska naaftada (diesel) waa 10 kg galaan kasta. Basku celcelis ahaan wuxuu ku socdaa 8 mayl galaan kasta. Waxay shaqeeyaan 223 maalin sannadkii.

Xisaabi qadarta bixin (emission)-ka CO2 ee soo saaray rakaabkiiba sannadkii iyadoo la safraayo bas. Jawaabta ku bixi kiilogaraam oo sax u ah 3 tirooyin muhiim ah (significant figures).

40 qof ayaa 6 mayl u jira meesha shaqadooda waxayna ku safraan isla bas. Bixin (Emission)-ka CO2 celceliska ah ee baska naaftada (diesel) waa 10 kg galaan kasta. Basku celcelis ahaan wuxuu ku socdaa 8 mayl galaan kasta. Waxay shaqeeyaan 223 maalin sannadkii.

Bixin (Emission) maylkii: $10\,000 \div 8 = 1250$ garaam oo CO2 ah maylkiiba (1.25 kg)

Bixin (emission) safar kasta:

Bixin (emission) maalin kasta:

Bixin (emission) sannad kasta:

Bixinta (emission) sannadlaha ah qofkiiba:

$$3345 \div 40 = 83.6 \text{ kg oo CO2 ah qofkiiba (ilaa 3 s.f.)}$$

Habab kale ayaa sidoo kale loo isticmaali karaa si loo helo jawaab la mid ah.

Samaynta safar



Xisaabinta waqtiyada safarka ee gaadiidka kala duwan



Xisaabinta bixinta (emission) kaarboon ee safarrada



Xisaabinta qiimaha safarka

Dhaqaalaha shidaalka ee gaariga waxaa badanaa lagu muujiyaa mayl galaan kasta (mpg). Tani waa celceliska tirada maylalka uu gaarigu ku safri karo isagoo isticmaalaya 1 galaan oo shidaal ah.

Ingiriiska, batroolka iyo naaftada waxaa lagu iibiyaa litir.

Waxaan isticmaali karnaa xaqiiqda ah in 1 galaan uu qiyaas ahaan yahay 4.546 litir si loo beddelo unugyada.



Qof ayaa u kaxaysta 9 mayl shaqada. Celceliska hufnaanta shidaalka gaarigiisu waa 50 mpg. Batroolku wuxuu ku kacayaa 142.9 p litirkiiba. 1 galaan $\approx$ 4.546 litir.

Waa maxay kharashka shidaalka (petrol) ee safarka?

Qorshe:

1. Xisaabi xaddiga shidaalka (petrol) ee la isticmaalay oo ku jira galaan (gallons).
2. U beddel xaddiga shidaalka (petrol) litir (litres).
3. Xisaabi kharashka shidaalka (petrol).

Xisaabinta kharashka safarka

Qof ayaa wataa 9 mayl (miles) shaqada. Celceliska hufnaanta shidaalka (fuel efficiency) gaarigu waa 50 mpg. Shidaalku (petrol) wuxuu ku kacayaa 142.9 p litirkii. 1 gallon ~ 4.546 litres.

Waa maxay kharashka shidaalka (petrol) ee safarka?

1. Xisaabi xaddiga shidaalka (petrol) ee la isticmaalay oo ku jira galaan (gallons).

mayl (miles)	50	9
galaan (gallons)	1	

Safar kasta wuxuu isticmaalaa 0.18 gallon oo shidaal (petrol) ah.

Qof ayaa wataa 9 mayl (miles) shaqada. Celceliska hufnaanta shidaalka (fuel efficiency) gaarigu waa 50 mpg. Shidaalku (petrol) wuxuu ku kacayaa 142.9 p litirkii. 1 gallon $\approx$ 4.546 litres.

Waa maxay kharashka shidaalka (petrol) ee safarka?

2. U beddel xaddiga shidaalka (petrol) litir (litres).

Safar kasta wuxuu isticmaalaa 0.18 gallon oo shidaal (petrol) ah.

Safar kasta wuxuu isticmaalaa 0.81828 L oo shidaal (petrol) ah.

Qof ayaa wataa 9 mayl (miles) shaqada. Celceliska hufnaanta shidaalka (fuel efficiency) gaarigu waa 50 mpg. Shidaalku (petrol) wuxuu ku kacayaa 142.9 p litirkii. 1 gallon $\approx$ 4.546 litres.

Waa maxay kharashka shidaalka (petrol) ee safarka?

3. Xisaabi qiimaha shidaalka (petrol).

Safarkasta wuxuu isticmaalaa 0.81828 L oo shidaal (petrol) ah.

Qiimaha shidaalka (petrol) safar kasta waa qiyaastii £1.17

Safarka baabuurka ee qofka shaqada wuxuu ku kacayaa £1.17 shidaal (petrol).

Waxay sameeyaan safarka laba jeer maalintii 225 maalmood sannadkii.

Waa maxay qiimaha sannadlaha ah ee shidaalka (petrol) ee shaqada tagista?

Shaqada tagista baabuurka waxay ku kacaysaa qiyaastii £526.50 sannadkii shidaal (petrol).

Qofku wuxuu ku bixiyaa £526.50 sannadkii shidaal (petrol) si uu u tago shaqada.

Waxa kale oo uu bixiyaa £80 bishiiba caymiska baabuurka (car insurance).

Qiimaha dayactirka sannadlaha ah ee baabuurka waa £650.

U qaad in uu leeyahay baabuurkiisa si uu u kaxaysto shaqada. Immisa ayuu ku bixiyaa wadarta baabuurkiisa sannadkii?

Qofku wuxuu ku bixiyaa qiyaastii £2136.50 baabuurkiisa sannadkii si uu u tago shaqada.

Qofku wuxuu kaxeeyaa 12 mayl (miles) shaqada. Waxay u safraan shaqada iyo guriga 225 maalmood sannadkii. Celceliska hufnaanta shidaalka (fuel efficiency) baabuurkiisu waa 40 mpg. Shidaalku (petrol) wuxuu ku kacayaa 138.9 p litirkiiba. 1 gallon $\approx$ 4.546 litir.

Isku dheji xisaab kasta waxa ay ka dhigan tahay macnaha guud.

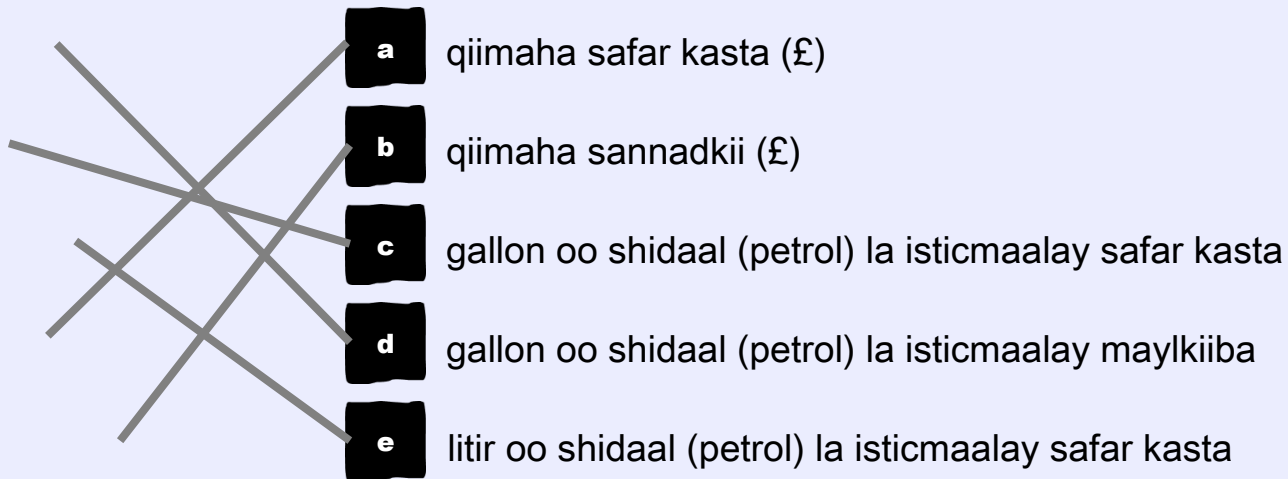
$$1 \div 40 = 0.025$$

$$0.025 \times 12 = 0.3$$

$$0.3 \times 4.546 = 1.3638$$

$$1.3638 \times 1.389 = 1.894...$$

$$1.894... \times 2 \times 225 = \text{£}852.44$$



Qof ayaa wata 12 mayl shaqada. Waxay u safraan oo ka soo noqdaan shaqada 225 maalmood oo sanadka ah. Celcelis ahaan shidaalka baabuurka waa 40 mpg. Shidaalku waa 138.9 p litirkiiba. 1 gallon $\approx$ 4.546 litir.

Isku dhig xisaab kasta waxa ay u taagan tahay macnaha.

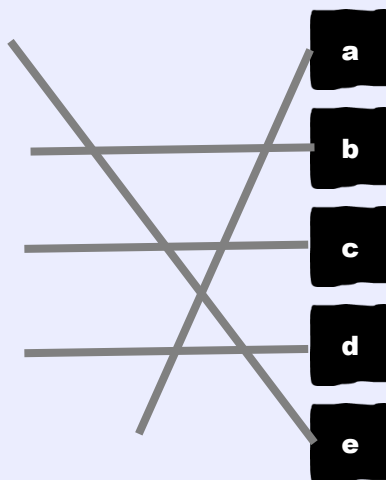
$$12 \times 2 \times 225 = 5400$$

$$1 \div 40 = 0.025$$

$$0.025 \times 5400 = 135$$

$$135 \times 4.546 = 613.71$$

$$613.71 \times 138.9 = 85\,244.319$$

- 
- a** kharashka shidaalka sanadlaha ah (pence)
 - b** gallon oo shidaal ah oo la isticmaalay maylkii
 - c** gallon oo shidaal ah oo la isticmaalay sanadkii
 - d** litir oo shidaal ah oo la isticmaalay sanadkii
 - e** mayl la safray sanadkii

1) Qof ayaa ku nool 6 mayl shaqadiisa oo u safra baabuur 225 maalmood sanadkii. Celcelis ahaan baabuurku wuxuu safraa 45 mayl gallonkii. Shidaalka shidaalka ugu dhow waxaa lagu iibiyaa 148.9 p litirkiiba. 1 gallon $\approx$ 4.546 litir.

a) Immisa ayay ku bixiyaan shidaalka sanadkii safarka shaqada?

b) Caymiska baaburkoodu waa £65 bishii. Dayactirka sanadlaha ahi waa £820. U qaado inay baaburka u isticmaalaan oo kaliya safarka shaqada. Immisa ayay ku bixiyaan wadarta baaburka sanadkii?

c) Waxay ka fikirayaan inay iibiyaan baaburka oo ay safraan bas. Bas bas todobaadle ah oo magaaladooda ah waa £22 todobaadkii. U qaado inay iibsaa doonaan bas bas todobaadle ah todobaad kasta oo sanadka ah. Ma kharash badan ama kharash yar bay ku bixi doonaan sanadkii? Sharax jawaabtaada.



1) Qof ayaa ku nool 6 mayl shaqadiisa oo u safra baabuur 225 maalmood sanadkii. Celcelis ahaan baabuurku wuxuu safraa 45 mayl gallonkii. Shidaalka shidaalka ugu dhow waxaa lagu iibiyaa 148.9 p litirkiiba. 1 gallon $\approx$ 4.546 litir.

a) Immisa ayay ku bixiyaan shidaalka (petrol) sannadkii gaariga (car) markay shaqada u raacaan?

Tusaale xeeladda xallinta:

Mayl sanadkii: $6 \times 2 \times 225 = 2700$ mayl sanadkii

Gallon maylkii: $1 \div 45 = 0.02$ gallon (gallons) halkii mayl (mile)

Gallon sanadkii: $0.02 \times 2700 = 60$ gallon (gallons) sannadkii

Kharashka sanadkii: $60 \times 4.546 = 272.76$ litir (litres) sannadkii

$272.76 \times 1.489 = \text{£}406.14$ sannadkii



- a) Immisa ayay ku bixiyaan shidaalka (petrol) sannadkii gaariga (car) markay shaqada u raacaan? £406.14
- b) Caymiska (insurance) gaarigoodu waa £65 bishii. Dayactirka (maintenance) sannadeedkoodu waa £820. U qaad inay gaariga (car) kaliya u isticmaalaan shaqada. Immisa ayay ku bixiyaan wadarta gaariga (car) sannadkii?
- c) Waxay tixgelinayaan inay gaariga (car) iibiyaan oo ay bas (bus) ku raacaan shaqada. Bas (bus) todobaadle ayaa ku kacaya £22 todobaadkii. U qaad inay bas (bus) todobaadle kala iibsan doonaan todobaad kasta oo sannadka ah. Ma ku kacayso bas (bus) raaci in ka badan ama ka yar sannadkii? Caddee jawaabtaada.

Kharashka sannadeed ee bas (bus) todobaadle: $22 \times 52 = £1144$

Waxaa jiri kara fursado (options) badan oo loo safro meel.

Qodobo kala duwan ayaa saameeya habka gaadiidka (transport) ee la door bidayo. Tusaale waxaa ka mid ah waqtiga, kharashka iyo saameynta deegaanka (environmental impact).

Xisaabinta (calculations) waxaa loo isticmaali karaa in lagu barbar dhigo hababka gaadiidka (transport) ee kala duwan si loo taageero go'aan qaadashada.

Samaynta safar (journey) isku mid ah marar badan waxay ka dhigan tahay in saameynta safarkaas ay batto.