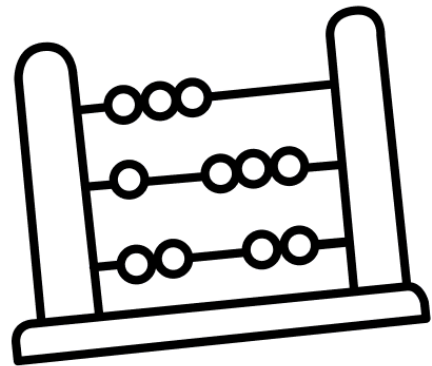


Shaqaale beereed (dalag)

Maths

Unit Xisaab goobta shaqada



Natiijo

Waxaan fahmi karaa sida xisaabta loogu isticmaalo shaqaalaha beeraha (dalag).

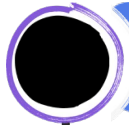
Erayada muhiimka ah

Bedka waa cabbirka dusha oo sheegaya tirada labajibbaaranaha unug ee loo baahan yahay si buuxda u daboosho dushaas.

Qiyaas degdeg ah xisaabinta waxaa laga helaa adoo adeegsanaya qiyam qiyaas ah, oo inta badan lagu soo koobo 1 lambar muhiim ah.

Celceliska (arithmetic) ee xog tirooyin ah waa wadarta qiimaha loo qaybiyo tirada qiimaha. Waa cabbirka u dhaxaysa ee matalaya celceliska qiimaha.

Shaqaale beereed (dalag)



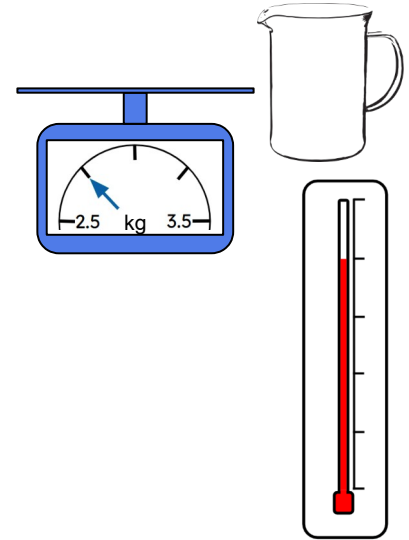
Isticmaalka beddelka warshadaha beeraha



Isticmaalka qiyaasta warshadaha beeraha

Waa maxay qaybaha xisaabta ee aad u malaynaysaa in shaqaalaha beeraha ee la shaqeeya dalagga ay isticmaali karaan?

- Bed iyo mug
- Isku dhufasho iyo qaybin
- Qiyaas
- Lacag
- Miisaan iyo cabbir
- Heerkul
- Waqti
- Beddel
- Qaab caadi ah



Inta lagu guda jiro darsigan waxaan eegi doonaa qaar ka mid ah kuwan.

Ma ka fikiri kartaa halbeegyo cabbir (units) oo bedka (area) ah?

- cm²
- m²
- km²

Kuwani waa halbeegyo aad yaqaanno isticmaalkooda.

Marka lala shaqeynayo dhulka, cabbiro kale ayaa inta badan la isticmaalaa.

Ma taqaan halbeegyo cabbir oo dhulka ah?

- Acre
- Hectare

Acres waa halbeeg dhul oo Imperial ah.

Hectares waa halbeeg dhul oo metric ah.

Acre wuxuu u dhigmaa 43 560 square feet.

Hectare wuxuu u dhigmaa 10 000 square metres.

Kee ka weyn yahay, acre ama hectare?

$$1 \text{ acre} \approx 43\,560 \times 0.092\dots$$

$$1 \text{ acre} \approx 4046.86 \text{ m}^2$$

U beddel 2.3 acres oo isku wareeg ah
(square metres).

1 acre $\approx$ 4046.86 m²

	Acres	m ²	
$\times 2.3$	1	4046.86	$\times 2.3$
	2.3	9307.778	

U beddel 2.3 acres oo isku wareeg ah (square metres).

1 acre $\approx$ 4046.86 m²

	Acres	m ²
$\times 2.3$	1	4046.86
	2.3	9307.778

U beddel 5.2 acres oo isku wareeg ah (square metres).

1 acre $\approx$ 4046.86 m²

	Acres	m ²
$\times 5.2$	1	4046.86
	5.2	21 043.672

Ingiriiska, dalagyada waxaa lagu iibiyaa tan (tonnes).

Maraykanka, dalagyada waxaa lagu iibiyaa bushels.

Waa muhiim in beeralaydu ay awoodaan inay beddelaan tan iyo bushels si ay isbarbardhigaan suuqyada.

Maadaama bushels ay tahay cabbir mug (volume) halkii cuf (mass), dalag kastaa wuxuu leeyahay qodobo beddel oo kala duwan.

Dalag	Bushel (bu) ilaa tan (t)
Barley	1 bu = 0.021772 t
Galleyda	1 bu = 0.0254 t
Saliid	1 bu = 0.014515 t
Digirta Soy	1 bu = 0.027216 t
Sarreen	1 bu = 0.027216 t

Isticmaalka beddelka warshadaha beeraha

\$1 = £0.78

Qiimaha iibka bushel kasta = \$5.86

Qiimaha iibka halkii tan = £173

Dalag	Bushel (bu) ilaa tonne (t)
Shaciir	1 bu = 0.021772 t
Galleyda	1 bu = 0.0254 t
Saliid	1 bu = 0.014515 t
Digirta	1 bu = 0.027216 t
Soy	
Sarreen	1 bu = 0.027216 t

Beeraleyda Maraykanka ama UK miyay helayaan qiimo ka fiican sarreenkooda?

Imisa bushel oo sarreen ah ayaa ku jira tan?

$1 \div 0.027216 = 36.743...$

Qiimaha dollar ee tan = $36.743... \times \$5.86 = \$215.314...$

U beddel \$215.314... oo noqo pound.

$215.314... \times 0.78 = £167.95$

Beeraha UK ayaa helaya qiimo ka fiican.

Isticmaalka beddelka warshadaha beeraha



Hubi

Run mise been?

Qiimaha ayaa ka fiican Maraykanka.

\$1 = £0.78

Qiimaha iibka halkii bushel = \$7.38

Qiimaha iibka halkii tan = £156



Run



Been

Dalag	Bushel (bu) ilaa tan (t)
Shaciir	1 bu = 0.021772 t

$1 \div 0.021772 = 45.93...$

Qiimaha dollar ee tan = $45.93... \times \$7.38 = \$338.967...$

$338.967... \times 0.78 \approx £264.39$

Beeraha Maraykanka ayaa helaya qiimo ka fiican.

1) Beerta (farmer) kee baa helaya qiimaha ugu fiican ee oats?

\$1 = £0.78

Qiimaha iibka bushel kasta = \$3.06

Qiimaha iibka tonne kasta = £274

Dalag	Bushel (bu) ilaa tan (t)
Shaciir	1 bu = 0.021772 t
Galle	1 bu = 0.0254 t
Oats (Oats)	1 bu = 0.014515 t
Soybeans (Soybeans)	1 bu = 0.027216 t
Wheat (Wheat)	1 bu = 0.027216 t

2) \$1 = £0.78

Qiimaha iibka bushel kasta =
\$3.78

Waa maxay qiimaha ugu yar ee
iibka tonne kasta ee corn (corn) ee
UK, si qiimaha UK uga fiicnaado?
Jawaabta ku qor pound-ka ugu
dhow.

Dalag (Crop)	Bushel (bu) ilaa tonne (t)
Barley (Barley)	1 bu = 0.021772 t
Corn (Corn)	1 bu = 0.0254 t
Oats (Oats)	1 bu = 0.014515 t
Soybeans (Soybeans)	1 bu = 0.027216 t
Sarreen (Wheat)	1 bu = 0.027216 t

3) \$1 = £0.78

Qiimaha iibka halkii tonne = £153

Waa maxay qiimaha ugu yar ee iibka halkii bushel ee soybeans ee Maraykanka, si qiimaha Maraykanku u fiicnaado? Jawaabta ku qor senti ugu dhow.

Dalag	Bushel (bu) ilaa tonne (t)
Shaciir (Barley)	1 bu = 0.021772 t
Galleyda (Corn)	1 bu = 0.0254 t
Oats	1 bu = 0.014515 t
Soybeans	1 bu = 0.027216 t
Sarreen (Wheat)	1 bu = 0.027216 t

1) Beerta beeralayda ayaa helaya qiimaha ugu fiican ee oats?

\$1 = £0.78

Qiimaha iibka bushel kasta = \$3.06

Qiimaha iibka tonne kasta = £274

Dalag	Bushel (bu) ilaa tonne (t)
Shaciir (Barley)	1 bu = 0.021772 t
Galleyda	1 bu = 0.0254 t
Oats	1 bu = 0.014515 t
Soybeans	1 bu = 0.027216 t
Wheat	1 bu = 0.027216 t

$1 \div 0.014515 = 68.894\dots$

Qiimaha dollar ee tonne = $68.894\dots \times \$3.06 = \$210.816\dots$

$210.816\dots \times 0.78 \approx £164.44$

Beeralayda UK ayaa helaya qiimo ka fiican.

2) \$1 = £0.78

Qiimaha iibka bushel kasta = \$3.78

Waa maxay qiimaha ugu yar ee tan (tonne) galleyda ee UK, si qiimaha UK uga fiicnaado? Jawaabta ugu dhow pound.

Dalagga	Bushel (bu) ilaa tonne (t)
Barley	1 bu = 0.021772 t
Galleyda	1 bu = 0.0254 t
Oats	1 bu = 0.014515 t
Soybeans	1 bu = 0.027216 t
Wheat	1 bu = 0.027216 t

$$1 \div 0.0254 = 39.37...$$

$$\text{Qiimaha dollar ee tan} = 39.37... \times \$3.78 = \$148.818...$$

$$148.818... \times 0.78 = £116.078...$$

£117 tan (u baahan inay ka badan tahay £116)

3) \$1 = £0.78

Qiimaha iibka halkii tan = £153

Waa maxay qiimaha ugu yar ee iibka halkii bushel ee soybeans ee Maraykanka, si qiimaha Maraykanku u fiicnaado? Jawaabta ku bixi senti ugu dhow.

Dalag	Bushel (bu) ilaa tan (t)
Barley	1 bu = 0.021772 t
Corn	1 bu = 0.0254 t
Oats	1 bu = 0.014515 t
Soybeans	1 bu = 0.027216 t
Wheat	1 bu = 0.027216 t

$$1 \div 0.027216 = 36.743...$$

$$\text{Qiimaha dollar-ka halkii tan} = 153 \div 0.78 = \$196.153...$$

$$\$196.153... \div 36.743... = \$5.3385...$$

\$5.34 halkii bushel

Shaqaale beeraha (dalagga)



Isticmaalka beddelka warshadaha beeraha



Isticmaalka qiyaasta warshadaha beeraha

Si loo saadaaliyo dakhliga dalagga, beeralaydu waxay isticmaalaan qiyaas.

Si loo qiyaaso wax-soo-saarka dalagga, waxay qaadaan muunad 1 m² oo ka mid ah meelo kala duwan oo beerta ah. Kadibna waxay helaan celceliska muunadahan si ay u bixiyaan tiro celcelis ah oo dhirta halkii mitir laba jibaaran. Tani waxay ka dhigan tahay inay markaa xisaabin karaan qiyaas tirada dhirta dhulkooda.

Waxay sidoo kale dooran doonaan geed waxayna tirin doonaan tirada xabbadaha halkii sabuul si ay u soo saaraan qiyaas.

Beerale wuxuu leeyahay beer qamadi ah oo 12 hektar ah.

Hoos waxaa ku qoran tirada sabuulka qamadiga ee 5 muunadood oo mitir laba jibaaran kala duwan:

452, 447, 485, 478 iyo 438

Sidoo kale, halkan waxaa ku qoran tirada xabbadaha ee sabuul kasta oo qamadi ah (hal geed):

38, 42, 48, 51, 41, 53, 47, 55, 49, 56

Marka hore, waxay u baahan yihiin inay xisaabiyaan celceliska tirada sabuulka halkii mitir laba jibaaran iyo celceliska tirada xabbadaha halkii sabuul.

Hoos waxaa ku qoran tirada sabuulka qamadiga ee 5 muunadood oo mitir laba jibaaran kala duwan:

452, 447, 485, 478 iyo 438

Sidee ku xisaabtaa celceliska?

Soo hel wadarta tirada sabuulka oo u qaybi tirada muunadaha.

Waa imisa tirada guud ee dhagaha?

$$452 + 447 + 485 + 478 + 438 = 2300$$

$$\text{Celceliska tirada dhagaha mitir laba jibaaran} = 2300 \div 5 = 460$$

Isticmaalka qiyaasta (estimation) warshadaha beeraha



Waa kuwan tirada xabbadaha (grains) ee dhag kasta oo sarreen ah:

38, 42, 48, 51, 41, 53, 47, 55, 49, 56

Waa imisa tirada guud ee xabbadaha?

$$38 + 42 + 48 + 51 + 41 + 53 + 47 + 55 + 49 + 56 = 480$$

$$\text{Celceliska tirada xabbadaha dhag kasta} = 480 \div 10 = 48$$

Beerale wuxuu leeyahay beer sarreen ah 12 hektar (hectare).

Celceliska tirada dhagaha mitir laba jibaaran = 460

Celceliska tirada xabbadaha dhag kasta = 48

Celceliska cufka (mass) xabbad = 50 mg

Qiimaha iibka tan (tonne) kasta = £173

Wadarta tirada xabbadaha mitir laba jibaaran = $460 \times 48 = 22\,080$

Isticmaalka qiyaasta (estimation) warshadaha beeraha



Beer shaciir ah oo 10 hektar

Celceliska dhagaha mitir laba jibaaran = 775

Celceliska xabbadaha dhag kasta = 25

Celceliska cufka (mass) ee xabbad = 46 mg

Qiimaha tan (tonne) kasta = £156

Xisaabi dakhliga (income) beerta shaciirta.

Tirada guud ee xabbadaha = 1.9375×109

Cufka guud ee xabbadaha = $1.9375 \times 109 \times 46 \times 1 \times 10^{-9} = 89.125 \text{ tan}$

Dakhliga guud = $89.125 \times £156 = £13\,903.50$

1) Xisaabi dakhliga guud ee beerta sare ee 15 hektar.

Celceliska cufka (mass) ee xabbad = 41.3 mg

Qiimaha tan (tonne) kasta = £274

Tirada panicles ee mitir laba jibaaran (square metre) tijaabooyin:

412, 423, 404, 398 iyo 438

Tirada xabbadaha ee panicle kasta:

43, 49, 41, 52 iyo 50

1) Xisaabi dakhliga guud ee beerta sare ee 15 hektar.

Celceliska cufka (mass) ee xabbad = 41.3 mg

Qiimaha tan (tonne) kasta = £274

Tirada panicles ee mitir laba jibaaran (square metre) tijaabooyin:

412, 423, 404, 398 iyo 438

Tirada xabbadaha ee panicle kasta:

43, 49, 41, 52 iyo 50

$$\text{Celceliska tirada panicles} = 2075 \div 5 = 415$$

$$\text{Celceliska tirada hadhuudhka panicle kasta} = 235 \div 5 = 47$$

$$\text{Wadarta tirada hadhuudhka} = 415 \times 47 \times 150\,000 = 2.92575 \times 10^9$$

$$\text{Wadarta cufka hadhuudhka} = 2.92575 \times 10^9 \times 41.3 \times 1 \times 10^{-9} = 120.8... \text{ tonnes}$$

$$\text{Wadarta dakhliga} = 120.8... \times £274 \approx £33\,108.37$$

Shaqada dalagga waxay u baahan tahay faham aad u wanaagsan oo ku saabsan sida loo beddelo unugyo kala duwan.

Tusaale: Acres iyo hectares

Hectares iyo mitir labajibbaaran

Lacagaha kala duwan

Qiyaas (Estimation) waa qayb muhiim ah oo ka mid ah shaqada dalagga. Waxay u oggolaanaysaa beeralayda inuu saadaaliyo wax soo saarka dalagga.