

manhajka

FASALADA WAXBARASHADA

DADKA WAAWEYN

QEYBTA:

XISAABTA

WASAARADDA WAXBARASHADA

**xarunta waxbarashada
dadka waaweyn**

manhajka

F A S A L A D A W A X B A R A S H A D A

D A D K A W A A W E Y N

QEYBTA:

XISAABTA

WASAARADDA WAXBARASHADA

**xarunta waxbarashada
dakka waaweyn**

H O R D H A C

Manhaajkani wuxu. Jiran svedraddit caruur ee fasalida waxbara-srade u dha weyeey.

Mannajka wuxu ka kuubar yero. Waryalaan aan siicyno in qofka weyni waa baaban yahay taas uu parto ee noloshaan iyo meheraddii, ka kariinaynay.

Qeybta hore ee fasalka kowesd aad ayay o fududchay, iyede oo daaka looga soob bilaabayo Tirsimadda. Taas micnaheedu ma aha in dadka la illidays, waxase looga jireed naqtiiniid iyo in fasalka ardeyda ku jirta oo heerka agoontrroodu kala geddisan tahay ay isku meel ka bilaabaan. Hase yeeshaa haddii aad ko baqatid n ardadu ku caajisto waad shaafi kartaa meeshee aad istidhaahdid ardeydaadu wey fahmeysaa. Taas micnaheedu waxa weeye ma aha khasab in aad manhajka u reacdid sida uu u kala horeeyo.

Waxa aan barayaasha ka codsaneynaa in ay isku xidhaan nolosha, baahida qofka iyo waxa ay dhigayaan. Tusaale: marka ay isugeynaa dhigayaan. Waa in aaney tirooyin mutuxan u dhigan dadka. Waxa habboon in aad tirooyin micno leh aad u dhigtid. Sida: isugey: 4 halaad + 5 owr = 9 neef. Halka aad ka odhan taheyd. Sugee: 4 + 5 = 9.

Waad mahadsan tiihin.

Ibrahim X. Barre
Madaxda X.W.D.W.

FASALKA 1aad

Tirooyinka Idil

1. Akyriga iyo Qorista tirooyinka Idil ee 1 iilaal 9.

Dariiqo:-

- Qorista tirooyinka waxaad raacisaan erayo.
- Ku qor tusaalooyin tirooyin ah sabuuradda iyo buugaba. Toosi ardayga.
- Ku qor hal tiro 5 labajibaaran dhexdha.
- Ka soo qaado tusaa~~looyin~~ degaanka kuu dhow; 3 dugsi, 9 baar, 2 sac iwm.
- Waxa ka horreya iyo waxa ka dambeeyaa (ama 2, ama 6, ama 8).

Tusaalooyin: Wuxaan isticmaashaa qiimaha alaabta taal la

Dugaanka: Sigaar 3 Sh., saabuurn 2 Sh.

Isgarabdhigga xaddiyada

Tyamaa Jaban (Rakhiisa)? Iyamaa weyn? Iyamaa dheer?

Dariiqo:-

Isticmaal halbeegyo cabbiraadeedka caadiga ah
Sida kiilograam, kiintaal, mitir, litir iwm.

Tusaalooyin: - Dhererka Guryaha, culayska xabxabyo.

Isugeyn:-

- Isugeynta tirooyinka halka god ah iyo kuwa ka yar 10.
- Astada isugeynta "+" iyo "=".

Dariiqo:-

Isticmaal qiimaha alaabta taal dugaanka. Isugeynta laba ama in ka badan oo alaab ah.

Isku xir magacda alaabta iyo tirooyinka iyo halbeegyo cabiraadeed.

Tusaalooyin:- Faadumo waxay gadatay 1 saabuun ah (2 sh) iyo (baakid) sigaar ah (3 sh).

$$2 \text{ sh.} + 3 \text{ sh.} = 5 \text{ sh.}$$

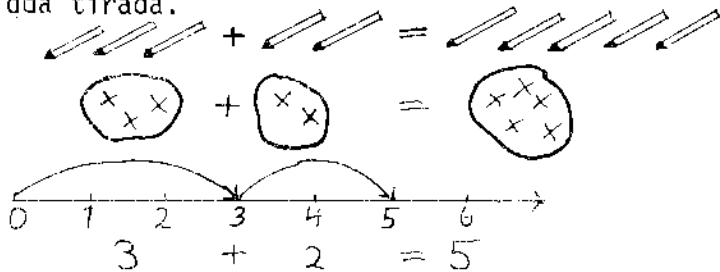
imiisa wax ayaad ku gadan kartaa 9 sh.

1 marwaxad iyo 1 dhalo saliid iyo 1 buug

1 sh. + 6 sh. + 2 sh. = 9 sh.

Tirooyin Idil:

Tirooyinka waxaad ku muujin karnaa walxo, astoooyin ama xariiqda tirada.



U sheeg in u Eber (0) yahay bilowga tirada.

Isugeyn:

Siyaabaha kala geddisan ee isugeynta:

$$\begin{array}{r} \boxed{} + \boxed{} = 9 \\ \boxed{} + 7 = 8 \\ 2 + \boxed{} = 7 \\ 3 + 6 = \boxed{} \\ 2 + \boxed{} = \boxed{} \end{array}$$

Tusaalooyin:

Iibsiga iyo gadashada.

Tirada xoolaha iyo xisaabinta waxa lagu helo marka Beeraha la gooyo.

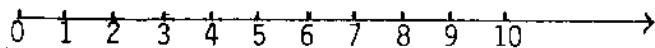
Samaynta: Ninbaa waxa lagu amray toddoba kursi. wuxu sameeyey 4 kursi.

$$4 + \boxed{} = 7$$

Tirooyinka Idil:

Ku bilow in 10 yahay halbeeg cusub

Dariiqo:- Sii wad xariiqda tirada
sii wad tirsiga ka dambeeya 9.



Toban shilin oo dhagax ah waxa loo rogi karaa lo shilin oo warqad ah.

Tsaaloyin: 10 qalinoo kala daadsan waxa laga dhigi karaa xidhmo.
10 buug waxa laga dhigi karaa (boqsho) 10 buug ah.

Bilowga rug qiimeed: kow, tobno

Cariigo: u tiri toban toban (ilaa 90).

iswaydaarinta rugaha

1 4

4 1

is garabdhig lammaanayaashasida 28/82 17/71 iwm.

Labada tiro iyamaa weyn?

Kala dhigidda tiro laba god ah.

73 = 7 tobno + 3 halbeeg

2 tobno + 7 halbeeg = 27

isu keenidda tobno iyo halbeegyo si ay tiro
keliya u noqdaan.

Isugeyn:

Isugeynta tobno (wadartu haka yaraato 100).

Tusaalooyin:

Isticmaal liistada qimaha alaabta dukaanka.

Isticmaal waxa ay soo saaraan iskaashatooyinku.

20 kiintaal + 10 kiintaal + 60 kiintaal.

- Fogaanta la socdo.

Maalinta kowaad 20 km, maalinta labaad 30 km,
maalinta sadexaad 20 km.

isugaynta tobno iyo halbeegyo:

20 + 5 =

80 + 7 =

30 + 2 + 6 =

40 + 3 + 4 =

Tirooyin Idil:

Habdhisca tirada:

10 halbeeg waxay sameeyaan halbeeg ka sareeya ee ku xiga

10 halbeeg - 1 toban

10 tobno - 1 boqol

10 boqol - 1 kun

Cariigo: Joogtax u qor tirooyinka ka kooban saddex ama afar god

- Tus in rugta tiro ay muujineyso qimahaeeda.

- Wuxu ka qabto eber habdhiska tirada.

- Eber waxa ay buuxin kartaa rugo kala qiime sareeya.

1023 wuxuu tusayaa in aanu boqol tahayn, laakiin
ju Farvanay 1 kun.

Isugeyn: Buuxinta meelaha madhan (isu diyaarinta sidashada).

Tusaalooyin:

14	+	<input type="text"/>	=	20
87	+	<input type="text"/>	=	90
<input type="text"/>	+	7	=	60
21	+	9	=	<input type="text"/>

isugeynta sidashada leh:

7 + 8	25 + 6
7 + 3 = 10	25 + 5 = 30
10 + 5 = 15	30 + 1 = 31

Dariigo: Kala dhig hal tiro oo ka mid ah wadarta

Buuxi tobanka, dabadeedna u gee inta ka soo hadhay "hal tiro" tobanka.

Isugeynta isdaba joog ah

3 + 4 = 7	2 + 7 = 9
7 + 4 = 11	14 + 7 = 21
11 + 4 = 15	26 + 7 = 33
<input type="text"/> + 4 =	
<input type="text"/> + 4 =	

Isugeynta tirooyinka labada god ah oon lahayn sidasho.

34	22	43
+ 23	+ 76	+ 22
57	98	+ 13
		78

Dariigo: Marka hore isugee halbeegyada, dabadeedna tobnaha.

Tusaalooyin: Tirada ardayda fasalada.

Fogaanta baabuurta lagu socdo.

Isugeynta tirooyinka labada god ah ee leh sidashada:

27	14
+ 15	+ 35
42	29
	78

Dariigo: 7 + 5 waa 12 halbeeg - ama 1 toban iyo 2 halbeeg.
Tobanka cusub waxa lagu dhigayaa labada tobnood ee kale ee labada (ama ka badan) tiro ee la isugeynayo.
Isugee tobnaha.

Isugeynta waxaa ku isticmaashaa mee zha qofku u garan karo sida:-

1. Jukaanada (iibashada iyo gadashada)
2. Kharashaka guriga (immisa aaya lagu isticmaalay waxaas?)
3. Xisaabinta qiimaha waxyaalaha la too saaro: lacaga
4. Xisaabinta qiimaha beabuurta, iyo wixii la ijaarto.

Kalagoyn:

ku difow tusaalooyin nolosha bulshada, sida:-

- Ninbaa wuxu heystay 8 Sh. Wuxu gatay huug qiimahiisu 6 Sh. Yahay Immisa ayaa u soo hadhay?
- Ninbaa wuxu haystay 10 qeel ah. Wuxuu iibiyey 3. Immisa ayuu naastaa?
- Ninbaa wuxu shaqeeyaa 9 saacadood maa'insii. Wuxu shaqeeyey maalin 5 saacadood. Immisa ayuunu shaqeynин.

Kalagoyn ta waa lidka isugeynta:

$$\begin{array}{r} 7 \\ + \quad 3 \\ \hline 20 \end{array}$$

$$\begin{array}{r} 10 \\ - \quad 3 \\ \hline 26 \end{array}$$

$$\text{Halkaad ku odhan lahayd } 10 - 8 = 2 \text{ ama } \begin{array}{r} 10 \\ - \quad 8 \\ \hline 2 \end{array}$$

waxaad odhan kartaa: Immisa ayaan u geyn karaa 8 si aan u helo 10.

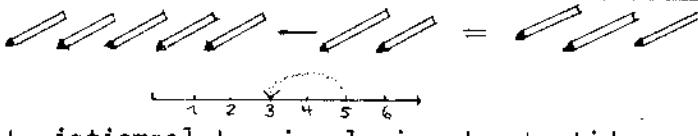
Dariigo: Isugu dar layliyaal isugeyn ah iyo kuwo kalagoyn ah oo tusida ay labado lid isugu yihiin.

Shaqooyin kala duwan:-

10	-	2	=	<input type="text"/>
<input type="text"/>	-	3	=	8
<input type="text"/>	-	<input type="text"/>	=	8
<input type="text"/>	-	2	=	<input type="text"/>
8	-	<input type="text"/>	=	2

ka soo qaado tusaalooyin siyaabaha loo shaqaysto maalinta kasta (qaado tirooyin).

Sida loogu muujiyo kalagoyn ta waxyaalo, astoooyin ama xariiqda tirada.



ku isticmaal koomiyaal si aad u tustid.

$$\begin{array}{r} 10 \\ 10 \\ 10 \\ \hline 10 \\ 10 \end{array} - \begin{array}{r} 10 \\ 10 \end{array} = \begin{array}{r} 10 \\ 10 \\ 10 \end{array}$$

Kala goo halbeeg idil adoo isticmaalaya layli hadal ah:-
Tusaalooyin:-

$$\begin{array}{r}
 20 - 7 = \\
 80 - 9 = \\
 200 - 20 = \\
 500 - 200 =
 \end{array}$$

Kala garashada laga gooye (subtrend) faraq:-

$$\begin{array}{r}
 10 - 7 = 3 \\
 10 \text{ laga gooye} \\
 7 \\
 3 \text{ faraq}
 \end{array}$$

Dariiqo: magacyadaas waa in aanan lagu dheeraan Waa in uu ardaygu ku garan karaa kalagoynta ka soo qaadashada leh.

Kalagoynta ka soo qaadashada leh:-

$$\begin{array}{r}
 20 \\
 - 7 \\
 \hline
 13
 \end{array}$$

Dariiqo: Todobada (7) waxba kuma dari karo si aan u helo eber, taakiin waxaan u geyn karaa si aan u helo 10. Tobankaasi (10) waxan ka soo qaadanay "laga gooyaha". Waa in aan ka gooyaa tobankaasi "laga gooyaha". Waa in aan u geeyaa ka go'e.

Kalagoynta "ka soo qaadashada leh".

Dariiqo: Kordhi tirooyinka marka u ardaygu aad u garto tirooyinka yar yar, ku bilow tirooyin buuxa.

$$\begin{array}{r}
 100 \quad 80 \quad 50 \quad 200 \quad 5000 \\
 - 75 \quad - 16 \quad - 8 \quad - 80 \quad - 550 \\
 \hline
 \end{array}$$

$$\begin{array}{r}
 \text{Marka dambe:} \quad 112 \quad 222 \quad 5210 \\
 \quad \quad \quad - 35 \quad - 80 \quad - 1382
 \end{array}$$

Isticmaal tirooyin keliya oo ay la soodaan cabbiraadyo kala duwa

Iskudhufasho

Iskudhufasho waa isugeyn gaaban

Tusaale: Ninbaa wuxu soo gatay 4 midiyood oo middiiba tahay 7 sh.

furfurid: Wuxuu bixiyey, 7 sh. + 7 sh. + 7 sh. + 7 sh. = 28 sh.

Waxaad u qori kartaa: 7 sh. x 4 = 28 sh.

Haddaba astada isku talaabta ah "x" waxa weeyi

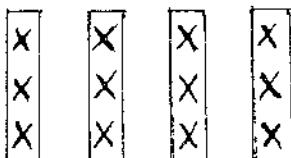
Astada Iskudhufashada.

Isticmaalka iskudhufashada:

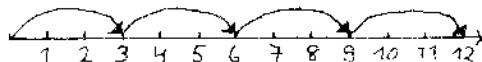
Qof keliya ayaa wuxu ijaar baabuur ka bixiyey 2 sh. 4 qofna waxay ka bixinayaan 2 sh. x 4 = 8

Hal baako oo sigaar ah qiimihiiisu waa 3 sh. 5tii baako waa imisa?
3 sh. x 5 = 15 sh.

Mujjista Iskudhufashada



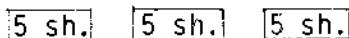
$$3 \times 4 = 12 \text{ sh}$$



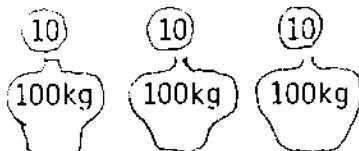
$$3 \text{ km} \times 4 = 12 \text{ km}$$

Xusuus:-

$$3 \text{ km} \times 4 = 3 \text{ km} + 3 \text{ km} + 3 \text{ km} + 3 \text{ km}$$



$$5 \text{ sh.} \times 3 = 15 \text{ sh.}$$



$$10 \text{ senti} \times 3 = 30 \text{ senti}$$

$$100 \text{ kg} \times 3 = 300 \text{ kg}$$

Diyaarinta cabbiraadda bedka:-

Tusaalooyir ka soo qaado beeraha, dhismaha, ama waxyaabaha tagu sameeyo qarante.

Tusaale: ninbaa wuxuu ku sameeyey gurigiisa saqaftiiisa jiingad. Halkii dhinactax ayaa wuxuu u baahan yahay / jiingadood. Saddexdii jiif-u-tax immisa ayey u baahan yihiin?

Tusaha iskudhufashada:-

ku bilow qiimaha gadashada alaaboo:-

1	baako	oo	sigaar	ah	qiimihiisu	3	sh.
2	"	"	"	"	"	6	sh.
3	"	"	"	"	"	9	sh.
4	"	"	"	"	"	12	sh.
5	"	"	"	"	"	15	sh.
6	"	"	"	"	"	18	sh.
7	"	"	"	"	"	21	sh.
8	"	"	"	"	"	24	sh.
9	"	"	"	"	"	27	sh.
10	"	"	"	"	"	30	sh.

Tusaalooyin kale ka qaado qiimaha hilibka, lhuudradha.

Tusaha iskudhufashada 1 ilaa 10.

Dariigo:- Tusaha ku sawir sabuurada. Sharax laba ama saddex dhinactax. Inta kale u daa ardayda.

Iskudhufashada tiro laba god ah fyo tire hal god ah (male qaadasho)
 $12 \times 4 = 48$

Dariigo:- Iskudhufo godadka koowaad. Wuxaan heshid ku qor tirooyinka hoostooda, ku dhufo tirada tobnaha ah.
Ku jawaab hoos.

Iskudhufashada qaadashada leh:-

Tiro laba god ah iyo mid hal god ah.

Dariigo:- Sida la isugu dhufanayaa waa sida ta hore, hase ahaatee waxaad xusuusisaa in uu 10 halbeeg u beddelayo 1 tobani.

Dariigada guud ahaaneed:-

Isticmaal wixii tusaalooyin ah ee suurtagal ah ee ka iman kara. Miisaaniyada guriga, boostada, beeraha iwm. Su'aalaha ku saabsan xisaabinta, iibsashada iyo gadashada. Xaga dhismaha iyo maamulka su'aalo ka sii ardayda.

Tusalao:- Baabuur ayaa wuxuu qaadi karaa 2000 kg. Haddii la rabo inlagu qaado 25 sanduuq oo midkiiba yahay 90 km. Sidaasi ma suurtoobaysaa?

Warkaad ardayda siisid tusaalooyin dhaqan gal ah, sii layliyo ka qoqban tirooyin keliya. Waa in ardaygu xusuusan karaa xisaab fal-ka iskudhufashada. Waa in uu ardaygu u beddeli karaa su'aasha erayada ku qoran tu u dhiganta oo xisaab ah. Waa in ay jiraan tallaabooyinkani.

1. Su'aasha oo ku qoran erayo
2. Garashada xisaab falka lagu furfurayo su'aasha
3. Furfurista
4. Garashada xirriirkka ka dhexeeya jawaabta iyo su'aasha la siiyey.

Jabbiraada Amminta:

Baahida too qabo iyo xisaabinta Amminta. Markee too baahan yahay Amminta. Sida ay Soomaalidu u xiisaabsan jirtay Amminta iyo sida rabka caalmiga too isticmaalo, isku beddelka halbeegyada Amminta.

Daqiqad iyo saacad:

Inta daqiqo eed shaqo ku dhammayn karto, inta saacadood. Fogaanta la lugeeyo, fogaanta baabuurta (Isticmaal Iskudhufashu). Kalli ayaa beer soo gaadh siiya 100 litir oo biya ah daqiqadiiba, imisa litir ayuu soo gaadhsiinaya 10 daqiqo, saacad bedhkeed, 10 daqiqo.

Isku bedelaada daqiqadaha iyo saacadaha ama saacadaha iyo daqiqadaha.

Tusaale:- Amminta u dhexyasa Tabadan Amminood.

1.25 sac iyo 3.47 sac

faraq: 2 sac iyo 22 daq.

Dhammaystirka habdhiska:-

Maalmo, toddobaad, bil, sano. Xilliga roobka iyo xilliga aanu roobku jirin Xilliga abuurista iyo goynta. Soo saarka maalmaha iyo toddobaadada lagu qabto guri dhisga, qudaalka iyo waraabinta beeraha. Soo saar mushaharka shaqaalaha la ijaarto Amminta dheer. Akhriska iyo qoraalka marka la soo gaabiyoo ilbiriqsi, daqiqad, iyo saacad.

Qaybin:-

Baahida loo qabo tirooyinka la isuqaybiyo.

Miisaaniyadda guriga: 320 sh., bishii.

Immisa la isticmaala toddobaadkii? $320 : 4 = 80$ sh

Waxay soo saarto iskaashatadu: 560 kg. ayaa loo qaybiyey 70
beeralay ah. Midkii immisu helayaa? $560 : 70 = 8$ kg.

Ninbaa shaqeeyey 150 daqiqo. Immisa saacadood ayuu shaqeeyey:

$$150 : 60 = 2 \text{ sac iyo } 30 \text{ daq.}$$

Sharaxa qaybinta: Soo saarka qaybo isleeg oo lagu helo tiro keliya.

Tusaale: Hooyo ayaa waxay shanteedii carruurta ahayd siisay 10 sh. Midkii imiisa ayuu helayaa?

• • • • • • • • tirada lagu siiyey

[] [] [] [] [] tiradii oo loo qaybiyey 5 meelood.
 $10 : 5 = 2$

Labaatan waxa loo qaybiyey kooxo.

20 hal "kox" ah:	$20 : 1 = 20$
20 laba koox ah	$20 : 2 = 10$
20 afar kooxood ah	$20 : 4 = 5$
20 tobab kooxood ah	$20 : 10 = 2$

sabuuradda ku qor tusaalahaas.

Qaybintu waa lidka iskudhufashada:

$$3 \times 4 = 12. \quad 12 : 4 = 3 \text{ ama } 12 : 3 = 4$$

Iskudhufashadu waxaylabo tiro ka dhigtaa tiro keliya. Qaybintuna waxay tiro ka dhigtaa laba tiro, xiriirkaas ku isticmaal hubinta jawaabta iskudhufashada iyo qaybinta. Habee shaqo u ardaygu ku noq-noqdo. Layliyada aan qoraalka ahayn.

La gaybshe, gaybshe, qayb:

$$12 : 4 = 3 \text{ Qayb}$$

La gaybshe Qaybshe

Geynta loo qaybinayo tiro laba god tiro hal god ah.

<u>16</u>	<u>069</u>	
<u>2</u>	<u>32</u>	3 <u>207</u>
<u>2</u>	<u>12</u>	18
<u>12</u>	<u>12</u>	27
<u>30</u>	<u>30</u>	27
		00

ogeysiis: ku bilow 20
waayo 2 uma
qaybsantu 3.

Geynta loo qaybinayo tirooyinka waaweyn 10 ama 100.

Cartigo: Wuxaad isticmaashaa layliyo aan lahayn hadhaa.

Tusaale:- 220 : 10 = 22

$$3700 : 100 = 37$$

$$\text{Ha isticmaalin:-} \quad 227 : 10 = 22.7$$

$$3751 : 100 = 37.51$$

. Paci layliyada qaybshuhu yahay 2 ilaa 9 (isku diyaarinta jajabka)

10,100, 1000 (isku diyaarinta jajab tobantaha)

12,24,60 (soo saarista Amminta).

ast-a-sadda dhererka iyo Fogaanta

ast-a-sadda soo saaridda dhererka iyo fogaanta. Meelaha looga baahan ast-a-sadda dhererka iyo fogaanta ee ay ka mid yihiin: guri dhiska na dhererka iyo joogga guriga), Beer fal, dhiska kalliyada, dhaqaalaha guriga (dhererka dharka aad u baahan tahay). ast-a-sadda dhererka cabiri jiray (taako, xusul).

ast-a-sadda cabi xka baxgacsan: Baahida loo baahan yahay in wax lagu ast-a-sadda na thengoo yar yar iyo kuwa waaweyn.

Sida wax loogu cabiro usha mitirka ah:-
 Ku cabir alaabta aqalka, qolalka, iyo dadkaba.

Ku shaqeysiga sm iyo mitir (habdhiska mitirka)

100 cm = 1 mitir.

Sida la isugu beddelo halbeegyada:

Dariiqo: Tusaalooyin badan ka soo qaado meelaha lagu isticmaalo.

Isku garabdhig habdhiska ingiriisiga iyo habdhiska mitirka.
 Tuse u samee sida la isugu beddelo halbeegyada ku jira habdhis keliya.

Waar/hiish iyo m/sm.

Sida loo isticmaalo tusahaas.

Dariiqo: iska jir jajabka (e.g. $2\frac{3}{8}$ hiish).

U bilow km:- 1000 m = 1 km.

- Ammin inteyya ayaad u baahan tahay in aad socotid 1 km?
- Fogaanta loo socdo tuulooinka iyo magaalo madxyada gobolada
- Qiimaha waddooyinka (1 km qiimihiisu waa imisa).

Isticmaalka habdhiska: mm, cm, m, km

Siyaabaha loo isticmaalo halbeegyadaas (tusaalooyin: fogaanta oo lagu cabiro km, m).

Sida la isugu beddelo cabiraadaha iyadoon lahayn jajab.

Tusaale: 2530 m = 2 km iyo 530 m.

Cabiraada culayska:

1000 g = 1 kg.
 100 kg = 1 Kiintaal.

Sida la isugu beddelo halbeegyada culayska.

Isticmaal xisaab falada: Iskudhufashada iyo qaybinta, isugeyn iyo kalagoyn.

Dariiqo: Iska jir jajabka

Tusaale: 240 kg : 20 = 12 kg.

Ha waydiin 237 kg : 20 = 11.85 kg.

↳ isticmaal cabiraada culayska

- Dhaqaalaha guriga (rashinka)
- Qiimaha
- Beeraha: bacrimiye, inta la isticmaalay
- Caafimaadka: culayska qofka marka loo eego dhererkiisa.

Jajabyo:- Xubintani waxay ku saabsan tahay dhigista jajabyada caadiga ah ee ugu fudud. Hooseeyaashu waa inay ku koobnaadaan 1 ilaa 9 iyo 10 ilaa 100. Haddii fasalku ka bixi karo, waad qaadan kartaa hooseeyaal ah 12, 24, 60 oo Tooga baahan yahay xisaabinta amminta iyo 1000 oo looga baahan yahay xisaabinta ga-raam iyo mitir.

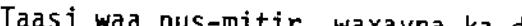
Raadinta walxo aan mar walba idlayn oo qaybo too jajabiyeey.

Tusaale:- Had iyo jeer ma gadatid kilograam dhan oo sonkor ah, mar walba ma karisid kiloogaraam idil oo bariis ah. Had iyo jeer bil mushaharkeed oo idil mar kaama wada baxdo, marar baa qaar kuu soo haraa. Hawl aad qabanaysay inta badan mar ma wada dhammaysid.

Qof baa doonaya inuu subax aaradeeyo maro hal mitir ah, ka soo qaad in jaantskani hal mitir yahay:-



Tobankii subaxnimo ayuu barta fallaarta ku muujisan gaadhay



Taasi waa nus-mitir, waxayna ka dhigantahay shaqadii uu qabanayey badh buu dhammeyey. Wuxaad qori 1/2 m.
Barashada erayada sarreeyo, xarriijinta qaybta iyo hooseeye waa:-

Wax idil ayaa too qaybinayaa laba isle'eg. Labada qayboodba qaadi maysid, Wuxaad qaadanaysaa qayb qura

Sarreye	1
calaamadda	-
qeybta	2 hooseeye

Sarreeye : wuxaad qaadan labada qaybood oo isleeg midkood
hooseeye: wuxaad qaadan shayga idil u kala jabin laba qaybood :
isleeg.

Waxa habboon in ugu horreynta too fiirsado hooseeyaha, taasoo si degdeg ah ka caawimaysa in aad ogaatid jajabka aad ka shaynaysaa weynaantiisu intuu yahay.

Munaasabaadka la isticmaalayo 1/2 (badh):

Nus kiilo ah Sonkor, bur, bariis, hilib iyo khudar. Nus mitir an dhar, xarig, loox, maro-kaneeco iwm.

Ri nuskeed, digaag nuskii, liimo muskeed iwm.

$$\text{Isugeyn:- } \frac{1}{2} \text{ kg} + \frac{1}{2} \text{ kg} = 1 \text{ kg} \quad (\text{ama } \frac{2}{2})$$

$$\text{Kalagoyn:- } 1 \text{ kg} - \frac{1}{2} \text{ kg} = \frac{1}{2} \text{ kg}$$

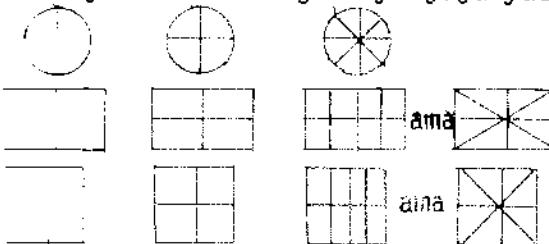
Marxaladan waa in ardaydu layliyada jajabyada oraah ahaan uga shaqeyaan ee aanay tirooyin ku shaqayn.

Barashada afareedyo iyo sisdeedyo iyadoo la tixraacayo badhadh.

$$\begin{array}{c} \frac{1}{2} \\ \hline \frac{1}{4} & \frac{2}{4} & \frac{3}{4} \\ \hline \frac{2}{8} & \frac{3}{8} & \frac{4}{8} & \frac{5}{8} & \frac{6}{8} & \frac{7}{8} \end{array} \quad | \quad \begin{array}{l} \text{ama } \frac{2}{2} \\ \text{ama } \frac{4}{4} \\ \text{ama } \frac{8}{8} \end{array} \quad \begin{array}{l} \text{Ha la kaso in } \frac{1}{2} \\ \text{uu la qime yahay} \\ \frac{2}{4} \text{ ama } \frac{4}{8} \end{array}$$

Tisaabinta layliyo ku saabsan badhadh, afareedyo & siddeedyo:

Jaantusyada loo adeegsanayo jajabyada:-



Isugeynta & kala goynta jajabyo aan dhaafsiisnayn (hal) hooseeyaal kooduna is tieg yihiin.

Isugeynta jajabyo ah 10 eedyo iyo 100 eedyo ama 12 eedyo,
12 eedyo iyo 60 eedyo iyadoo aan la adeegsanu jaantusyo u taagan.
Isugeynta iyo kala goynta jajabyo leh hooseeyaal isku midah.

$$\text{Tusaale: } \frac{1}{4} + \frac{2}{3} = \frac{3}{12} + \frac{8}{12} = \frac{11}{12}$$

$$\frac{2}{3} - \frac{1}{3} = \frac{8}{12} - \frac{3}{12} = \frac{5}{12}$$

Isgarab dhigidda jajabyo

- Keebaa weyn 1/4 iyo 3/8?

Sida loo raadsho hooseeyaha ay wadaagaan jajabyo

- Naqtiiin tusaalihiif 4eedyo loo rogayay 8 eedyo.
- Kee baa weyn 1/3 iyo 1/2?
- 1/3 iyo 1/2 mid kasta 6 eed u rog adoo jaantus adeegsanaya.
- Ha loo fiirsado beddel ku dhacay sarreeyaasha marka labada jajab 6eedyo loo rogay.
- Dheeg in hooseeyaha ay wadaagaan yahay 2 x 3.

Isugeynta iyo kala goynta jajabyo hooseeyaaalkoodu kala jaad yihiir

$$\text{Tusaale: } \frac{1}{4} + \frac{2}{3} = \frac{3}{12} + \frac{8}{12} = \frac{11}{12}$$

$$\frac{2}{3} - \frac{1}{4} = \frac{8}{12} - \frac{3}{12} = \frac{5}{12}$$

- Jaantusyo baa la adeegsanyaa si loo kaso int:

$$\frac{1}{4} = \frac{3}{12} \quad \text{iyo} \quad \frac{2}{3} = \frac{8}{12}$$

Noocyada jajabyada:-

- Jajab qumane $\frac{1}{3}, \frac{3}{3}, \frac{5}{3}$
- Jajab ma qumane $\frac{5}{4}, \frac{3}{2}, \frac{5}{2}$
 $1\frac{1}{4}, 1\frac{1}{2}, 1\frac{3}{5}$

Dariiqad:-

Marka ta dhigo lane kaso noocyada jajabyada, isku dhaf jajaby hooseeyaaal kala duwan leh (ayadoo i thawraayo xannibaadihiif loo soo sheegay), dabadeed he ta waaeyo hana la kala gooyo. Istimmaal tusaiayaal ama layliye oo sha la xiriira, (tixraac dariiqada guud ee ugu dambaysa xilinta isku dhufashada ee fasse ka koowaad).

Geometri

Wareegga iyo bedka laydi

Inta wareeg, bed iyo laydi aan loo gelin waxay yihiin, waxa lagama maarmaan ah in waxa xarriiqtoosan iyo xagal qumar la yiraahdo la barto.

Xarriiq toosan:- Way adag tahay si xarriiq toosan looga helaa dabiicadda, Taakiin inta badan waa laga heli karaa dhaqanka baniaadanka.

Xariiqo dabiicadeed
Xariiqo dad sameeya



Tusaalooyin xariiqo toosan:-

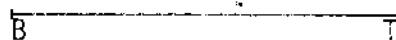
- Dhinacyada dariishad, jirjirrada miis, jirjirrada wargeys, iwm. Ardayda u dir inay sawiraan xariiqyo toosan.

Ardaydu ha u fiirsadeen walxo kala duwan, hana tiriyeen inta xarriiq toosan ay ka heli karaan.

Muujinta xarriiq toosan:-

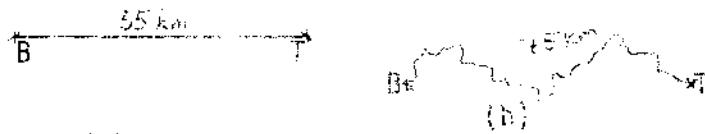
-addii xariiq baro jiftimedkeedu yihiin B iyo T, xariiqdaas waxa lagu magacaabaa BT.

Xarriiq toosan oo kasta BT waxay leedahay dherer ah fogaansha u cheexeyya B iyo T.



B iyo T waxay u taagnaan karaan laba aqal, laba ceel, laba tuulo. Fogaanshaha B iyo T udhexeeyaa a wuxu noqon karaa mm ama smesa KB.

Marka B iyo T muujinayaan laba tuulo, jaantuska (v) waa



Waddadii laakiin (a) ma aha waddadii. Waayo?

Xarriiq toosan BT waa fogaanshaha ugu gaaban ee B iyo T isku xiraya sida marka aad diyaarad ku safartid oo kale.

Xagal qumman:-

Dariiqo: Ha ku qeedin xagal darajoooyinkeeda sida xagal qu mani waleed hay 90 darajo, maadama aanay ardaydu aqoon xagal iyo darajo midnaba, u bar in xagal qummani tahay furraant ay sameeyaan kulanka laba darbi, darbi yo kebisku, labade jiftin ee deriska ah ee xaashi.

Ardaydu xagal qumman ha ka soo saareen degaankooda.

Cabbiraada bed.

Dhariiqo: Isticmaal laydi lagu sawiro buuga ardayda, ha isticmaalin erayga laydi, ku magacow arayga shaxan.

Dherer: 6 afargees, labjibaar, ballac: 4 afargees.

dherer (dhinaca b) Tiri inta afargeesle shaxankaagu ka kooban yahay. Dhinaciiba waxaad ku haysataa 6 afargeesle, joogtaxina 4 afargeesle. Bedka waxaad ku helaysaa adoo isku dhufta afargeeslayaashaha dhinactax iyo joogtax ka kooban yahay
 $b \times t = \text{bedka laydiga ama } 6 \times 4 = 24 \text{ afargees}$
Ogoobey halbeegga aan wax ku cabbiraynaa waa afargees.

b

Isticmaal walxo kala duwan ee qaab laydi leh.

- Xagga beeraha halbeeg cabbiraadeedka la isticmaalaa waa jibaa' ama qoodi.
- Xagga dhismaha dhagxa nta kabiska la dhigo oo la yiraa "Muturelli" ama "Marmar".

Sharax in halbeeg cabbiraadeedyada tusaalooyinkaasi kala duwan yihiin, hase ahaatee mar walba $b \times t$ ay leedahay halbeeg.

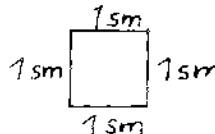
Naqtiin halbeeg cabbiraadeedyada dhererka ama fogaanshaha ee habdhiska tobanaale.

Ahmiyad saar cabbiraadeedyada ugu caamsan, sm iyo m.

Barista sm²: Baahida loo qabo halbeeg cabbiraadeedyo bededka u caam ah. Cabbiraadda bedku wuxu sal ahaan la xiriir aa cabbiraat dhererka.

Halbeegga bededka yaryar loo isticmaalaa waa sm²

Sentimitir labajibbaaran



Sentimitir labajibaarani waa shaxan dhiniciisa kastaa 1 sm dhererada le'eg yahay, geesihiiisuna ay leeyihiin 4 xaglood ee qumman.

Dariiqo:- Warqado ka jarjar shaxanno kala duwan (laydiyo iyo labajibaaranayaal) kalana jin ah.

Shaxan kasta ku magacow xaraf. U qaybi ardayda si ay u raadiyaan una qortaan.

- Dhererada dhinacyada
- Bededka shaxannada
(arday kasta ha isticmaalo masdarad).

Sii dhererka dhinacyada walxo waaweyn, sida sawirrada iyo khariidaha fasalka yaal, dariishadaha, albaabka iwm. Ardaydu ha helaan bedka sm² (ha soo qaadin xooga).

Halla barto m² iyo km² oo looga baahan yahay raadinta beded waaweyn sida beeraha guryaha iwm. Sii bedka iyo hal dhinac ee shaxar Weydii ardayda in ay helaan dhinaca maqan.

$$30 \text{ sm}^2 = 5 \text{ sm} \times \boxed{} \text{ sm}$$

Laydigu waa qaab joometiri ee ugu caamsan degaanka baniaadamka:

Beeraha, kaliyaasha beer, guryaha intooda badan, derbiyada, darri shadaha, albaabada, miisaska, darmada, sarriraha iwm.

Astaamaha laydi:- Shaxan afar dhinac leh, dhinacyade iska soo horjeedaa waa isle'eg yihiin, kuwa dariska ahina waa kala yar yihiin, isla markaasna waxay sameeyaan xagal qumman.

Markay ardaydu aqoonsadaan waxa laydi yahay ha sawireen laydiyo kala duwan hana cabbireen (jajab yaanu jirin), sidoo kale halla cabbiro walxo laydiyo dhab ah.

Laydiyo kala duwan ha laga shaqeyyo (sm^2 , m^2):

Laabajibbaaranayaal iyo laydiyo

$$5 \text{ sm} \times 3 \text{ sm} = \boxed{} \text{ sm}^2$$

$$15 \text{ m} \times \boxed{} \text{ m} = 15 \text{ m}^2$$

$$\boxed{} \text{ m} \times 5 \text{ m} = 15 \text{ m}^2$$

Halloo fiirsado in marka bedka la soo saarayo ay dhinacyadu isla halbeeg ku cabbiran yihiin. U door layliyo la xiriira no-lasha maalin walba.

Fik radda bedka la xiriiri ammin: Haddii nin ay 5 saac ku qaadat: inuu sameeyo 1 m^2 oo dhar ah, intee saac bay ku qaadan inuu sameeyo 12 m^2 ?

La xiriiri culayska: 1 m^2 oo loox ah baa wuxuu u baahan yahay
 200 g oo rinji ah. Immisa garaam oo rinji
ah bay 2 m^2 u baahan tahay?

Wareegga laydi

Nin beeralay ah baa doonayey inuu dhaqo digzag. Wuxu diyaariyey bed ah $20 \text{ m} \times 30 \text{ m}$. Wuxuu rabay inuu ku wareeqo dayr. Immisa bu-noqonayaa dhererka dayrkaasi?

dhererka dayrdku waa

$$30 \text{ m} + 20 \text{ m} + 30 \text{ m} + 20 \text{ m} = 100 \text{ m}$$

$$(2 \times 30 \text{ m}) + (2 \times 20 \text{ m}) \stackrel{\text{ama}}{=} 100 \text{ m}$$

$$2 (30 \text{ m} + 20 \text{ m}) \stackrel{\text{ama}}{=} 100 \text{ m}$$

Halbeeg cabbiraadeedku waa $\boxed{}$ ee na aha m^2 .

Gegi ciyaareed oo qaab laydi sheshaa dhererkeedu yahay 100 m , ballaceeduna yahay 70 m . Haddii la doonayo in dhagxaan dhabbacar isdabayaal loogu wareeqo gegida, immisuu noqonayaa dhererka dhagxantu!

Reen kaa 1. noqonayaa in lagu ureeqo kob noqshada. Immisuu noqonayaa dhererka kobtu. Talli aaddimaha reenkii yahay 1 m^2 .

- xoo-looyinkaan kaabu holla barto siiska guud ee wareegga:-

(W = 2 dii + 2b (b=ballaac, dii=dherer)

Marka xubintani dhammaad joogto, waa in ardaydu awood u leeyihir in ay raadiyaan baika iyo wareegga laydi iyagoo isticmaalaya halbeegga habboos (cm, m)

Weydii wareega iyo bedka xaydiyo sida kuwa sadeximahan leh.

dherer 16 m, ballaac 12 m

sherer 2 sm, ballaac 6 sm

dherer 96 sm, ballaac 76 sm

Jajab tobantle

Naqtiin jajabyada caadiya ah

- Jajabyada hooseeyaashhoodu yihin 1 ilaa 9.
- jajabyada hooseeyaashhoodu yiniin 10 iyo 100.
- Jajabyadaa la naqtiiimayo tsugee, kala goy, isgarabdhig, raadi hooseeyahay ay wadaagaan, aydoo inta badan la isticmaalayo jajabyada leh hooseeyaa! 10 iyo 100 ah.

Barashada hab cusub ee loo qori kare jajabyada hooseeyaashhoodu yihin 10 ama 100

Naqtiin qiimaha rugaha, marka laga bilaabo kunka, rugta ugu horrayn midig ka xigtaa waxay leedahay tobneed qiima kunka.

Tusaale: 1, 100

hal tobneed ee kun = 1 boqol
kun

Sidoo kale ayaa boqolaadka labaadka iyo koowaadkaba loo raaci karaa. Haddaad hal rug koowaadka midig ka socotid, tirada rugtaas taal qiimeheedu waa tobneed kow.

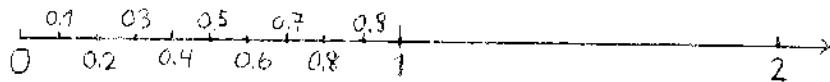
Bal aan u fiirsanno marka tiro imanayso midigta koowaadka:

Laba wjil u qaybi sh. 3. Wiilkiiba wuxu heleyaa
sh. 1.4 ama sh. 1.5. 5tu waa 5 tobneed, barta 1 iyo 5 u
dhaxaysaaya kala muujisa tirada waxa idil iyo tirada
waxaan idlayn. Haddii labada wiil sh. 1 loo qaybin
Tahaa waxa qaybtu noqon lahayd 0.5 ebertu waxay u
taagan tahay wax idil majiraan.

Jajabka sida 0.5 ayaa la yiraa jajab tobnaale.

Dariiqo: Ardaydu ha heleen tobneedyada tirooyinka 1 ilaa 9, hana u dhaxeeyo 0.1 iyo 0.9.

Jajabyada tobanle ha lagu muujiyo xarriiqda tirada



Tobantobneed waa 1, marka loo eego jajabka caadiga ah ama tobanle.

$$\frac{1}{10} + \frac{1}{10} = \frac{10}{10} = 1$$

$$0.1 + 0.1 + 0.1 + 0.1 + 0.1 + 0.1 + 0.1 + 0.1 + 0.1 + 0.1 = \\ 10 \times 0.1 =$$

Ha loo fiirsado dhaqankabarta tobanle marka qaybshuhu 10 yahay

$$\begin{aligned} 80 : 10 &= 8 \\ 3 : 10 &= 0.3 \\ 83 : 10 &= 8.3 \end{aligned}$$

Layli hallugu qaato raadinta tobneedyada tirooyinka ilaa 1000 iyadoo jawaabta lagu qoraayo jajab tobanle.

Tusaalooyin xagga lacagta ah:-

$$\begin{aligned} 1 \text{ sh.} &= 100 \text{ sent} \\ 1 \text{ sent} &= 0.01 \text{ sh.} \\ 10 \text{ sent} &= 0.10 \text{ sh.} \end{aligned}$$

Isticmaal tuse muujinaya jajabyada tobanle ee u dhaxeeyea 0.01 ilaa 0.99.

Kala goynta iyo isugeynta dhawr biiro hallaga shaqeeyo. La la baro tusaalooyinka ka saabsan kg iyo m.

$$\begin{array}{rcl}
 & 0.52 \text{ kg} & 0.34 \text{ m} \\
 + & 0.43 \text{ kg} & + 0.06 \text{ m} \\
 \hline
 & \underline{0.28 \text{ kg}} & \underline{0.12 \text{ m}}
 \end{array}$$

Tirooyinka isugu jira jajab iyo idil

7.35 shilin = 7 shilin + 0.35 shilin ama 7 sh. + 35 senti.

2.34 mitir = 2 m + 0.34 m ama 2 m + 34 sm.

17.256 kg = 17 kg + 0.256 kg ama 17 kg + 256 g.

Isugeynta iyo kala goynta tiro dhafan:-

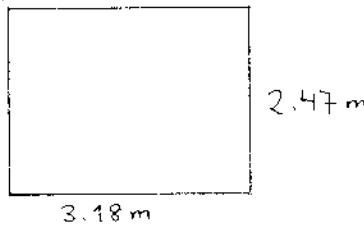
$$\begin{array}{rcl}
 & 2.86 \text{ m} & 2.01 \text{ g} & 12.65 \text{ sm} \\
 + & \underline{6.75 \text{ m}} & - \underline{1.95 \text{ g}} & + \underline{45.98 \text{ sm}}
 \end{array}$$

Isticmaal tusaalooyin ku saabsan nafaqada (diyaarinta qadada soorashada cuntooyinka nafaqooyinka loo baahan yahay ku kala jiraan), kuwa ku saabsan ganacsiga, loox-qoridda, birtumidda iwu isku dhufashada jajabvo tobane.

Xisa abinta bed: sida runta ah dhererada iyo ballacyada qaabka joometiri mar walba ma aha tiro idil.

Bedka laydi aaddimmahiisu yihin 2.47 m iyo 3.18 m waa.

$$\begin{array}{r}
 2.47 \text{m} \\
 \times 3.18 \text{m} \\
 \hline
 1976 \\
 247 \\
 \hline
 741 \\
 \hline
 78546 \text{ m}^2
 \end{array}$$



Serax labada rugood ee ugu dambaysa iyo in $\text{mm} \times \text{mm} = \text{m}^2$ layliyo
sooshooda la xidhiidha lagaa shaqeeyo.

Jajabyada tobanle iyo qaybin:

Ilaa iyo hadda waxaan naqaannay qaybin haraa leh:-

$$\begin{array}{r} 55 \\ 50 \boxed{ } 2760 \\ 250 \\ \hline 260 \\ 250 \\ \hline 10 \end{array}$$

Waxaan nidhaa 2760 : 55, haraa 10

si qaybtu u haboonaato haraa la'aan:

$$\begin{array}{r} 55.2 \\ 50 \boxed{ } 2760 \\ 250 \\ \hline 260 \\ 250 \\ \hline 100 \\ 100 \\ \hline 000 \end{array}$$

Tabta qeytaas looga shaqeeyey u sharax ardayda.

Jajabka caadiga ah oo loo rogayo jajab tobanle:

Jajabka caadiga ahi waa hab gaar ah ee qaybinta loo qoro.

$$\begin{array}{r} 0.375 \\ 3 \overline{) 8} \text{ micnaheedu waa 3 : 8 ama} \quad 8 \boxed{ } 30 \\ \quad 24 \\ \hline \quad 60 \\ \quad 56 \\ \hline \quad 40 \\ \quad 40 \\ \hline \quad 00 \end{array}$$

Ardayda sii layliyo noocan oo
kale ah. Ka ilaali jajabyada tobaalle
ee soo noq-noqonaya.

Isticmaal halbeeg cabbiraadeedyo.

Jajab tobanle oo loo ragayo jajab caadi ah:

$$\text{Tusaale: } 0.55 = \frac{55}{100} = \frac{11}{20}; 0.2 = \frac{2}{10} = \frac{1}{5}$$

ka dhaadhici isku-jarjaridda.

3rd Too raadsho tira jajabka ee tiro kale, waxaan tiradaas
dhufannaa jajab tobanle u dhigma jajabka la isa siiyey.

Tusaale: Waa maxay $\frac{4}{5}$ ka 75 kg?

$$\frac{4}{5} = 0.8, 0.8 \times 75 \text{ kg} = 60.0 \text{ kg.}$$

Fiiro: Marka tiro kasta lagu dhufto tiro u dhaxaysa 0 iyo taranta soo baxaysaa waa ka yartahay tiradii.
Tiro 1 lagu dhuftaana waa tiradii.

Tusaale: $16 \times 0.5 = 8, 16 \times 1 = 16.$

Gammuurid

Win beeralay ah baa raba inuu beertiisa dhir ka la geddisan
beero. Beerta aaddimaheedu waa sidan:-

Wuxuu rabaa inuu 7 qaybood u qaybiyo.

715 m



121 m



$$715 \text{ m} : 7 = 12.14285$$

Aadduu rabo inuu mitirro idil isticmaalo waxa qayb walba aaddi maneedu noqon 12 m iyo 121 m, waayo 12.14285 m waxay u dhawdhaa 12 m ee uma dhowa 13 m. Markaa 12.14285 waxa loo gammuurray 12 m dhaw tiro idil.

Xeerka Gammuuridda:

Haddii aad rabto inaad tiro u xisaabiso ilaa rug (ama rug tobanle) u fiiri rugtaas tirada midigta ka xigta. Haddii tiradu tahay 1,2,3,4 rugta midig waxba kama qo'e karaan maadaama ay badh ka yartahay, haddiise tiradu tahay 5,6,7,8,9. markaa rugta aad ku gammuuraysay hal ku kordhi.

Haddii aad rabtid inaad tirooyinkan ku gammuurtid ugu dhawaan tobneed, marka halka:

2.51	
2.52	
2.53	waxaad qaadan 2.50.
2.54	

	2.55
	2.56
Halka	2.57 waxaad qaadan 2.60
	2.58
	2.59

Marax waxa loogu baahan yahay gammuuridda iyo sida sii wadidda qaybin ay u sahlayso.

Halbeegyo cabbiraadeed

Naqtiiin halbeeg cabbiraadyadii lagu soo dhigtay fasalka koowaad.
 - Saacado, daqiqado
 - kg, g
 - km, m, sm, mm

Iskudhufashada iyo isku qaybinta halbeegyada iyo qormada habboon

$$7 \text{ kg} : 2 = 3.5 \text{ kg}$$

$$7 \text{ sm} \times 3 \text{ sm} = 21 \text{ sm}^2$$

$$21 \text{ sm}^2 : 7 \text{ sm} = 3 \text{ sm.}$$

Halbeegyo yaryar oo loo rogayo kuwa waaweyn iyo roggaa xagga kale:-

$$7324 \text{ g} = 7 \text{ kg} + 324 \text{ g} = 7.324 \text{ kg}$$

$$\text{ama } 7324 \text{ g} = \frac{7324}{1000} = 7.324 \text{ kg.}$$

Layliyo u baahan xisaabfalllo kala duwani:

Maalintii waxa ku jira 8 saacado shaqo. Immisa saacado shaqo ayaa ku jira bil 31 maalmood ah haddii ay 4 Jimce galaan.

Nin baa wuxu raba a inuu dayr ku wareejo booskuu deggen yahay qaabkiisu yahay laydi $25 \text{ m} \times 31 \text{ m}$. Immisa mitir baa dayrin uga baahan haddii xagga dariskiisa 11 mitir uga dayran tahay.

Sii tusaalooyin xagga nafaqada

Dariiqo: Sii liiska kalooriyada cuntooyinka caadiga ah, ee ku tibaaxan caddadyo 100 graam ah.

Tusaale: $100 \text{ g} \text{ oo rooti ah} = 250 \text{ kaloori.}$

isku dhufashooyin jajab tobanle layliyo ah waa lage lamayn karaa.

Isticmaal tusaalooyin la xidhiidha dukaan gadidda:

Samee liis walxo qimahoodu ku xiran yahay dherer ama bed.

Tusaale: Hal m^2 ee bir fidsan (sida darmo) baa waxay joogtaa sh. 27, Immisuu noqonayaa qimaha 7.9 m^2 ? Qimaha 0.35 m^2 ?

Birduuban baa mitirkii joogaa 7 shilin. Qofbaa wuxu gatay 3.75 m .

Hal mitir oo dhar ah baa jooga 12.50. Wuxaad dhar ugu baahan tahay 2.5 m .

Habdhisca lacagta

Halbeegyada naqta soomaalidu waa shilin iyo senti. Naqtiin Noodaaki iyo Sanuudii horay loo isticmaalay.

Halaga shaqeeyo layliyo afka ah ee ku saabsan wax gadasho iyo sarrif.

Tusaale: Digs i baa qimahiisu yahay Sh. 62.25. Qof gatay baa wuxu dhiibay afar 20 nood. Immisaa u soo hadhi.

$$80 \text{ Sh. } 62.25 = 17.75 \text{ Sh. Sarrif.}$$

Sii lacag, waydii inta sanuud iyo nooddad ay ka koobanaan karto.

Tusaale: $27.60 \text{ Sh.} = 20 + 5 + 1 + 1 + 50s + 10s$
ama $10 + 10 + 1 + 1 + 1 + 1 + 1 + 50s + 5s + 5s$

Waxyaalaha lacag u taagnaan kara asaan ahayn lacag:

(b) Jeeg iyo (t) istaam

Goormaa jeeg la isticmaalaa?

Jeegee baa la yeeli karaa?

In jeeg la yeelo (aqbalo) ma khatar baa?

Canshuuraha lagu bixiyo istaamyada.

Habdhisca boostada iyo siday ugu shaqayso istaamyada.

Lacagta waddamada aan ganacsiga la teenahay

Sarrifka lacagaha dibedda iyo ta Soomaaliya

Celcelis:-

Munaasabooyinka aqoonta celceliska lagama marmaanka thay:

Ma-saariifta, ganacsiga iwm.

Micnaha celcelis ha laga dheego tusaalooyin nolosha la xiriira.

Layli ha lagu qaato halbeeg cabbireedyada, iyadoo lagu bilaabayo tirooyin yaryar.

- Culayska waxyaalaha la beero
- Dhererka ulaha looga baahan yahay guryo dhiska.
- Wagtiga loo baahan yahay in la sameeyo kursi.
- Qimayaasha dhar tolidda.
- Bedka guryaha tuulo ku yaal.

Fiiro:- Bilow ahaan, tirooyinka celceliskooda la raadinayaan
yaanay ka badan 3 ilaa 5 tiro dabadeedna gaarsii ilaa
10 tiro.

FASALKA 3aad

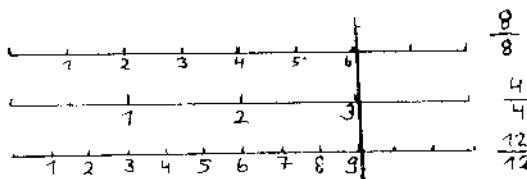
Jajabyo:

Intiiin isugeyn iyo kala goyn jajabyo leh hooseeyayaal isku mid ah adiga oo isticmaalayo habab kala gedisan oo ay u tibaa-myihiiin.

Jajabyada Isu dhigan

suji ama tus isla qayb kamid ah walax idil in loo gori karo siyaabo kala gedisan.

Tusaale:



Jajabkan waxaa loo tibaaxi karaa sida $\frac{6}{8}$ ama $\frac{3}{4}$ ama $\frac{9}{12}$.

Jajabyadan oo dhami way isu dhiganyihiin waana isku qiime laakin ~~tacka~~ ay u qoranyihin ayaa kala duwan.

Gaaruno: Qiimaha jajab isbedelimaayo haddii sareeyaha iyo hooseeyaha jajabkaa lagu dhufto tiro isku mid ah.

$$\text{Tusaale: } \frac{3}{7} = \frac{3 \times 5}{7 \times 5} = \frac{15}{35}$$

$\frac{3}{7}$ iyo $\frac{15}{35}$ waa is qimo le'egyihiiin.

~~Tusaa~~ tibaaxyo habab kala gedisan sida $\frac{1}{4}$ waxuu la qimo ~~gantaa~~ $\frac{2}{8}$.

U ~~ta~~ arada layliyo.

Dib u Magacaabida Jajabyada

Haddii aad heysatid laba jajab oo hooseeyayaal kala duwan leh waa in aad mid dib u magacawdaa si ay labada jabab u yeeshaan hooseeyayaal isku mid ah.

Tusaale:

Halkaad ka oran lahayd $\frac{3}{4} + \frac{5}{8}$ waxaad oran kartaa $\frac{6}{8} + \frac{5}{8}$.

Baarista hooseeyayaal u dhex ah laba jajab haddii mid ka mid ihi uu yahay dhufsanaha ka kale.

Tusaale: $\frac{3}{4}$ iyo $\frac{3}{12}$.

12 waa dhufsanaha 4 markaa $\frac{3}{4}$ waxaan u dhigi karaa

$$\frac{3 \times 3}{4 \times 3} = \frac{9}{12}$$

Labada jajab $\frac{3 \times 3}{4 \times 3}$ iyo $\frac{9}{12}$ waxay wadaagaan hooseeyayaal isku

mid ah. Markaa imminka waana la isugeyn karaa waana la kala goyn karaa labadaa jajab.

Fududaynta Jajabyada

Ka shaqeenta jajabyada inta badan waxay ku hawl yar yihiin haday leeyihiin hooseeyayaal yar-yar; waxaana jajab lagu fududayn karaa adiga oo u qaybiya sareeyaha iyo hooseeyahaba tiro isku mid ah.

Tusaale:

$$\frac{12}{10} = \frac{12 : 2}{10 : 2} = \frac{6}{5}$$

U dir ardada layliyo badan markaad tusaalooyin badan oo noocan siisid ama dhacsiisid.

Heerkan waxaad moodaa in jajabyada ay yihiin hab lagu xalli-layo. Masalooyin aan la xiriirin nolosha maalin walba ee Bulshada. Isticmaal intii suurta gal ah Masalocyin taabanaya nolosha Bulshada maalin walba.

JASYADA AAN QUMANAYIN IYO TIROOYINKA ISKU DHUFAN

**Mr Fuundi ah ayaa waxuu u baahan yahay 4 leban ah oo kiiba
kererkiiso yahay $\frac{3}{4}$ m si uu u dhamaystiro musquushiisii.**

■ a immisa dhererka lebanka qebi ahaan?

$$\text{Fur-furis: } \frac{3}{4} + \frac{3}{4} + \frac{3}{4} + \frac{3}{4} = \frac{12}{4} = 3 \text{ m.}$$

**Sterax tusaalooyin badan oo hooseeyayaal yar-yar leh dabeednaa
raadi tirooyinka idil ee ka soo bixi kara sida:**

$$\frac{15}{3}, \frac{20}{5}, \frac{21}{7}, \frac{28}{4}, \frac{12}{3} \quad \text{iwm.}$$

mar sidan soo socota jajabyada ugu kala dhig arda.

$$\frac{12}{3} = \frac{3}{3} + \frac{3}{3} + \frac{3}{3} + \frac{3}{3}$$

fusaale:

Nimbaa waxuu soo gatay $\frac{1}{2}$ kg oo bariis ah $\frac{3}{4}$ kg co hilib ah
 $\frac{3}{8}$ kg oo ah sonkor tirada kg da uu gatay wa:

$$\frac{1}{2} \text{ kg} + \frac{3}{4} + \frac{3}{8} \text{ kg}.$$

5. aad hooseeyayaal isku mid ah u hesho, dib u magacaw
taabyada qaar ka mid ah adoo isku deyaaya in aad hooseeyey
5cumidah u hesho.

barkaa jajabkeeno waxuu noqonayaa: $\frac{4}{8} + \frac{6}{8} + \frac{3}{8} = \frac{13}{8}$

•exay samaysaa tiro idil oo hal ah. Waxaa soo haray 5

b-kaa u qor 1⁵/₈ kg halkii aad ka qori lahayd 13¹/₈ kg.

ayaa waxaa loo yaqaan Tiro Isku Dhufan waayo waxay ku
ta hay tiro idil ivo Jajab.

Izir ardaada layliyo ay isku bed-bedelaan tircooyin isku xafan iyo daajabyn.

ISU GAYNTA TIROOYINKA ISKU DHAFAN

U tababar habkan soo socda:

- Hubi in tirooyinka isku dhafani leeyihiiin hooseyayaal isku mid ah.
- Haddii hooseyayaasha kala duwan yihiin, dib u magacaw jajabyada midkood si loo helo hooseyayaal isku mid ah.
- Ha taaban tirooyinka idil heerkan.
- Markaad hesho hooseyayaal isku mid ah, tirooyinka idila gooni Isugu gee jajabyadana gooni isugu gee sida:

$$(2 \frac{1}{4} + 5 \frac{2}{4} = 2 + 5 + \frac{1}{4} + \frac{2}{4} = 7 + \frac{3}{4} = 7 \frac{3}{4})$$

- Dabadeedna jadeeyada tiro isku dhafan ahaan u qor.
- Haddii jajabku ka wayn yahay hal, dib u magacaw jajabka dabadeedna u gee tirada idil tirooyinkii idlaa eeka soo baxay jadeedyadi hore sida.

$$(7 \frac{9}{4} = 7 + 2 \frac{1}{4} = 9 \frac{1}{4})$$

ISKU DHUFASHADA JAJABYADA IYO TIROOYINKA IDIL

Faadimo waxay isticmaasha $\frac{1}{10}$ oo saliid ah maalin walba.
Immisay isticmaashaa Todobaadki ?

Furfuridda kowaad (Isugeyn)

$$\frac{1}{10} + \frac{1}{10} + \frac{1}{10} + \frac{1}{10} + \frac{1}{10} + \frac{1}{10} + \frac{1}{10} = \frac{7}{10}$$

Furfuridda labaad (Isku dhufasho)

$$\frac{1}{10} \times 7 \text{ ama } (\frac{7}{10} \times 1) = \frac{1}{10} \times 7 = \frac{7}{10}$$

Tusaale: $\frac{2}{9} \times 3 = \frac{2 \times 3}{9}$.

Mar haddii tiro idil lagu dhufto jajab, sareeyaha ayuunbaa lagu chufanayaan tirada idil laakiin la taaban maayo hooseyaha.

acc² : hooseeyahana tagu dhufsto 3, jajabkeeno waxuu noqonayaa
 $\frac{6}{12} = \frac{2 \times 3}{9 \times 3} 00$ aan waxba u dnimin jajabkeenii habkiisii oo
 bedelby mooyce.

DHUFASHADA JAJABYADA

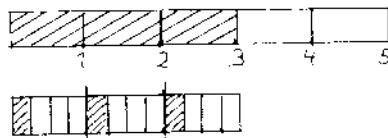
Isticmaal leyliyo habab iyo tibaaxo kala gedisan.

- dir ardada layliyo kala heer sareeya.
- eeegso jajabyo sareeyahooda yahay 1.
- Sareeyayaasho yay ka badan 5.
- Marka hore isticmaal layliyo jedceyooyinkedo ka yar yihiin 1
- ja isticmaalin tirooyinka isku dhufsan had iyo jeer ama u bedel jajabyo aan qumanayn.

BINTA JAJABYADA

Caabad ah ayaa waxaa loo qaybiyey 4wiil in ay ku fariistaan.
 Laybahaan immisuu kiiba u helayaa?

- in $\frac{3}{5}$ la kala jebiyaa. Haddii aad ka fekertid in wiil waliba
- saybtiisa, jaantus ayaad ku muujin kartaa waxaanu u
- zaanayaa sidan.



Isticmaal tusaalooyin kale iyo jaantusyaba.

Dhufashada waa habka keliya ee suurta geliyo in la
 tiro markaloo eego

Sanigalka oo la leeyahau tiro kale.

Waxaa u dir layliyo taabanaya nolosha Bulshada.

U QAYBINTA TIROOYIN IDIL EE JAJABYADA

Sidan ku bilow:

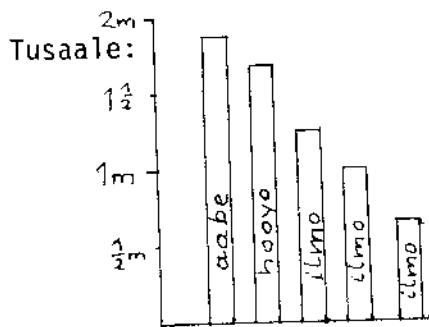
$$\frac{3}{5} : 4 = \frac{3}{5 \times 4}$$

Markaad tiro idil wax u qaybiso, waxaad heleysaa jajabyo yaryar. Kaa micneheedo waxuu yahay hooseeyaha ayaa kordhaya. Kordhinta hooseeyuhu waxay ku xirantahay qiimaha qaybiyaha.

AKHRISKA TUSAYAASHA IYO GARAAFYADA

Garaafyo Xariiqeed: Habka ugu sahlan ee lagu muujiyo faraqyada dhexeeya jimidhyo, tayooyin iyo da' (cimri) iwm waa iyada oo la zdeegsado shexano u taagan walxahaa.

In la muuyiyo dhererada dadka qoys ka koobani ay kala yihiin.



Xarriquhu sidey u kala dheeryihii ayaa dadku u kala dheeryihii. Istimmaal warqada Garaafka.

Waxyaabaha lagu muujin karo garaaf xariiqeed.

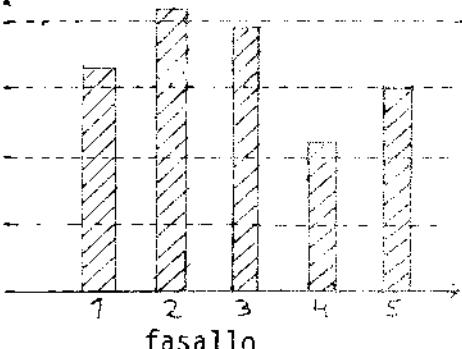
Fogaansho u dhexeeya Gobolada, Tuulooyinka ama Degmooyinka.

- Culayska Xoolaha kala jimidhweyn
- Qiimaha Alaabta ganacsiga.

GAAF JIITIMEEO

■ Ta isticmaala marka aanay fududayn sharaxa ama kasida ja-
yo ah tircooyir qoru.

Mantus



Immisa arday ayaa fasalkii
ku jirta?
Waa immisa dhamaan ardada
fasalada ku jirta?

■ Ee kani waxuu ku wanaagsan yahay:

Jadeeyooyinku si fiican ayay u sugaran yihiin.
■ ee sahal is garab dhiga jadeeyooyinku.
■ ee la kala midabayn karaa jedooyinka.

■ Ee ka noocani waxuu kaga duwan yahay garaaf xarfiqeedka in
■ ee cheeruu u bahaan yahay dhismihiisu oo qura ah.

■ Ee tooyinka Garaafyada lagu isticmaali karo waxaad ka heli
■ ee nolasha maalin walba. Wuxaad, ahmiyad siiseen sida ardadu
■ ee kasti lahaayeen garaafyada ka soo baxa hayadaha iyo Wasaara-
■ eelka, halkii iyagu ay ka soo dhisi lahaayeen Garaafya-

■ Ee carteed soo diyaari garaafyo kala duwan, oo fasalka laga-
■ Ee munaaqashoodo.

FIKRADAHA KU HABOON GARAAF KU MUUJINTA

- Qaybinta Maadooyinka ee tusaha kaltanka Dugsiyada.
- Da 'kooxeedka Fasalada W.D.W.
- Korodhka tacabka miraha beeridda ee sanad kasata sii sano ee ugu dambeeyey.
- Celceliska heer Kulka bil walba.

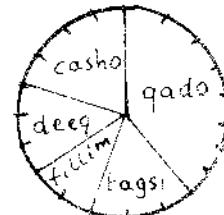
GARAAF GOOBED

Waxaa la isticmaala marka wax idil too jejibinayo qaybo yar-yar

Tusaale: 1

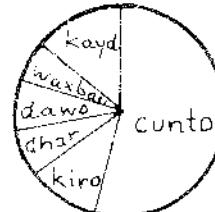
Qofbaa 20sh. u kharash gareeyay sida soo socota.

8 sh	qado
3 sh	tagsi
2 sh	fillim
3 sh	deeq
4 sh	casho
<u>20 sh</u>	



Tusaale: 2

Miisaaniyada qoyska ee halbil waxaa too qaybin kara sidar



3. Miisaaniyada Dawladda hal sano waxaa too qeybin kara sidar

Iaashaanahiga Caafimaad.

A. Faadaha

Caafimaad.

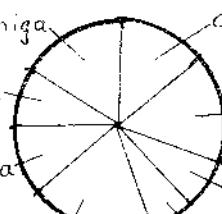
Waxbarasho

Maallyadda

x, xoolaha

wixii kale

Beeraha



SAAMI

Saamigu waa ah loo adeegsadi is garab dhigga laba xaddi.

Tusaale: I

Yuusufba Da'diiso tahay 20 sano, walaalkii Axmadna waa 25 sano jir Saamiga u dhexeeya da'da Yuusuf iyo ta Axmad 20 : 25

Waxaana loo qoraa saamigaa sansaan jabjab, 20 ama 0.8.taasoo oo micneheedo yahay Axmad 0.8 jeer buu ka 25 yar yahay Yuusuf.

Tusaale: II

Nin beerlay ah ayaa waxuu leeyahay 3 hektar oo dhul ah.
Deriskiisuna 7 hektar saamiga u dhexeeya jimidka labadooda
beerood waa 3 : 7 ama $\frac{3}{7}$.

Ogoobay waxyaalaha la isgarab dhigaya inta badan waa isku nooc isla halbeeguna way ku tibaaxan yihiin.

Marka walaxo la isgarab dhigayo waxaan is weeydiinaa laba Su'aalood:

1. Immisay tirada b ka wayn tahay tirada t ?
2. Immisa jeer bay tirada b ka wenyn tahay tirada t ?

Tabta isgarab dhiga ee weeydiinta Iaad loo adeegsanayaa waa kala goyn (b-t). ta Iaadna waa sami ($\frac{b}{t}$).

Tusaale: III

Loox qori baa waxaa laga doonayaa in uu sameeyo 9 kursi. Waa du sameeyay 4 ka mid ah. Hadaba saamiga u dhexeeya shaqada lu qabtay iyo ta laga doonayo waa 4 : 9 ama $\frac{4}{9}$.

Tusaale: IV

Laba wiilbaa qabtay shaqada lagu siinaayo 100 sh. Saamiga u dhexeeya shaqa abadkoodu waa 2 : 3 Markaa tacagta waa in ino qaybiyaa 5 meelood oo ay u kala helaan $\frac{2}{5}$ iyo $\frac{3}{5}$.

U dir layliyo noocan ah oo la xiriira noolaanshaha. Saamiga 2 : 3 ka tahay 120, 5 : 7 iyo 120, 5 : 10 ka 120, 1 : 2 ka 120.

Tusaale: V

Shamiito, ciid iyo jay wax tagudhisayo baa waxa la isgu dhafay siday u kala horeeyaan saamiga ah $1 : 3 : 6$. Immisa kg baad nooc kasta noqonayaan haddii culayskooda isku yahay 200 kg?

FURFURIS

Wadarta qaybaha saamiyada waa $1 + 3 + 6 = 10$ markaa 200 kg ha lo qaybiyo 10 meelood oo isle'eg laguna dhuftaa qayb kasta oo saamiyada ka mid ah.

$$\begin{array}{rcl} \frac{200 \times 1}{10} & \text{oo Shamiito} & \text{ah.} \\ \frac{200 \times 3}{10} & \text{oo Ciid} & \text{ah} \\ \frac{200 \times 6}{10} & \text{oo Jaay} & \text{ah} \end{array}$$

Tusaale: VI

Beerbaa waxay ku fadhidaa 12 hektar waxaa lagu beeraa moos, bariis, galey oo saamigoodo yahay $1 : 2 : 3$ sida ay u kala horeeyaan. Immisa hektar baa noociiba lagu beeraa?

XUSUUSIN

Iska ilaali saamiyo ay ku jiraan jajabyo waayo way ku adagtahay aradda ka shaqyntoodo.

Tirooyinka saami ahaan la isu garab dhigaa ma aha khasab in ay noqdaan tirooyin idil.

Tusaalooyin:

$$1. \quad 4.5 : 2.7 \quad 2. \quad 2 \frac{1}{4} : 4 \frac{1}{2}$$

Tusaalaha (1) saamige 4.5 iyo wadarta $(4.5 + 2.7 = 7.2)$ ay ka tana, waxa idil waa $\frac{4.5}{7.2} \times$ wixii la saamiyoonayay. Sidoo kale saamige kale $\frac{2.7}{7.2} \times$ wixii la saamiyaanayay.

Tusaale (2) Saamiga 2 iyo wadarta $(2 \frac{1}{4} + 4 \frac{1}{2} = 6 \frac{3}{4})$ waa

$$2 \frac{1}{4} : 6 \frac{3}{4}$$

$$\text{sidoo kale saamiga } 4 \frac{1}{2} \text{ iyo wadarta } 5 \cdot \frac{3}{4} \text{ waa } 4 \frac{1}{2} : 6 \frac{3}{4}$$

Saamiyada jaadkaas ah ka shagayn toodlu ma hawl yera, nasaveeshhee waa ta fududayn karaa.

SIDA LOO FUDUDEEYO SAMIYO JAjab LEH

$$4 \frac{1}{2} : 8 \frac{1}{4} = \frac{4 \frac{1}{2}}{8 \frac{1}{4}} = \frac{\frac{9}{2} \times 4}{\frac{33}{4} \times 4} = \frac{18}{33} = \frac{6}{11}$$

Tabtaas waxa lagu soo bartay jajabyada caadiga aholayliyo ah sida loo fududeeyo saamiyada ardada u dir.

$$13 \frac{1}{2} : 15 ; \quad 6 \frac{1}{2} : 2 \frac{1}{4} ; \quad 4 \frac{1}{2} \text{ m} : 2 \text{ m.}$$

Saamiyo ah jajab tobante oo loo rogaye tirooyinka idil

$$2.7 : 8 = 27 : 80$$

$$3.7 : 2.1 = 37 : 21.$$

Jifiirso in tirooyinka dambe ka weyn yihin kuwa bore, labada saami waa isla mid. Eeg saamiyadan kale sida loo fududeeyo:

$$27 : 9 = 3 : 1 \quad (\frac{27}{9} = \frac{3}{1})$$

$$54 : 45 = 6 : 5 \quad (\frac{54}{45} = \frac{6}{5})$$

SGARAB DHIGA SAAMIYO

Saamigeebaa qiime badan:

- 1) 15 : 20 ama 8 : 10 !
 2) 12 : 3 ama 45 : 10 !

Isku day in aad labada saami u eegtid isla tiro (hooseeyaha ay wadaagaan labada jajab).

- 3) 15 : 20 ama 16 : 20 !
 4) 4 1 ama 45 : 10 !

waxa ay leegyirin 40 : 10 she 45 . U hadda ~~saeed~~ soo saari kartaa samigii weyn, Marka aad ngeenay taqabba laedadooda.

Layliyo kuwa sare u eg u dir.

Tusaale: Koodee bursaday:

B waxa 5saacadood oo shaqa ah lagu siiyay 20 Shilim	
T waxa 3 " " " " " 12 "	

Iabada saami keebaa qiime weyn:

$\frac{20}{5}$ ama $\frac{12}{3}$ hal hooseeye ay wadaagaan	
$\frac{4}{1}$ ama $\frac{4}{1}$ waa isku qiime.	

SAAMIGALYO

Haddii qimaha 5 kursi yahay 45. Immisa bay noqon qimaha 3 kursi

Furfuris: Haddii 5 kursi joogaan 45sh. 1 kursi waa 9 sh.

Marka 3kursi waxa ay joogaan 3×9 sh = 27 sh.

Sii tusaalooyin laga shaqayn karot: qibasho qalabyo, alaab guri, xoolo. Culays Santuuqyo, Jawaanno, amminshaqo.

Xaqiqadii, saamigal waa laba saami oo isku zhuruud ah ee la isgarab dhigeyo iyadoo saamiyada midkood la yaqaan ka kalana hai tiro la ogyahay.

Tusaalooyin hore waxa loo qori karay sidan:

$\frac{45}{5} = \frac{X}{3}$	"X" waxa ay u taegan tahay tirada maqan. Har haddii aanay ardadu ku shaqayn karin isleeg markaa waa in lagu shaqeyaa tabtii hore.
------------------------------	---

Tusaalooyin:

- 1) Qof ayaa 15sh lagu siiyay 5tii saacadood oo shaqo ahayd. Shaqo 11 saac ah maxaa laga sija?
- 2) 7 mitir oo dhar ah baa iimahoodu yahay 21 sh. Iimaha qimaha

5 mitir noqon!

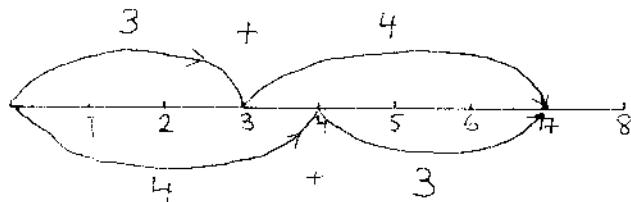
3) Culays 10 sanduuq baa ah 54kg. Waa maxaya culayska 108 sanduuq oo la nooc ah?

SHARCIYADA (ARITMETIK)

Sharciga kala horaynta ee isugeynta iyo iskudhufashada looma baahna in ardaydu erayga bartaan.

ISUGEYN. Marka tirooyin la isugeynayo, kala horreyntoodu macne ma leh.

$$4 + 3 = 3 + 4$$



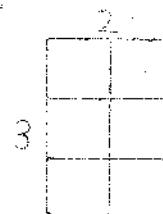
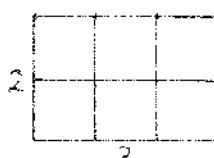
Tusaalooyin ah isugeyn saddex ama afar biiro ku muuji sharcigii kale horaynta.

ISKUDHUFASHADA.

Marka tirooyin la iskudhufanayo sida too kala horraysiiyaa isirradu morna ma beddeshe taranka.

$$\text{Tusaale}: \quad 2 \times 3 = 3 \times 2$$

Caddayn:



Jabada xaaladoobba waxa aad tirin 6 jabajibbaarane.

Bixi tusaalooyin kale iyadoo jaantusyo kale lagu muujinayo. Sharciga kala horaynta run kuma ana kaлагоynta iyo isuqaybinta

$$5 - 3 = 2$$

$$39 : 3 = 13$$

$$3 - 5$$

$$3 : 39$$

Layliyo xarta xisaabfal ku saabsan ardayda ha too diro.

SHARCIGA HORMOGELINTA ee isugeynta iyo iskudhufashada.
Isugeyn. Sida loo kooxeeyaa biirooyinku wax isbeddel ah kuma
samayso wadarta.

$$\text{Tusaale: } (5 + 3) + 1 = 5 + (3 + 1)$$

$$\text{Waayo } (5 + 3) + 1 = 8 + 1 = 9$$

$$5 + (3 + 1) = 5 + 4 = 9$$

J fiirso in biluhu ay muujinayaan hadba biirooyinka la isku kooxeeyey.

Sidoo kale, marka tirooyin kasta la iskudhufanayo, sida isirradha loo kooxeeyaa baddasho taranka:

$$\text{Tusaale: } 7 \times (5 \times 3) = (7 \times 5) \times 3$$

$$\text{Caddayn: } 7 \times (5 \times 3) = 7 \times 15 = 105$$

$$(7 \times 5) \times 3 = 35 \times 3 = 105$$

Saansaannada ay isirradu u dhigan yihiin waa kala duwan yihiin laakiin tarannadu waa isla mid.

Haddii weydiinta xisaabeed ee lagaga shaqaynayaa tahay isugeyn Keliya ama iskudhufasho keliya, markaa looma baahna bilo.
 Haddiise ay isugu jirto isugeyn iyo iskudhufasho, markaa bilahu waa lagama maarmaan.

$$\text{Tusaale: } 5 \times 3 + 4 = ?$$

$$\text{Haddii aad xisaabisid } (5 \times 3) + 4 = 60 \text{ taas oo ka duwan marka aad xisaabisid } 5 \times (3 + 4) = 35.$$

Taasi waxa ay tusaysaa in markan oo kale biluhu lagama maarmaan yihiin.

Weydiimo xisaabeed oo nooca sare ee aan bilaha tahayn u dir ardayda in ay ka shaqeeyaan. He loo fiirsado jadeeyooyinka kale duwan ee ka dhasha tabaha kala duwan ee lagaga shaqeeyey.

ISLA'EGYOFIKRAD GUUD:

Isla'egyadu, waa tabta ugu caamsan ee lagu isticmaalo ama loo adeegsado qaybaha Xisaabta oo dhan. Haddii Fasalkaagu aanu la heer ahayn ama la socon karin hab aljebreed (Sida Istimaa-lidda Sumadaha b, t, j w, h, y).

Waa in ay aakhirtu fahmaan fikradda ah in labada dhinac ee isla'eg ay is le'egaataan sida ereygaba uu muujinayo. Ardaydu waa in ay fahmaan in aan dhinac keliya isla'ega la bedeli karin ee labada dhinacba si loola wada dhaqmaayo.

Ardaydu way soo isticmaaleen isle'egyo ee ereyga isla'eg uun bayna isticmaali jirin.

Tusaalooyin Sii Sida:

$$\begin{array}{rcl} 7 & + & 12 = 19 \\ 12 & - & 7 = 5 \\ 7 \times 12 = & 84 \end{array}$$

$$3\frac{1}{2} - 6\frac{1}{4} = 5\frac{1}{4} - 4\frac{3}{12}$$

Dhinacyada bidix iyo midiq ee calaamadda isla'egaanshaha (=) waa in laga helaa wax isku qiime ah, haddii kale oo taa la waayo Xisaabteenu ma aha isla'eg.

Sii ardayda lamaanayaal tibixyo Xisaabeed si ay u raadshaan in qaybaha lamaanayaal tibixyo Xisaabeed si ay u raadshaan in qaybaha lamaanihii waliba isu dhigan yahay (=) ama aanay isu dhignayn (#).

Tusaalooyin: Buuxi

- 1) $3 + 7 =$ ama $\neq 12 - 3$
- 2) $5 - 2 =$ ama $\neq 1 + 3$
- 3) $15 : 3 =$ ama $\neq 20 - 15$
- 4) $30 \times 2 =$ ama $\neq 150 - 50$

Waad ku shaqeysan kartaa isla'egyo waanad bedeli kartaa qii-nihisa haddii aad labada dhinacba si ula wada dhaqantid.

Tusaale:

$$12 + 30 - 4 = 20 + 18$$

Haddii 4 labada dhinacaba loo geeyo, isla'geeno waxuu noqonayaa.

$$\begin{array}{rcl} 12 + 30 - 4 + 4 & = & 20 + 18 + 4 \\ 12 + 30 & = & 20 + 18 + 4 \\ 42 & = & 42 \end{array}$$

U dir ardayda layliyo isla'egyo dhinacyadooda si loola wada dhaqmaayo si aanu isla'ekaanshuu u lumen. Adeegso noocyada Xisaab falada oo dhan iyo jajabyo; isticmaal halbeegyo cabiraa-deedka oo dhan (Oherer, Culays, ammin). Ha isticmaalin heerkar isla'egyo leh xaddiyo lama yaqaan.

Sii ardayda layliyo la xiriira degaankooda.

Xaddiga lama yaqaanka ah,

Had iyo jeer ma taqaanid qimaha tibaxa isla'eg oo dhan.

$$3 + \square = 7 \quad \text{ama} \quad 3 + X = 7$$

Xaddiga lama yaqaanka ah waxa loo dhigi karaa ama loo muujin karaa habab kala gedisan, sida (\triangle \square \circ $\boxed{}$) oo ah hab Joometeri (X, Y) oo ah xuruuf. Waxay u taaganyihin xaddiga lama yaqaanka ah.

Nin loox qori ah ayaa waxuu u baahan yahay 8 m oo loox ah. Waxuu hore u haystay jajabyo loox ah oo dhererkooda yahay:

$$1.50 \text{ m} + 0.30 \text{ m} + 2.7 \text{ m} + 60 \text{ cm}$$

Immisa mitir ayaa u dhiman?

Furfuris:

$1.50 \text{ m} + 0.30 \text{ m} + 2.70 \text{ m} + 60 \text{ cm} + \square \text{ m} = 8 \text{ m}$
xaddiga lama yaqaanka ah dhinac ku takoor sidan oo kale.

$$5.10 \text{ m} + \square \text{ m} = 8 \text{ m}$$

$$5.10 \text{ m} - 5.10 \text{ m} + \square \text{ m} = 8 \text{ m} - 5.10 \text{ m}$$

$$\square \text{ m} = 2.90 \text{ m}$$

Talaabada hore waxaad dhinaca bidix ku haysatay lama yaqaanka + 5.10 m. Sii yar - yaree dhinaca bidix adiga oo ka jaraaya 5.10 m dhinaca midigna sidoo kale ku fallaayo.

U dir ardayda layliyo badan oo leh xeddi lama yaqaan ah iyadoo Xisaab fal qura lagu suubinayo labada dhinac ee callaamada isla'egaanshaha.

LAYLI:

1. Saddex wiil oo walaallo ah ayaa waxay haystaan 2500 Sh. Laba ka mid ahi waxay leeyihiin 1000 Sh. iyo 800 Sh. ka saddexaad immisuu leeyahay?
2. Xaasbaa 300 Sh. oo masruuf ah loogu tala galay bil. Todobaad ka bacdi waxay kharash gareeyeen 55 Sh., 17 Sh., 23 Sh., 15 Sh iyo 32 Sh. Immisa u hadhay?

Marka ardaydu layliyo badan oo noocan ah ka shaqayso, xasuusi ardayda in labada dhinac ee isla'egyada ay isla'egyihiiin dhinac waxa lagu falo -hinaca kalana lagu falaayo. Taa micniheedu waxuu yahay:

- Haday isugeyn noqoto labada dhinac wax isla'egbaa loo geeynayaa.
- Kalagoyn sidoo kale.
- Isku dhufasho sidoo kale.
- Qaybin sidoo kale.

Marxaladahaas oo dhan qiimaha isla'eg wuu isbedelaya laakiin labada dhinac ee isla'egyadu waa isku mid.

SAAMIGAL (Proportion)

1. Nin beerelay ah ayaa waxuu ogaaday in 50 kg oo bacrimin ah ay ku haboon tahay 1 hektar ee beertiisa ka mid ahba. Beertiisu waxay ku fadhidaa 3.5 hektar. Immisa kg oo bacrimin ah ayuu u baahan yahay?

Furfuris:

Iaamiga u dhexeeyaa 50 kg oo bacrimin ah iyo 1 hektar waa $\frac{50}{1}$. Waa in lagu isticmaala saamigan dhulka la bacriminaayo. Isla'egyo marka waa:

$$\frac{50}{1} = \frac{X}{3.5} .$$

Waa in la helaa hantida bacriminta (X) ah se ku habeen 3.5 hektar oo dhul ah. Waa in ay hantida bacrimintu iyo bedku ~~gadaan~~ saamigal.

Waa in aynu tekooraa xaddiga lama yaqaanka an (X) ee isla'egeena. Si taa loo helo waa in aynu ku dhufanaa labada dhinac ee isla'egeena 3.5.

$$\frac{50 \times 3.5}{1} = \frac{X \times 3.5}{3.5}$$

$$175 = X$$

Beerwaluhu waxuu u baahan yahay 175 kg oo bacrimin ah.

2. Nin moofoole ah ayaa 1 kg ee daqiqda ahay ugu baahan 0.5 l oo biyo ah. Immisa litir co biyo ah ayuu ugu baahan yahay 5 kg ee daqiqda ahayd?

Furfuris:

Saamigalku waa sidan: $\frac{0.5}{1} = \frac{X}{5}$

$$\frac{0.5 \times 5}{1} = \frac{X \times 5}{5}$$

$$2.5 = X$$

Moofooluuhu waxuu u baahan yahay 2.51 oo biyo ah.

U dir ardayda layliyo leh xaddiyo waaweyn.

3. Laba tuulo oo khariidad ku muujisan ayaa fogaansha u dhexeeya yahay 7.85 m. Marka qiyaasta loo eego, 15 m ee khariidada ku muujisan waxuu u dhigan yahay 2 kg oo dhulka ah.

$$\frac{2}{1} = \frac{x}{7.8}$$

Ogsoonow in saamigalku sareeyayaashiisuna isku halbeeg yihiin hooseeyaashuna isku halbeeg.

Ku isticmaal masalooyinka saamigalka meelahan.

- Isku dhafka Cunto la karinaayo ama moofole.
- Isku dhafka Bacriminaha.
- Mushaharo ku xiran muddo.
- Sicirka miraha beeraha iyadoo lagu cabiraayo Culays ama dherer.

Ogoobay ilaa iya hadda waxaad wadday Saamigal toes ah.

1. Qofbaa muddo 3 daqiqo ah dhalo kaga buuxiyay hal qasabad. Hadduu laba qasabodood oo biyuhu si isku mid ah uga soconayaan isticmaalo, immisuu waqtii u baahan yahay?

Jawaab: $\frac{3}{2}$ daqiqo waayo labada qasabodood waxay ku buuxinayaan $\frac{1}{2}$ (Badh) waqtigii ta hore.

2. Laba Nin oo Shaqaale ah ayaa gidaar ku dhisi kara 6 saacadood. Isla shaqadaasi immisa saacadood bay ku qaadanaysaa 4 Nin?

2 Shaqaale	6 Sac.
4 Shaqaale	6 Sac. : 2

Shaqaa laba Nin u baahan. Shaqaalaha oo labanlaabmaa waxay ku qaadanaysaa $\frac{1}{2}$ (Badh) waqtigii 2 Nin. saddex laab Shaqaaluhu waxay u baahan yihiin $\frac{3}{2}$ waqtigii 2 Nin iyo sidaas oo loo wado.

Ha dhiseen ardaydu masalooyin korodhsimada tibixi dhalinayso ka kale oo yaraada.

Guud ahaan Saamigalyadaa an Tooska ahayn waxaa loo furfuraa sidar:

12 ruux oo Shaqaale ah ayaa 5 Maal mood u baahan in ay shaqo ku dhamaystiraan. Immisa Maal mood ayaa 8 ruux u baahan yihiin?

$$\begin{array}{lll} 12 \text{ Ruux} & = & 5 \text{ Maal mood} \\ 1 \text{ Ruux} & = & 5 \text{ Maal mood} \\ 8 \text{ Ruux} & = & 60 \text{ Maal mood} \\ & & 60 \text{ Maal mood} : 8 = 7.5 \text{ Maal mood} \end{array}$$

Sharaxaad: Haddii 12 ruux oo Shaqaale ah u baahan yihiin muddo 5 Maal mood ah, 1 ruux waxuu u baahan yahay 12 laab shaqada 12 ka ruux. Marka tirada Shaqaaluhu korodhaba, waqtiga shaqadu waa sii yaraanayaa. Haddii Shaqaaluhu 8 yahay, waxay u baahan yihiin $\frac{1}{8}$ waqtigii uu ruux kaliya u baahnaa.

3. 3 beeralay ah ayaa waxay rabaan in ay iibsadaan Cagaf-Cagaf. Kiiba waxaa laga rabaa 8.000 Sh. in uu bixiyo. Haddii Iskaashat ka kooban 17 beeralay ah ay iibsadaan Cagaf-Cagaf, immisa kiiba la rabaa in uu bixiyo?

$$\frac{8.000 \times 3}{17} = x$$

$$24.000 : 17 = 1411.76$$

Kii iskaashatada ka mid ahba waa in uu bixiyaa 1411.76 Sh.

Masalooyinku ha ka yimaadaan nolosha Bulshada. Tus hoos u dhaca shaqo ama sicir haddii dad badani ka qayb qaataan barnaamij.

J tababar ardayda in ay aqoonsadaan nooca Saamigalka ay u adeegsanayaan masalo - ma saamigal toos ahbaa mise waa mid aan toos ahayn.

Tusaale:

$$87 \times 0.1 = 315 \times 0.01 =$$

Xaliimo Imtixaankii W.D.W. hehay natijjooyinkan:

Af-Soomaali	:	100kii	83
Xiaab	:	100kii	63
Aqoon Guud	:	100kii	75
Saynis	:	100kii	80

U qor Jadeeyooyinkaa sida:

b) Jajabyo t) Jajah T. wile

Bar ardayda in boqleed Jeeyahay qoriso u g. 100kii 73 waxaad tiraahdaa 73%. %
lahayd 100kii 73 waxuu

U qor boqleedyo adoo isticmaalaya %, 100kii 18, 100-ii 10.35.
U dir ardayda layliyo. Adeegso boqleedyada sida caadiga ah loo
isticmaalo sida:

50 %, 25 %, 75 %
10 %, 20 %, 30 % 90 % (w)

Bilowga xubintan, ahmiyad saab ixfirka oo qeeyaa jajabyo
iyo bogleedyo.

50 %	=	$\frac{1}{2}$	Ardaydo na ku muujiyo .
25 %	=	$\frac{1}{4}$	Tusayaal jaishyo ,
10 %	=	$\frac{1}{10}$	Jajab tobanle iyo boqleedyo .

11. Is ka 50kg oo baradho ah ayaa xumaaday. Waa immisa kg inta taaday?

$$\underline{\text{Enterprise}}: \quad \frac{10}{100} = \frac{x}{50}$$

II : maxay u taagan tahay $\frac{10}{100}$. Sidii aad ku soo baratay isla' ee, ku dhufo 50 labada dhinacba.

$$\frac{10 \times 50}{100} = x$$

$$5 = x$$

5 kg ka 50ka qayba kala xummaaday.

Masaalayinka loqleed meeluhay ku habooyihii:

Miisaaniyad: Kharashka kala gedisan ee ku baxo qayba kala gedisan ee daryeelka Ummadda.

- % ka Caruurta dhigta Dugsiyada marka 100 eego Mujtamaca meesha ku nool.
- Da'kooxeedka Urur.
- Isgarabdhiba sicirda miraha beeraha.
- Kor u qaadida sicirka.
- Kor u qaadida Mushaarka.

Waxaad taqaanaa Saamiga u dhixeyya laba tiro. Waxaad doonaysaa in aad ogaatid boqleedka saamiga.

Tusaale:

Awrbaa qiimihisu yahay 500 Sh., Yuusuf oo rabay in uu Awrka iibsado waxuu heli karaa 350 Sh. % ka uu Yuusuf haystaa qiimaha Awrka waa ka intee?

Furfuris:

$$\frac{350}{500} \text{ waxay}$$

$$\frac{350}{500} = \frac{x}{100}$$

$$\frac{350 \times 100}{500} = \frac{x \times 100}{100}$$

$$70 = x$$

Yuusuf waxuu haystaa 70 %.

Markaad rabtid in jajab loo bedelo boqoleed waxaad ku dhufanaysaa beqol (100).

Tusaale:-

$$1. \quad 1\frac{1}{2} \times 100 = \frac{100}{12} = 8\frac{1}{3}$$

$\frac{1}{12}$ wuxuu la micneyahay $8\frac{1}{3}\%$

$$2. \quad 0.37 \times 100 = 37$$

0.37 wuxuu la micneyahay 37 %

4 nin oo shaqaale ah ayaa lacag u qaybsaday sidan: 60 %, 20 %, 10 %, 10 %. Hantiday u kala helayaan waa intee haday qaybsadeen 15 sh., 90 sh., 250 sh., iyo 540 sh.?

Odhaah ahaan u weydii ardayda layliyo. Weydii boqoleed tirooyin ilaa 100 (sida 58,93) ama ilaa 1000 (sida 580, 930) weydii: % ka 4 ee 55kg
% ka 3 ee 90sintimitir,
isticmaal %ka u dhixeyya 1 ilaa 10.

DHEEF FUDUD

- ku xisaabtan muddo dhexdeed una dhaxaysa 1 bil ilaa 12 bilood.
- Tusaalooyinku ha ka yimaadaan degaanka.
- Baadh ama soo saar dheefta fudud ee amaaha loogu tala galay mashaariicda horumarinta ka soo baxa.

Qof daa raba in uu baabur iibsado. Wuxuu u baahanyahay 6.000 sh, oo uu ku bixiyo muddo 8 bilood ah. Haddii korsocodka dheeftu yahay ? waa intee hantida dheef ahaan looga rabaa?

Furfuris:

$$\begin{array}{rcl} \text{Dheefta hal sano} & = & 6.000 \text{ sh} \times 0.07 \\ " \quad " \quad \text{bil} & = & \underline{\underline{6.000 \text{ sh} \times 0.07}} \\ & & 12 \end{array}$$

$$8 \text{ bilood} = \frac{6.000 \text{ sh} \times 0.07 \times 8}{12} = 280 \text{ sh.}$$

Ka soo qaad in aad bangiga dhigatay 1.200 sh, korsocodka dheefta bangigu ku siinayaa hadaytahay 6 % hantida uu bangigu ku siinayaa waa immisa sanad ka soo wareeg?

Furfuris:

$$\begin{aligned}\text{Dheef korsocodka 1 sano} &= 1.200 \text{ sh} \times 0.06 \\ &= 72 \text{ sh}\end{aligned}$$

Dheef ahaan waxaad qaadanaysaa 72 sh, sanad ka bacdi.

Iskaashato ayaa waxay u baahantahay lacag dayn ah oo dhan 23,000 sh si ay qalab cusubugu gadaan/beertooda. Haddii korsocodka dheefahaan laga rabo yahay 7 % (ama $\frac{100}{100}$ ama 0.07) sanad gudihiina ay lacagta ku celinayaan waa imisa hantida dheef ahaan looga rabaa?

Xusuus:

Markaad baadhayso dheefta waa in aad maskaxda ku haysaa inlagu shaqaynayo jajabyo, jajab tobantle, boqoleedyo iyo saamigelyo. Had iyo jeer wax a sahlan in xisaabinta dheefta lagu raadiyo jajab tobantle halkii aad ka adeegsan lahayd boqoleed. Jedeeyada ka soo baxaysaa jajab tobantle ama boqoleed waa isku mid ee abaarta ayaa kala fudud.

Tusaale:

Qof baa raba in uu deynsado 500 sh, kuna bixiyo sanad gudihi, korsocodka dheefta laga rabaa haday tahay 6 %, imisuu bixinayaa sanadka dhamaadkiisa marka loo eego raasamaalkuu qaataay?

Furfuris:

$$\begin{aligned}\text{Dheefta} &= 500 \times 0.06 \times 1 \\ &= \text{raasamaal} \times \text{dheef korsocod} \times \text{waqt} \\ &= 30 \times 1 = 30\end{aligned}$$

waa in uu dib u bixiyaa 530 sh, sanad ka bacdi.

Xusuus:

Haddii aad daynsatid lacag, waxaad dib u bixinaysaa lacag ka badan tii aad daynsatay haddii uu jiro korosocod dheefeed. Inta dheer lacagtaad daynsatay ayaa waxa loo yaqaan dheef, lacagta aad amaahatayna waxaa loo yaqaan raasamaal.

Dheef Kor

Qof baa raba in uu daynsado 5,000 sh, kuna bixiyo muddo 3 sanc ah waxaa laga rabaa korsocod dheefeedoo ah 4 %. Dheefta 1 sanc waa in lagu daraa daynkiisii 1 sano ka dib, $5,000 \times 0.04 \times 1 = 200$ sh, sanadka hore dhamaadkiisa wuxuu bixiyaa 5,000 sh + 200 = 5,200 sh, sanadka labaad waa in la soo saaro dheeftiisa ayada oo raasamaal ahaan loo qaadanayo 5,200 sh.

Fiiro gaar ah

Ha ku shaqayn dheeef kor, ku sharaxa oo qura sida loo helo amaahda iyo sida lacagta loo qaybsado.

JOOMATERIAqoonsi shaxano iyo qaabab

- Naqtiiin laydiyadii iyo labajibaaranayaashii lagu soo dhigtey fasalka laad iyo ka 2aad.
- Naqtiiin fegradaha wareeg iyo bed.
- Tus geesoolayaal qaabdaran.

Ha soo saareen in geesoolayaasha loo kooxayn karo sida tirada dhinacyadoodu isu le'egyihiiin.

Geesoolayaal 3 dhinac leh,
 Geesoolayaal 4 " leh,
 Geesoolayaal 5 " leh,

Qeexidda erayada gees oo ah laba dhinac barta ay isaga yimaadaas ardaydu ha ka soo saareen qaababgeesociayaal ah degaankooda (fasalka, Dugsiga, dhismaha kale ama kuwa dabeeecaddu samaysay).

Geesaskooda ha tiriyeen. Muujinta in qaabka geesoolayaalko ah loo qaybin karo qobollo saddexgalla ah.

- Muujinta sadde'xagalada gaarka ah:
 saddexagala siman, saddexagala quman.

SHACCIITA MUG

- Barridda gaayeeda sal iyn joog ee saddexagal
- Barridda jidka lagu helo bedka saddexagal. Bed = $\frac{\text{sal} \times \text{joog}}{2}$
- Salaxyada qaarkood u jejebi (qaybi) saddexagallo si loo raadiyo bedka beer, aqal, qol, loox iwm.
- Tabta uun muujidabadeedna layli sii..

GOOBO IYO QAABADKA LA XIRIIRA

- Ha aqoonsadeen qaababka goobo iyo kuwa la xiriira ee dabeeecaddu samayso siida dayya, carceedda, dhulka iwm.
- Kasidda dhexroor iyo gacan.
- Kasidda madoorsoomaha π (baay) iyo siday ula xiriirto raadinta bedka goob.

AQOONSIGA MALAASYO

- Sharxidda in malaasyada lagu kala sooci karo qaabka fadhiqooda sida saddexjibaarane: labajibaarane. Kubbad: goobo.
- Layliyo ah sidii lagu aqoonsan lahaa malaasyada kala duwan.
- Wax ha laga barto malaasyada qaabka daran ee laga heli karo dabeeecada.

CABIRAAADDA MUG

- Mugga iyo siduu ula xiriiro saddexda aaddimood oo kala ah dherer, ballac iyo joog.
- Barashada halbeeg cabiraadeedka mugga oo ah sm^3 (sintimitir saddexjibaaran).
- Raadinta mugga teneg, foosto, baako sigaar iwm.

NAQTIIN GUUD

Naqtii cutubyada:

- Afarta xisaab fal
- Jajabyo
- Boqoleed
- Joomateri.

TILMAAMO GUUD

Jaxa dhacda badanaa in dariiqooyin dhoor ah oo kala geddisan y dadku raacaan, marka ay xisaab ka Shaqueynayaan. Inkasta oo jo'aanku isku mid yahay, misna ardeyda ayaa ku khaldameysa, iaddii bare kastiba si gooni ah u dhigo.

Sidaas darteed, waxaan talo ku soo jeedineynaa sida soo socota.

.. Isugeyn:

$$\begin{array}{r} 100 \\ + 14 \\ \hline 114 \end{array}$$

Xusuus: Celaanaddu bidixda had iyo jeer ha ka xigto. Isla markaana go'aanka laba xariijimood hoos mari.

2. Kala goyn:

$$\begin{array}{r} 260 \\ - 51 \\ \hline 209 \end{array}$$

Xusuus: Sida isugeynta calaamaddu bidixda ha ka xigto oo ha k. beegnaato tirada hoose. Sidoo kale go'aanka laba xariijimood hoos ka mari.

3. Isku dhufasho:

$$\begin{array}{r} 130 \\ \times 14 \\ \hline 130 \\ 520 \\ \hline 1820 \end{array}$$

Xusuus: Marka aad laba tiro isku dhufaneysid, waad is hoos dhigeysa, had iyo jeer tan yar labada tiro hoosta mari.

Tirada hoosta taala midda bidixda ku hor biilow oo ku dhufo tirada sare lambarka midigta ugu xiga. Go'aanka waxaad ku hoos dhigtaa, tirada hoos lambarka bidixda ugu xiga. U fiirso tusaalaha hoose.

4. Isu Qeybin:

		1	3	2
1	5	1	8	4
		4	4	
		4	3	
		2	8	
		2	8	
		0	0	

Xusuus: Marka aad laba tiro isu qeybineysid isticmaal calaamadda tusaalaha ku munjisan. Tirada la qeybinaayo gudaha geli, tan wax loo qeybinaayona debedda mari. Marka aad isu qeybisid waxa kuu soo baxa ku kor qor zariijinta dusheeda (u fiirso tusaalahu).

HABKA QORAALKA XISAABTA

Marka aad istiimaaleysid warqadda xariijimaha leh, lambarkii kastiba waxa uu dhex gelaya (zero) xariijimaha dhexdooda.

CALAAMADAH XISAABTA

Marka aad xisaabta qoreysid. Wuxaad raaceysaa cariiqaha dherer uga talowsanxaashida. Taas micnaheedu wuxa weeye tirooyinkii is lenba waad isku hoos beegeysaa. Sida tobnaadka, ku hoos cer tobnaad. Seddo kale raac xariiqaha gudban si fartu kuugu hagaagto, ayna tirooyinku isugu kaa beegmaan.

Tusaalahani waxe uu kuu muujinayaa, sida ay dhibaato ugu tahay beraha iyo ardeygaba in ay fahmaan farta xun.

$$\begin{array}{r}
 2+4+2-3 \times 4+9= \\
 9+8+2+9= \\
 15-12-6= \\
 \hline
 \end{array}
 \quad \text{Qalad!}$$

$$\begin{array}{r}
 21.33 \\
 12 \overbrace{}^{12} 256 \quad 16.66 \\
 24 \quad 2 \overbrace{}^2 33.33 \\
 \hline
 16 \quad 16.66 \\
 40 \quad 16.66 \\
 \hline
 16.66 \\
 16.66 \quad 24.600 \\
 \hline
 16.66 \\
 68.900 \\
 \hline
 83.30 \\
 \hline
 84.60
 \end{array}$$

Tusaalahaan waxaa mu kuu muujinayaa siida haddii hab quman loo qoro xisaaltaa ay ugu hawii yaradeeyso in la akhriyi karo.

$$7 + (4 \times 2) - (3 \times 9) + 8$$

$$7 + 8 - 12 + 9$$

$$15 - 12 + 9$$

$$(15 + 9) - 12 = \underline{\underline{12}}$$

12	356	7.3	40
12	356	7.3	40
12	356	7.3	40
12	356	7.3	40
12	356	7.3	40

Had iyo jeer waxaad isku deydaa in fartaadu ay hagaagto si ardadu ay ugu dayato.

Si loo kala sooco labada lambar ee kala ah hal iyo todoba oo badanaa la isku khaldo raac tusaalaha, areydaadana u bar ceynkaas.

1 2 3 4 5 6 7 8 9 0

1977