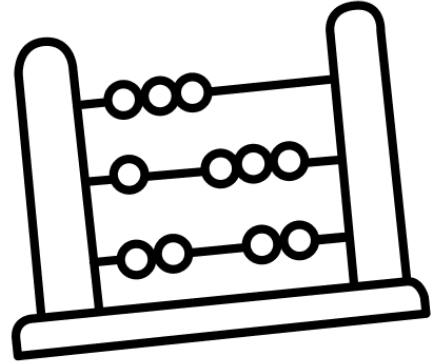


# Tababarka ciyaaraha (Sports coaching)

## Maths

**Unit** Xisaabta goobta shaqada (Xisaab in the workplace)



## Natiijo

Waxaan fahmi karaa sida xisaabta loogu isticmaalo tababarayaasha ciyaaraha.

# Erayada muhiimka ah

Xogtu (Data) waa ururinta macluumaadka.

Celcelisku (Average) waa hal lambar oo muujinaya qiimaha (value) dhexe ama caadiga ah ee xogta (data); mod-ka (mode), dhexdhexaadka (median), iyo celceliska (mean).

### Tababarka ciyaaraha (Sports coaching)



Diiwaangelinta iyo isticmaalka xogta (data)



Isticmaalka xogta (data) si loo qorsheeyo tababarka

Tababarayaasha ciyaaraha waxay isticmaalaan xisaab badan shaqadooda. Waxa ay aad u badan yihiin waa cabbiraadda (measuring)!

Sifiican Suad! Waxaad ku qabtay 800 daqiiqad 2:16



Tababare Cabdi



Ciyaaryahan Suad

Dhab ahaantii, tababarayaasha ciyaaraha iyo ciyaartoydu waxay si fiican u yaqaaniin cabbiradooda, waxayna si toos ah u ogaadaan halbeegyada (units) la isticmaalayo.

Sifiican Suad! Waxaad ku qabtay 800 daqiiqad 2:16



Tababare Cabdi



Ciyaaryahan Suad

Maxay yihiin halbeegyada (units) aad u malaynaysaa in Tababare Cabdi uu isticmaalayo halkan?

Waa maxay halbeegyada uu Tababare Cabdi ka hadlayo halkan?

Waa hagaag Suad! Boodboodka dheer ee aad samaysay wuxuu ahaa 3.95



3 mitir (metres),  
95 sentimitir (centimetres)



Suad oo Ciyaaraha ku Fiican

Waa hagaag Caasha! Waxaad ku orodday nus maratoon (half marathon)  
1:57 taas oo ah xawaare dhexdhexaad ah (average speed) 7 mph



Caasha oo Ciyaaraha ku Fiican

## Diiwaangelinta iyo isticmaalka xogta (data)



Sharaxaad

Dhaqan ahaan, tababarayaashu waxay isticmaali jireen qalab sida saacad-joojiyaha (stopwatch) si ay u diiwaangeliyaan waxqabadka.

Qalabkani wuxuu ina siin jiray macluumaad xaddidan oo dhammaantiisna waa in la qoraa.



Tignoolajiyada casriga ahi waxay hadda qabataa inta badan diiwaangelinta.

Tignoolajiyadu waxay diiwaangelisaa noocyo kala duwan oo xog (data) ah oo tababarayaasha iyo ciyaartoydu ay isticmaali karaan si ay ula socdaan waxqabadkooda.



Mid ka mid ah waxyaabahan, maxay tahay waxa aad u malaynaysaa in tiknoolajiyada casriga ahi ay u diiwaangelin karto ciyaartoyda iyo tababarayaasha?

Waqtiga la qaatay



Masaafada la soo maray



Xawaaraha (Speed)



Xawaaraha celceliska (Average speed)



Heerka garaaca wadnaha  
(Heart rate)



Heerka garaaca wadnaha ee celceliska (Average heart rate)



Kaloriyada la gubay (Calories burnt)



Wadarta saacadaha tababarka



Saacadaha caqliga leh (Smart-watches) / Talefoonnada caqliga leh (Smart-phones) waa kuwo caqli badan! Waxay siiyaan ciyaartoyda iyo tababarayaasha xog (data) badan oo kala duwan si ay u falanqeeyaan oo u horumariyaan waxqabadka.

Ciyaaraha waxaan la kulannaa halbeegyo (units) aan horay u arag.

Kcal waa soo gaabinta kilokalori (kilocalories).

Kalori (calorie) waa halbeeg (unit) tamar (energy) ah oo aan ka helno cuntada iyo cabitaanka. Dhalinyaradu waxay gubaan inta u dhaxaysa 1600 iyo 2400 maalin kasta.

Suad waxay ku tababartaa xoojin (intensity) sare saddex jeer ama ka badan usbuucii, waxayna ku xisaabtaa kaloriyadaas dheeraadka ah ee ay u baahan tahay cuntadeeda.



Suad ciyaar jecel

Ciyaaraha waxaan la kulannaa halbeegyo (units) aan horay u arag.

b.p.m. waxay u taagan tahay 'Beats per minute' ( garaac daqiiqaddii)

Tani waa tirada jeer ee uu wadnahaagu ku garaaco hal daqiiqo.

Dhalinyarada iyo dadka waaweyn waxay leeyihiin b.p.m. nasasho ah oo u dhaxaysa 60 ilaa 100

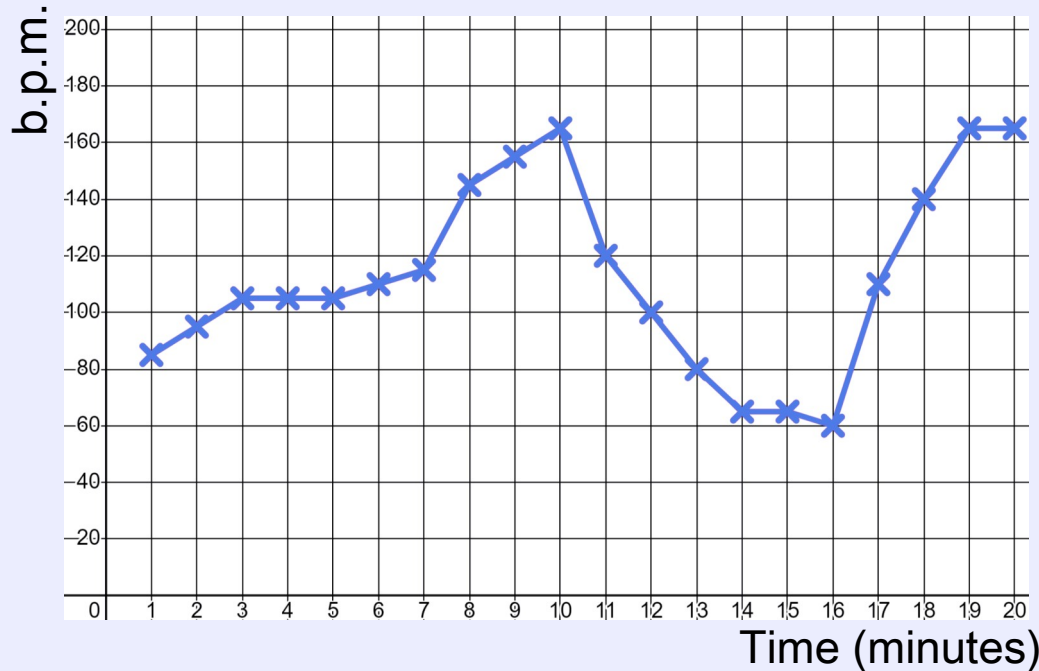
Inta lagu jiro jimicsiga b.p.m. wuu kordhaa  
sida wadnahaagu u shaqeeyo si adag si uu helo oksijiin (oxygen) muruqyadaada.



Suad ciyaar jecel

# Recording and using data

Tababare Lucas wuxuu isticmaalayaa app diiwaangelisay oo garaaf u sameysay wadnaha Sofia inta lagu jiro tababarka.



Goormaad u maleyneysaa in Sofia ay shaqeysay xoog sare?

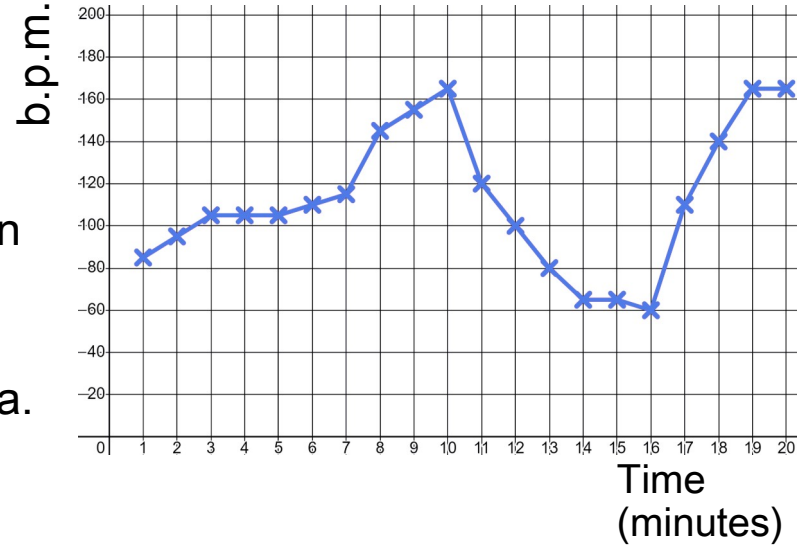
Goormaad u maleyneysaa in Sofia ay fidsanaysay?

Wadnaha Sofia wuxuu ahaa ugu yaraan 60 b.p.m. iyo ugu badnaan 165 b.p.m. inta lagu jiro tababarka.

Aan eegno haddii taasi caadi tahay.



Dhallinyarada iyo dadka waaweyn waxay leeyihiin wadnaha nasashada inta u dhaxaysa 60 iyo 100 b.p.m. Ciyaartoydu waxay u janjeeraan dhanka hoose ee miisaankaas iyagoo wadnaha hooseeya.



Inta lagu jiro jimicsiga wadnahaagu wuu kici doonaa.  
Laakiin, maxaan u hiigsanaynaa?

Si loo ilaaliyo wadnaha caafimaadka qaba waxaa muhiim ah inaad kor u qaaddo wadnahaaga si joogta ah iyada oo loo marayo jimicsi. Waxaa jira xisaabinta wadnaha bartilmaameedka.

- Wadnahaaga ugu sarreeya waa 220 b.p.m. laga jaray da'da
- Wadnaha bartilmaameedka jimicsiga dhexdhexaadka ah waa 50 – 70% ee ugu sarreeya
- Wadnaha bartilmaameedka jimicsiga xoogga sare waa 70 – 85% ee ugu sarreeya

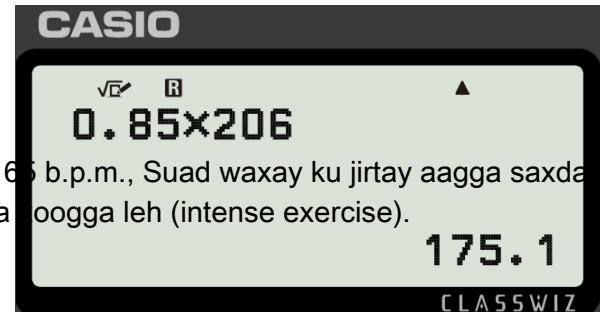
Suad waa 14 jir waxayna ku shaqaynaysay xoog sare (high intensity).  
Ma 165 b.p.m. ayaa ahayd wadnaha saxda ah (heart rate) iyada?

Wadnaha ugu sarreeya (Max heart rate):  $220 - 14 = 206$  b.p.m.

Qiimaha 70% (value):  $0.7 \times 206 = 144$  b.p.m.

Qiimaha 85% (value):  $0.85 \times 206 = 175$  b.p.m.

Marka 165 b.p.m., Suad waxay ku jirtay aagga saxda ah ee jimicsiga xoogga leh (intense exercise).



# Duubista iyo isticmaalka xogta (data)

Yacquub wuxuu hadda bilaabayaa jimicsi joogto ah. Wuxuu rabaa inuu sameeyo jimicsi dhexdhexaad ah (moderate exercise) saddex jeer usbuucii wuxuuna tirin doonaa wadnaha (heart rate).



- Wadnahaagu ugu sarreeya waa 220 b.p.m. minus da'da
- Wadnaha bartilmaameedka ah ee jimicsiga dhexdhexaadka ah waa 50 – 70% ee kan ugu sarreeya
- Wadnaha bartilmaameedka ah ee jimicsiga xoogga leh waa 70 – 85% ee kan ugu sarreeya

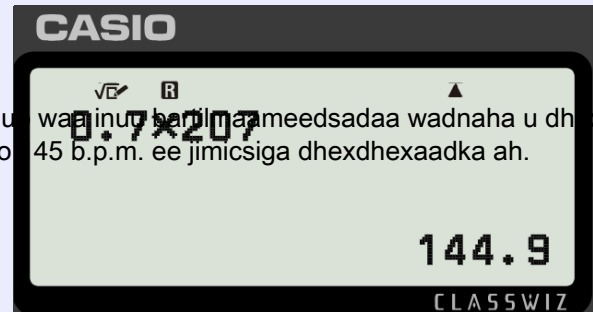
Yacquub waa 13. Waa imisa kala duwanaanshaha (range) ee wadnaha uu Yacquub bartilmaameedsanayo?

Wadnaha ugu sarreeya (Max heart rate):  $220 - 13 = 207$  b.p.m.

Xadka hoose (Lower bound):  $0.5 \times 207 = 104$  b.p.m.

Xadka sare (Higher bound):  $0.7 \times 207 = 145$  b.p.m.

Yacquub waa inuu bartilmaameedsadaa wadnaha u dhaxeeya 104 iyo 145 b.p.m. ee jimicsiga dhexdhexaadka ah.



Waxaa jira siyaabo kale oo aan farsamo ahayn oo lagu qiyaaso dadaalka (effort) dadka hadda bilaabaya jimicsi joogto ah.

Tababarayaasha sida aniga oo kale waxay isticmaali doonaan jaantuska RPE si ay u qorsheeyaan tababarkaaga Yacquub.



Tababare Cabdi



| Jaantuska RPE (Heerka dadaalka la dareemo) (Rate of perceived exertion) |                                  |                                                                                         |
|-------------------------------------------------------------------------|----------------------------------|-----------------------------------------------------------------------------------------|
| 10                                                                      | Dadaal ugu sarreeya (Max effort) | Waa suurtagal ma aha in la sii wado Neefsasho ka baxay Awood la'aan hadal               |
| 9                                                                       | Aad u adag                       | Adag in la ilaaliyo Dhibaato neefsasho, si dhib yar u neefsada Ku hadlaya erayo keli ah |
| 7-8                                                                     | Xoog badan (Vigorous)            | Qarka u daran raaxo la'aan Neefsasho gaaban, jumlado keli ah                            |
| 4-6                                                                     | Dhexdhexaad (Moderate)           | Wuu sii socon karaa saacado Neefsasho culus, wada hadal gaaban                          |
| 2-3                                                                     | Fudud (Light)                    | Fudud in la ilaaliyo saacado Si fudud wada hadal u sii wadi karaa                       |
| 1                                                                       | Aad u fudud (Very light)         | Wax kasta oo aan ahayn hurdo tusaale: Fadhiista oo daawanaya T.V.                       |

Ma tahay jimicsi wanaagsan ku socodka sabuuradda? Waxaan jeclahay inaan bilaabo.

Taasi waa jimicsi aad u fiican! Waxay u dhexayn doontaa inay dareento sida 3, 4, ama 5



Tababare Cabdi (Coach Lucas)

| Jaantuska RPE (Heerka dadaalka la dareemo) |                  |                                                                                 |
|--------------------------------------------|------------------|---------------------------------------------------------------------------------|
| 10                                         | Dadaal ugu badan | Ma suurtagelin in la sii wado<br>Neefsasho ka baxday<br>Awood la'aan inuu hadlo |
| 9                                          | Aad u adag       | Adag in la sii wado<br>Dhibaato neefsasho<br>Hadalka erey keliya                |
| 7-8                                        | Xoog leh         | Qarka u ah raaxo-darro<br>Neefsasho gaaban, jumlado keliya                      |
| 4-6                                        | Dhexdhexaad      | Waa la sii wadi karaa saacado<br>Neefsasho culus, wada hadal gaaban             |
| 2-3                                        | Fudud            | Fudud in la sii wado saacado<br>Si fudud wada hadal loo sii wadi karaa          |
| 1                                          | Aad u fudud      | Wax kasta oo aan ahayn hurdo<br>tusaale. Fadhiista daawashada T.V.              |

Halkee kula tahay inay yihiin hawlahaan jaantuska qofka hadda bilaabaya jimicsiga?

- Socodka mashiinka jimicsiga (treadmill)
- Kor u socodka buurta dheer
- 10 daqiiqo baaskiil wadista guriga saaxiib
- 2 daqiiqo trampoline-ka xoogga leh
- Ciyaaraha (Gaming)

| Jaantuska RPE (Heerka dadaalka la dareemo) |                  |                                                                                    |
|--------------------------------------------|------------------|------------------------------------------------------------------------------------|
| 10                                         | Dadaal ugu badan | Waa aan suurtagal ahayn in la sii wado<br>Neefsasho ka baxday<br>Hadli kari maayo  |
| 9                                          | Aad u adag       | Adag in la sii wado<br>Waa ku dhow inaad neefsan weydo<br>Ku hadlaya ereyo keli ah |
| 7-8                                        | Xoog badan       | Geestii raaxo-darrada<br>Neefsasho gaaban, jumlado keli ah                         |
| 4-6                                        | Dhexdhexa ad     | Waa la sii wadi karaa saacado<br>Neefsasho culus, wada hadal gaaban                |
| 2-3                                        | Fudud            | Fudud in la sii wado saacado<br>Wada hadalka si fudud ayaa loo sii wadi karaa      |
| 1                                          | Aad u fudud      | Wax kasta oo aan ahayn hurdo<br>Tusaale: Fadhiista oo daawanaya TV-ga              |

Haddii aad bilaabayso, wali ma doonayo inaan arko 9 ama 10!



| Jaantuska RPE (Heerka dadaalka la dareemo) |                             |                                                                                           |
|--------------------------------------------|-----------------------------|-------------------------------------------------------------------------------------------|
| 10                                         | Dadaal ugu badan            | Aan suurtagal ahayn in la sii wado<br>Neefsasho oo ka baxaysa<br>Awoodi la'aan inuu hadlo |
| 9                                          | Aad u adag                  | Adag in la sii wado<br>Si dhib yar ayuu u neefsan karaa<br>Hadalka ereyada keli ah        |
| 7-8                                        | Xoog badan<br>(Vigorous)    | Qarka u ah raaxo la'aan<br>Neefsasho gaaban, jumlado keli ah                              |
| 4-6                                        | Dhexdhexaad<br>(Moderate)   | Wuu sii socon karaa saacado<br>Neefsasho culus, wada hadal gaaban                         |
| 2-3                                        | Iftiin (Light)              | Sahlan in la ilaaliyo saacado<br>Wadahadal si fudud u socon karaa                         |
| 1                                          | Aad u fudud<br>(Very light) | Wax kasta oo aan ahayn hurdo<br>tusaale: Fadhiista daawashada T.V.                        |

Tababare Cabdi (Coach Lucas) wuxuu xisaabiyaa celcelis (averages) si uu ula socdo waxqabadka Caasha ee 800 m

| Toddobaad (Week) | 1   | 2   | 3   | 4   | 5   | 6   | 7   | 8   | 9   | 10  |
|------------------|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| Waqti (sec)      | 136 | 132 | 138 | 132 | 136 | 128 | 138 | 130 | 126 | 132 |

Waxaan xisaabin karaa celcelisyada (averages) wakhtiyada Caasha.

Marka waxaa u badan in aan ordo 132, laakiin waxaa laga yaabaa in aan ordo 138 Taas kuma filna in aan ka adkaado tartamayaashayda!

Naso. Waan ogahay inaad horumaraysid. Ma maqashay celcelis socod saddex-qodob (three-point moving averages)?



Tababare Cabdi (Coach Lucas)



Caasha Ciyaaraha (Sporty Sofia)

# Diiwaangelinta iyo isticmaalka xogta



Sharaxaad

Waxaan garaafi karnaa waqtiyada Suad.

| Toddobaad   | 1   | 2   | 3   | 4   | 5   | 6   | 7   | 8   | 9   | 10  |
|-------------|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| Waqti (sec) | 136 | 132 | 138 | 132 | 136 | 128 | 138 | 130 | 126 | 132 |

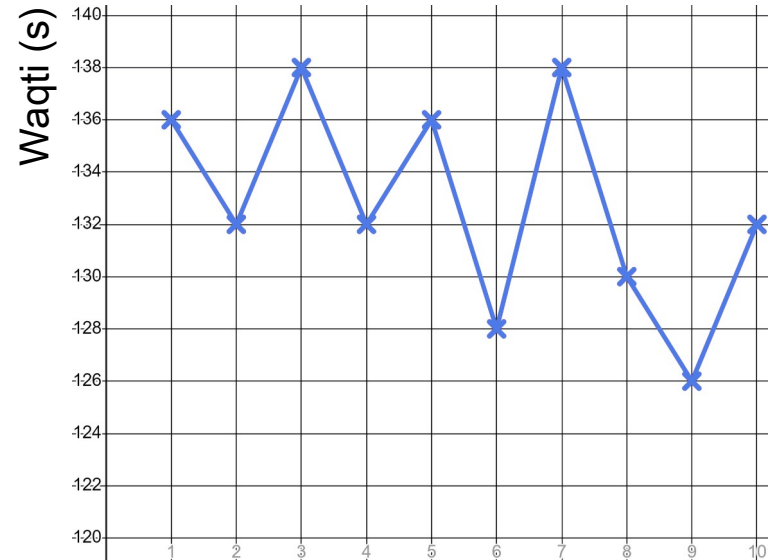
Khadku waa mid isbeddelaya (erratic).

Ma dib ayuu u kici doonaa?

Ma hoos ayuu u dhici doonaa marka xigta?

Ma horumaraysaa Suad?

Qaabka (pattern), isbeddelka (trend), waa sahlan tahay in la arko haddii aan sawirno celcelis socod saddex-qodob (three-point moving average).



# Diiwaangelinta iyo isticmaalka xogta



Sharaxaad

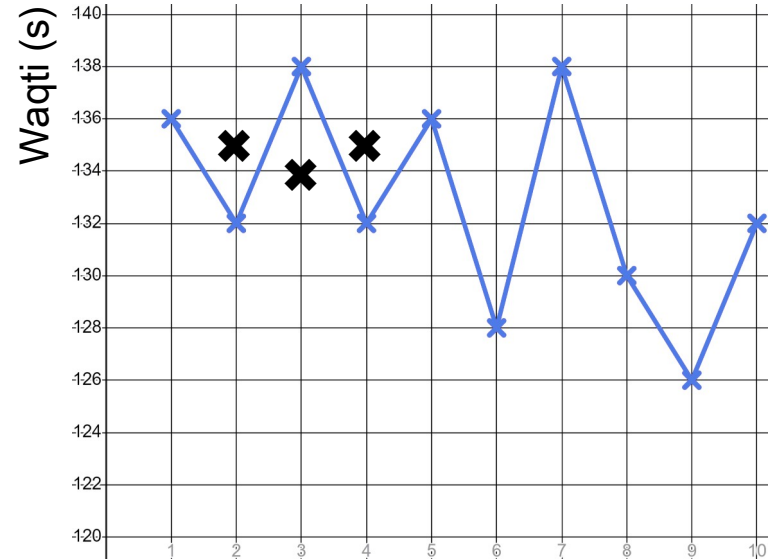
| Toddobaad   | 1   | 2   | 3   | 4   | 5   | 6   | 7   | 8   | 9   | 10  |
|-------------|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| Waqti (sec) | 136 | 132 | 138 | 132 | 136 | 128 | 138 | 130 | 126 | 132 |
|             |     | 135 | 134 | 135 |     |     |     |     |     |     |

Qaad celceliska saddexda qodob.

$$\frac{136 + 132 + 138}{3} = 135.3$$

$$\frac{132 + 138 + 132}{3} = 134$$

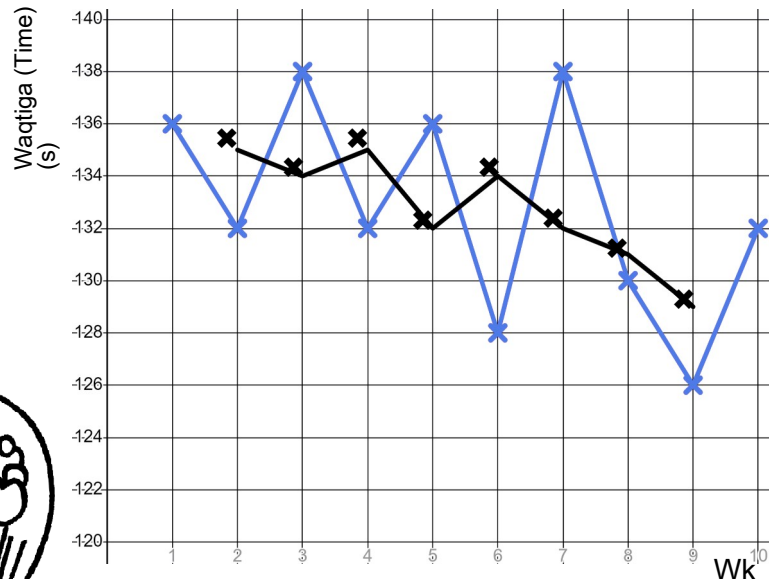
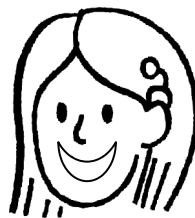
$$\frac{138 + 132 + 136}{3} = 135.3$$



| Toddobaad      | 1   | 2   | 3   | 4   | 5   | 6   | 7   | 8   | 9   | 10  |
|----------------|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| Wagtiga (Time) | 136 | 132 | 138 | 132 | 136 | 128 | 138 | 130 | 126 | 132 |
| (sec)          |     | 135 | 134 | 135 | 132 | 134 | 132 | 131 | 129 |     |

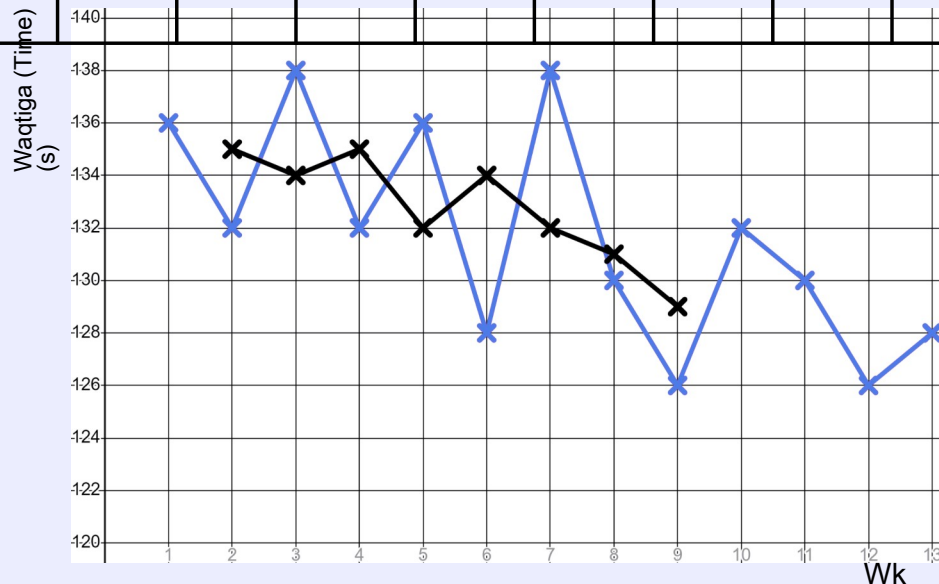
Ka dib markii shaxda oo dhan la buuxiyay oo celceliska dhaqaaqa saddexda dhibcood la sawiray...

Waxaan aragnaa khad aad u siman oo leh isbeddel cad oo hoos u socda.



| Toddobaad<br>(Week)        | 1   | 2          | 3          | 4          | 5          | 6          | 7          | 8          | 9          | 10  | 11  | 12  | 13  |
|----------------------------|-----|------------|------------|------------|------------|------------|------------|------------|------------|-----|-----|-----|-----|
| Waqtiga<br>(Time)<br>(sec) | 136 | 132<br>135 | 138<br>134 | 132<br>135 | 136<br>132 | 128<br>134 | 138<br>132 | 130<br>131 | 126<br>129 | 132 | 130 | 126 | 128 |

Soo hel celceliska dhaqaaqa saddexda dhibcod ee hadhay oo sii wad khadka isbeddelka ee Suad si aad u hubiso inay sii wadatay horumarka.

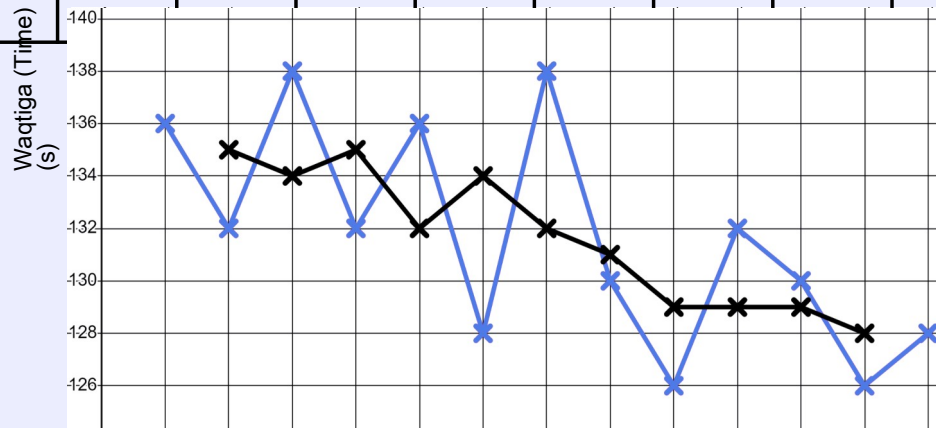


| Toddobaad (Week) | 1   | 2   | 3   | 4   | 5   | 6   | 7   | 8   | 9   | 10  | 11  | 12  | 13  |
|------------------|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| Waaqiga (Time)   | 136 | 132 | 138 | 132 | 136 | 128 | 138 | 130 | 126 | 132 | 130 | 126 | 128 |
| (sec)            |     | 135 | 134 | 135 | 132 | 134 | 132 | 131 | 129 | 129 | 129 | 128 |     |

$$\frac{126 + 132 + 130}{3} = 129.3$$

$$\frac{132 + 130 + 126}{3} = 129.3$$

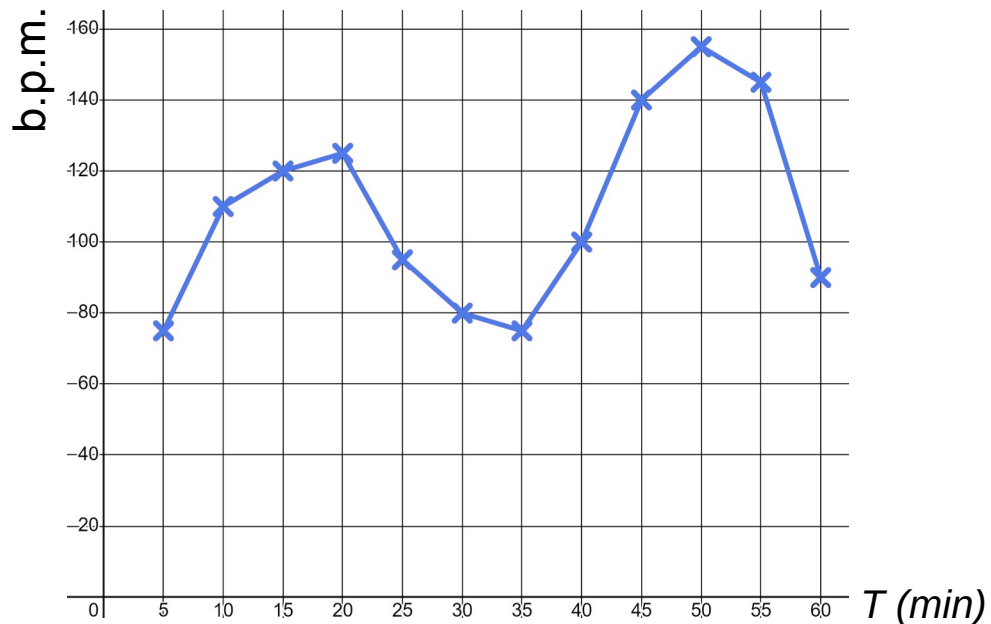
$$\frac{130 + 126 + 128}{3} = 128$$



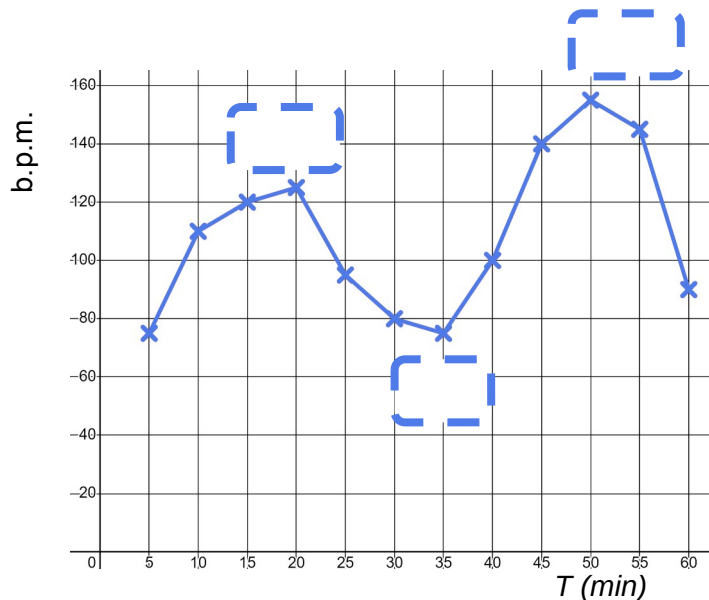
Suad waxay sii waday horumarka. Heerka horumarkeedu wuu yaraaday laakiin taasi

ma aha wax aan caadi ahayn kuwa wax qabta ee sare markay ku soo dhawaadaan awooddooda ugu badan.

1) a) Yacquub wuxuu raacayaa skateboarding oo saacaddiisu waxay duubaysaa b.p.m.-kiisa Qor ugu yaraan saddex jumladood oo qeexaya fadhiga skateboarding ee Yacquub. Isticmaal ereyo sida 'xoojin dhexdhexaad ah (moderate intensity)' iyo 'xoojin sare (high intensity)'.

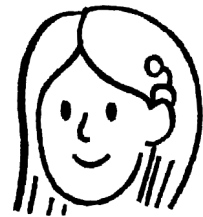


1) b) Qiimee (Rank) saddexdan daqiiqadood (moments) qiime (value) tiro oo ka yimid jaantuska RPE ee tababarayaasha.



| Jaantuska RPE (Heerka shaqada ee la dareemo) |                         |                                                                             |
|----------------------------------------------|-------------------------|-----------------------------------------------------------------------------|
| 10                                           | Dadaal ugu badan        | Ma joojin karo<br>Neefsasho la'aan<br>Hadli kari maayo                      |
| 9                                            | Aad u adag              | Adag in la sii wado<br>Dhibaato neefsasho<br>Hadalka erey keliya            |
| 7-8                                          | Xoog leh (Vigorous)     | Qarka u raacsan raaxo la'aan<br>Neefsasho gaaban, jumlado keliya            |
| 4-6                                          | Dhexdhexa ad (Moderate) | Waa la sii wadi karaa saacado<br>Neefsasho culus, wada hadal gaaban         |
| 2-3                                          | Fudud (Light)           | Fudud in la sii wado saacado<br>Wada hadal si fudud ayaa loo sii wadi karaa |
| 1                                            | Aad u fudud             | Wax kasta oo aan ahayn hurdo<br>Tusaale: Fadhiista daawashada TV-ga         |

2) Suad oo ciyaar jecel ayaa buuxinaysa jaantuska wadnaha ee loogu talagalay xubnaha qoyska ee da'da weyn si ay u isticmaalaan inta ay jimicsi samaynayaan.



- Wadnahaagu wuxuu ugu sarreeyaa 220 b.p.m. laga jaray da'da
- Wadnaha la beegsaday ee jimicsiga dhexdhexaadka ah waa 50 – 70% ee ugu sarreeya
- Wadnaha la beegsaday ee jimicsiga xoogga leh waa 70 – 85% ee ugu sarreeya

| Da' (Age) | Jimicsi dhexdhexaad ah min | Xoog sare wuxuu bilaabmaa | Xoog sare ugu sarreeya |
|-----------|----------------------------|---------------------------|------------------------|
| 20        | 100                        | 140                       | 170                    |
| 30        | 95                         |                           | 161.5                  |
| 50        |                            | 119                       |                        |
|           |                            |                           | 127.5                  |

Buuxi meelaha bannaan ee jaantuska.

3) Caasha waxay isku dayaysaa inay hagaajiso waqtigeeda 400 mitir. Halkan waxaa ah waqtiyadeeda ugu fiican 10 toddobaad oo tababar ah.

Caasha oo orod badan

| Toddobaad<br>(Week) | 1  | 2  | 3  | 4  | 5  | 6  | 7  | 8  | 9  | 10 |
|---------------------|----|----|----|----|----|----|----|----|----|----|
| Waqti (sec)         | 73 | 70 | 66 | 73 | 69 | 65 | 70 | 64 | 67 | 63 |



a) Xisaabi celceliska (mean), qaabka (mode) iyo dhexdhexaadiyaha (median) waqtiyadeeda.

b) Qor jumlad sharraxaysa sababta saddexdan celcelis oo keliya aysan kuugu sheegin in Caasha soo hagaageyso iyo in kale.

3)

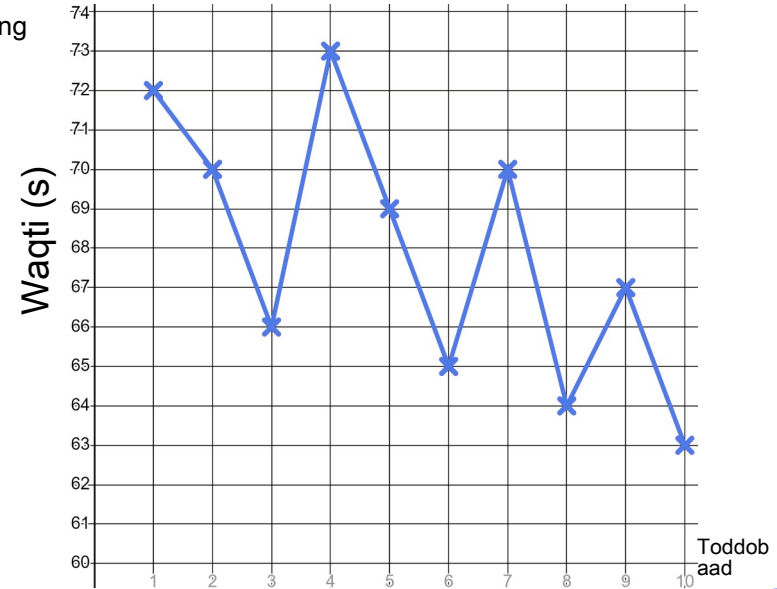
| Toddobaad   | 1  | 2  | 3  | 4  | 5  | 6  | 7  | 8  | 9  | 10 |
|-------------|----|----|----|----|----|----|----|----|----|----|
| Waqti (sec) | 73 | 70 | 66 | 73 | 69 | 65 | 70 | 64 | 67 | 63 |
|             | ✖  | 70 |    |    |    |    |    |    |    |    |



c) Buuxi jaantuska celcelisyada guurguura ee saddex-dhibcood (three-point moving averages) (tiro dhammays tiran). Midda koowaad ayaa lagu sameeyay.

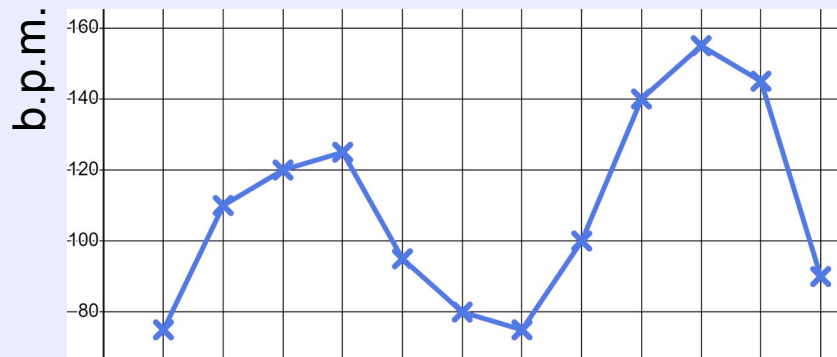
d) Sawir garaafka (graph) celcelisyada guurguura ee saddex-dhibcood ee Caasha oo qor faallo ku saabsan haddii ay soo hagaageyso iyo in kale.

e) U isticmaal saddexda celcelis socda si aad u saadaaliso goorta Caasha laga yaabo inay jebiso xannibaadda 60 ilbiriqsi.

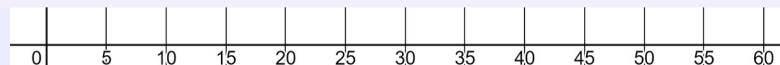


1) a) Yacquub wuxuu aadaa skateboarding-ga oo saacadiisu waxay diiwaan gelisaa b.p.m-kiisa.

Qor ugu yaraan saddex jumladood oo qeexaya fadhiyada skating-ga Yacquub. U isticmaal ereyo sida 'moderate intensity' iyo 'high intensity'.

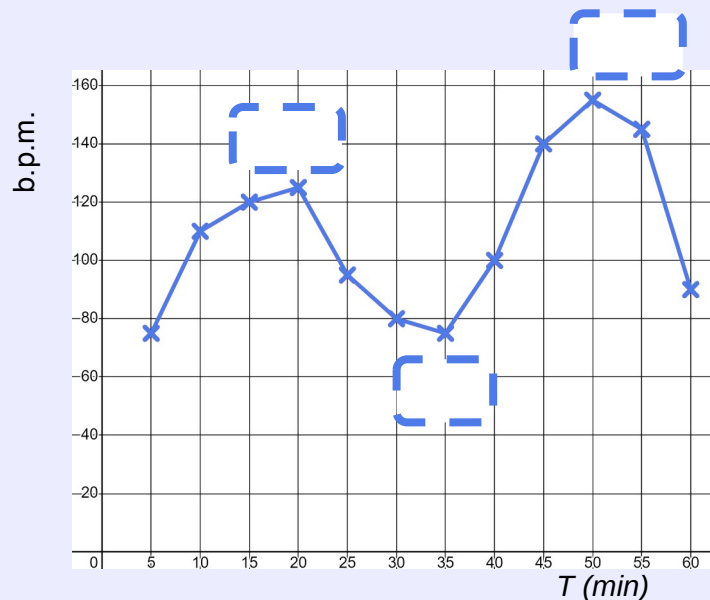


Waxaa laga yaabaa inaad qortay: "Yacquub wuxuu ku qaatay 20 daqiiqo oo ugu horreeyay isagoo ku shaqaynaya xoojin dhexdhexaad ah (moderate intensity). Ka dib wuxuu lahaa xilli nasasho ah. Wuxuu ku dhammeeyay xilli xoojin sare leh (high intensity) halkaas oo garaaca wadnihiiisu uu ahaa kan ugu sarreeya".



T (min)

1) b) Qiimee (rank) saddexdan xilli oo leh qiime (value) tiro oo ka yimid jaantuska RPE ee tababarayaasha.



| Jaantuska RPE (Heerka xoojinta la dareemo) |                          |                                                                                                                                               |
|--------------------------------------------|--------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------|
| 10                                         | Xoojin ugu sarreysa      | Ma suurtoagal in la sii wado<br>Neefsasho oo ka baxday<br>Awoodi maayo inuu hadlo                                                             |
| 9                                          | Aad u adag               | Adag in la ilaaliyo<br>Wuxuu si dhib leh u neefsanayaa<br>Hadalka erey keliya                                                                 |
| 7-8                                        | Xooggan (Vigorous)       | Xadka raaxo-darrada (Verge of uncomfortable)<br>Neefsasho oogo, jumlado keliya (Short of breath, single sentences)                            |
| 4-6                                        | Dhexdhexaad (Moderate)   | Waa sii socon karaa saacado (Could continue for hours)<br>Neefsasho culus, hadal gaaban (Breathing heavy, short conversation)                 |
| 2-3                                        | Fudud (Light)            | Fudud in la sii wado saacado (Easy to maintain for hours)<br>Wada hadalka si fudud ayaa loo sii wadi karaa (Can maintain conversation easily) |
| 1                                          | Aad u fudud (Very light) | Wax kasta oo aan ka ahayn hurdo (Anything other than sleeping)<br>Tusaale: Fadhiisasho daawashada T.V. (e.g. Sitting watching T.V.)           |

2) Suad oo ciyaar jecel ayaa buuxinaysa jaantuska wadnaha ee bartilmaameedka loogu talagalay xubnaha qoyska ee da'da weyn si ay u isticmaalaan inta ay jimicsi samaynayaan.



- Wadnahaagu wuxuu ugu badnaan karaa 220 b.p.m. laga jaray da'da (Your maximum heart rate is 220 b.p.m. minus age)
- Wadnaha bartilmaameedka ah ee jimicsiga dhexdhexaadka ah waa 50 – 70% tirada ugu badan (Target heart rate for moderate exercise is 50 – 70% of maximum)
- Wadnaha (heart rate) ee bartilmaameedka ah ee jimicsiga xoojinta sare waa 70 – 85% ee ugu badnaan (maximum)

| Da'da (Age) | Jimicsiga dhexdhexaadka ah (Moderate exercise min) | Xoojinta sare wadnaha (High intensity starts) | Xoojinta sare ugu badan (High intensity max) |
|-------------|----------------------------------------------------|-----------------------------------------------|----------------------------------------------|
| 20          | 100                                                | 140                                           | 170                                          |
| 20          | 100                                                | 140                                           | 170                                          |
| 30          | 95                                                 | 133                                           | 161.5                                        |
| 30          | 95                                                 | 133                                           | 161.5                                        |
| 50          | 85                                                 | 119                                           | 144.5                                        |
| 50          | 85                                                 | 119                                           | 144.5                                        |
| 70          | 75                                                 | 105                                           | 127.5                                        |
|             |                                                    |                                               | 127.5                                        |

Buuxi meelaha bannaan ee shaxda.

3) Caasha waxay isku dayaysaa inay wanaajiso waqtigeeda 400 mitir. Waa kuwan waqtiyadeeda ugu fiican 10 toddobaad oo tababar ah.

Caasha oo ciyaar fudud

| Toddobaad         | 1  | 2  | 3  | 4  | 5  | 6  | 7  | 8  | 9  | 10 |
|-------------------|----|----|----|----|----|----|----|----|----|----|
| Waqti (ilbiriqsi) | 73 | 70 | 66 | 73 | 69 | 65 | 70 | 64 | 67 | 63 |



a) Xisaab celceliska (mean), qaabka (mode) iyo dhexdhexaadka (median) ee waqtiyadeeda.

b) Qor jumlad sharraxaysa sababta saddexdan celcelis keligood aanay kuugu filnayn inay kuu sheegaan in Caasha ay horumarayso.

Waxaa laga yaabaa inaad tidhaahdo, "Celceliskan waxaa lagu xisaabiyay dhamaan 10 toddobaad. Waxay ina siinayaan macluumaad muhiim ah laakiin waxba kama sheegayaan horumarka waqtiga."

3)

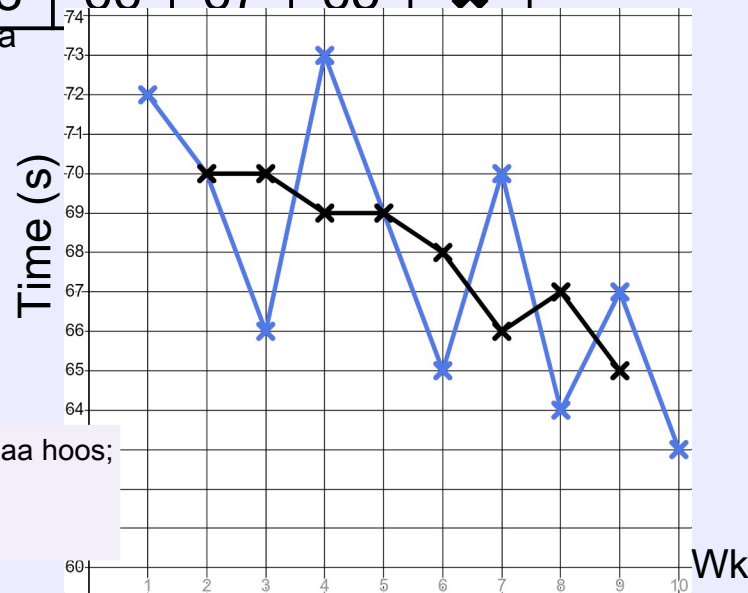
| Toddobaad         | 1  | 2  | 3  | 4  | 5  | 6  | 7  | 8  | 9  | 10 |
|-------------------|----|----|----|----|----|----|----|----|----|----|
| Waqti (ilbiriqsi) | 73 | 70 | 66 | 73 | 69 | 65 | 70 | 64 | 67 | 63 |
|                   | ✗  | 70 | 70 | 69 | 69 | 68 | 66 | 67 | 65 | ✗  |



c) Buuxi jaantuska celceliska socda ee saddexda dhibcood (ilaa nambarka ugu dhow). Kan koowaad waa lagu sameeyay.

d) Sawir celceliska socda ee Aisha oo qor faallo ah inay horumaraysid iyo in kale.

Waxaa laga yaabaa inaad tidhi, “Celceliska socda ee Aisha wuxuu u socdaa hoos; waxay horumaraysaa.”



Wk

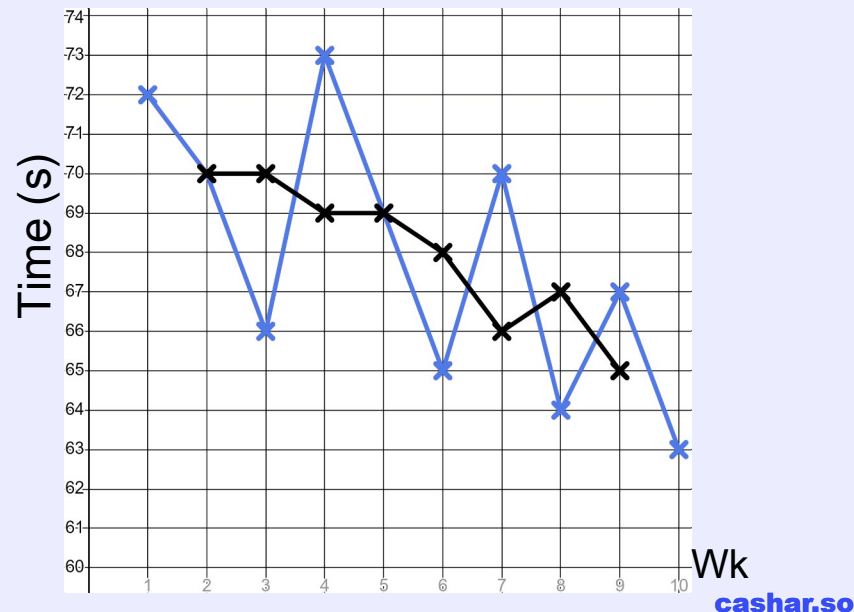
3)

| Week       | 1  | 2  | 3  | 4  | 5  | 6  | 7  | 8  | 9  | 10 |
|------------|----|----|----|----|----|----|----|----|----|----|
| Time (sec) | 73 | 70 | 66 | 73 | 69 | 65 | 70 | 64 | 67 | 63 |
|            | ✕  | 70 | 70 | 69 | 69 | 68 | 66 | 67 | 65 | ✕  |



e) Isticmaal celceliska socda si aad u saadaaliso goorta Aisha laga yaabo inay jebiso xadka 60 ilbiriqsi.

You might have said, “Aisha’s three-point moving averages are improving by approximately half a second per week. If this trend continues she should break the 60 second barrier in another ten weeks.”



### Sports coaching



Recording and using data



Using data to plan training sessions

# Using data to plan training sessions

Tababarayaasha ciyaaraha waxay isticmaalaan xog si ay u qorsheeyaan tababaro ku habboon baahida tababarka ee ciyaaryahanka.

Cilmi-baaris ayaa noo sheegtay in noocyada kala duwan ee ciyaaryahannada ay leeyihiin baahiyo tababar oo kala duwan, sidaas darteed waa inay si kala duwan u tababaraan.

Qorshaha tababarku waa inuu buuxiyaa himilooyinka waxqabadka ee ciyaaryahanka.

| Hadafka Tababarka<br>(Training Goal) | Qaybaha<br>(Sets) | Ku celcelinta<br>(Reps) | Wagtiga Nasashada (Rest<br>Period)         | Xoojinta (Intensity) |
|--------------------------------------|-------------------|-------------------------|--------------------------------------------|----------------------|
| Adkaysiga (Endurance)                | 3 - 4             | > 12                    | Ilaa 30 ilbiriqsi (Up to 30<br>seconds)    | < 67% ee 1RM         |
| Jir-xumaan (Muscle<br>leanness)      | 3 - 6             | 6 - 12                  | 30 ilaa 90 ilbiriqsi (30 to 90<br>seconds) | 67 - 85% ee 1RM      |
| Xoogga Murqaha<br>(Muscle strength)  | 4 - 6             | < 6                     | 2 ilaa 5 daqiiqo (2 to 5<br>minutes)       | > 85% ee 1RM         |

Iadwalkani wuxuu kuu sheegayaa sida saddex nooc oo ciyaartoy ah ay tahay inay u tababaraan

| Hadafka Tababarka<br>(Training Goal) | Qaybaha<br>(Sets) | Ku celcelinta<br>(Reps) | Wagtiga Nasashada (Rest<br>Period) | Xoojinta (Intensity) |
|--------------------------------------|-------------------|-------------------------|------------------------------------|----------------------|
| Adkaysiga (Endurance)                | 3 - 4             | > 12                    | Ilaa 30 ilbiriqsi                  | < 67% of 1RM         |
| Jir-cad (Muscle<br>leanness)         | 3 - 6             | 6 - 12                  | 30 ilaa 90 ilbiriqsi               | 67 - 85% of 1RM      |
| Xoogga murqaha<br>(Muscle strength)  | 4 - 6             | < 6                     | 2 ilaa 5 daqiiqo                   | > 85% of 1RM         |

- 'Rep' waa soo gaabinta 'Repetition'; taas macneheedu waa hal jeer ku celinta jimicsiga. Tusaale, hal riixid (press-up) wuxuu noqon karaa hal 'Rep'
- 'Set' waa ururinta 'Reps'. Tusaale, toban riixid (press-ups) wuxuu noqon karaa hal 'Set'
- 'Wagtiga Nasashada (Rest Period)' waa waqtiga lagu soo kabsanayo inta u dhaxaysa 'Sets'

| Hadafka Jimicsiga (Training Goal) | Sets  | Reps   | Wagtiga Nasashada (Rest Period) | Xoogga (Intensity) |
|-----------------------------------|-------|--------|---------------------------------|--------------------|
| Adkaysiga (Endurance)             | 3 - 4 | > 12   | Ilaa 30 ilbiriqsi               | < 67% of 1RM       |
| Jir-cad (Muscle leanness)         | 3 - 6 | 6 - 12 | 30 ilaa 90 ilbiriqsi            | 67 - 85% of 1RM    |
| Xoogga murqaha (Muscle strength)  | 4 - 6 | < 6    | 2 ilaa 5 daqiiqo                | > 85% of 1RM       |

- ‘Xoojin (Intensity)’ waa sida uu jidhku u shaqeeyo inta lagu jiro jimicsi
- ‘1RM’ waa soo gaabinta ‘One Rep Max’, taas oo ah ugu badnaan la gaari karo hal ku celin (repetition) oo jimicsi ah oo uu sameeyo ciyaartoy

| Hadafka tababarka<br>(Training Goal)       | Qaybaha<br>(Sets) | Ku celiska<br>(Reps) | Waqtiga nasashada (Rest<br>Period) | Xoojin (Intensity) |
|--------------------------------------------|-------------------|----------------------|------------------------------------|--------------------|
| Adkaysi (Endurance)                        | 3 - 4             | > 12                 | Ilaa 30 ilbiriqsi                  | < 67% of 1RM       |
| Jilicsanaanta murqaha<br>(Muscle leanness) | 3 - 6             | 6 - 12               | 30 ilaa 90 ilbiriqsi               | 67 - 85% of 1RM    |
| Xoogga murqaha<br>(Muscle strength)        | 4 - 6             | ≤ 6                  | 2 ilaa 5 daqiiqo                   | > 85% of 1RM       |

- Ciyaartoyda orodka dheer waxaa laga yaabaa inay yeeshaan hadaf tababar oo ah 'Adkaysi (Endurance)'
- Ciyaartoyga 'decathlete' wuxuu u tababarar karaa 'Murqo-xeefnimo (Muscle leanness)' sababtoo ah wuxuu u baahan yahay inuu qabto caqabado kala duwan oo ciyaaraha ah.
- Ciyaartoyga miisaan qaadista wuxuu u tababarar karaa 'Xoogga Murqaha (Muscle strength)'.

| Yoolka Tababarka (Training Goal) | Sets  | Reps   | Waqtiga Nasashada (Rest Period) | Xoojinta (Intensity) |
|----------------------------------|-------|--------|---------------------------------|----------------------|
| Adkaysiga (Endurance)            | 3 - 4 | > 12   | Ilaa 30 ilbiriqsi               | < 67% ee 1RM         |
| Murqo-xeefnimo (Muscle leanness) | 3 - 6 | 6 - 12 | 30 ilaa 90 ilbiriqsi            | 67 - 85% ee 1RM      |
| Xoogga Murqaha (Muscle strength) | 4 - 6 | < 6    | 2 ilaa 5 daqiiqo                | > 85% ee 1RM         |

Qofka leh hadda tababarka xoogga murqaha (muscle strength) sida caadiga ah wuxuu qorsheeyaa reps yar.

Qofka leh hadda tababarka adkaysiga (endurance) sida caadiga ah wuxuu qorsheeyaa sets yar.

Qofka tababbaraya 70% ee 1RM wuxuu ku tababbarayaa ilaa 30 ilbiriqsi (muscle leanness).

Qofka ku tababbaran 70% ee 1RM wuxuu u tababbarayaa \_\_\_\_\_.

| Hadafka Tababarka                       | Sets  | Reps   | Wakhtiga Nasashada   | Xoojinta (Intensity) |
|-----------------------------------------|-------|--------|----------------------|----------------------|
| Adkaysiga (Endurance)                   | 3 - 4 | > 12   | Ilaa 30 ilbiriqsi    | < 67% ee 1RM         |
| Jilicsanaanta murqaha (Muscle leanness) | 3 - 6 | 6 - 12 | 30 ilaa 90 ilbiriqsi | 67 - 85% ee 1RM      |
| Xoogga murqaha (Muscle strength)        | 4 - 6 | < 6    | 2 ilaa 5 daqiiqo     | > 85% ee 1RM         |

Cabdi wuxuu diyaarinayaa qorshe tababar ah walaashiisii oo weyn, kaasoo isku dayaya inuu galo tartanka xoogga sare (powerlifting). Walaasha Cabdi waa ka weyn tahay 18 sano, sidaas darteed jidhkeedu waa mid buuxa oo koray, marka waxay ku tababaran kartaa sidii kor lagu sheegay xoogga murqaha (muscle strength).



Waxaan ku bilaabaynaa qorshe fudud bil ah, ka dibna waan kor u qaadaynaa. 1RM-keeda hadda waa 120 kg

## Isticmaalka xogta (data) si loo qorsheeyo kalfadhiyada tababarka (training sessions)



Sharaxaad

| Hadafka Tababarka<br>(Training Goal)       | Qaybaha<br>(Sets) | Ku-celcelinta<br>(Reps) | Waqtiga Nasashada (Rest<br>Period) | Xoojinta (Intensity) |
|--------------------------------------------|-------------------|-------------------------|------------------------------------|----------------------|
| Adkaysiga (Endurance)                      | 3 - 4             | > 12                    | Ilaa 30 ilbiriqsi (seconds)        | < 67% ee 1RM         |
| Jilicsanaanta Murqaha<br>(Muscle leanness) | 3 - 6             | 6 - 12                  | 30 ilaa 90 ilbiriqsi (seconds)     | 67 - 85% ee 1RM      |
| Xoogga Murqaha<br>(Muscle strength)        | 4 - 6             | < 6                     | 2 ilaa 5 daqiiqo (minutes)         | > 85% ee 1RM         |

Qorshaha bilowga:

Xoojinta (Intensity):

Qaybaha/Ku-celcelinta  
(Sets/Reps):

4 qaybood (sets) oo 4 ku-  
celcelin (reps) ah



Wakhtiyada nasashada:

Waxaan ku bilaabaynaa qorshe fudud bil ah, ka dibna waan kor u qaadaynaa. 1RM-keeda hadda waa 120 kg

| Hadafka tababarka                   | Sets  | Reps   | Wakhtiga nasashada   | Xoojinta (Intensity) |
|-------------------------------------|-------|--------|----------------------|----------------------|
| Adkaysiga (Endurance)               | 3 - 4 | > 12   | Ilaa 30 ilbiriqsi    | < 67% of 1RM         |
| Jirka caafimaadka (Muscle leanness) | 3 - 6 | 6 - 12 | 30 ilaa 90 ilbiriqsi | 67 - 85% of 1RM      |
| Xoogga murqaha (Muscle strength)    | 4 - 6 | < 6    | 2 ilaa 5 daqiiqo     | > 85% of 1RM         |

Xoojinta (Intensity):

Sets/Reps:

Wakhtiyada nasashada  
(Rest periods):



Waxay soo martay bil iyada oo si fiican u tababaranaysa. Waxaan kor u qaadaynaa qorshaha tababarka.

| Hadafka Tababarka (Training Goal) | Sets  | Reps   | Wakhtiga Nasashada (Rest Period) | Xoogga (Intensity) |
|-----------------------------------|-------|--------|----------------------------------|--------------------|
| Adkaysiga (Endurance)             | 3 - 4 | > 12   | Ilaa 30 ilbiriqsi                | < 67% of 1RM       |
| Jir-cad (Muscle leanness)         | 3 - 6 | 6 - 12 | 30 ilaa 90 ilbiriqsi             | 67 - 85% of 1RM    |
| Xoogga murqaha (Muscle strength)  | 4 - 6 | < 6    | 2 ilaa 5 daqiiqo                 | > 85% of 1RM       |

Qorshaha khabiirka:

Xoogga (Intensity):

\_\_\_\_\_

Sets/Reps:

\_\_\_\_\_

Wakhtiyada nasashada (Rest periods):

\_\_\_\_\_

Maxaad u malaynaysaa in qorshaha khabiirka uu u ekaado horumarinta xoogga murqaha (muscle strength) qofka 1RM-kiisu yahay 120 kg?

Kani ma aha milan (solution) kaliya laakiin milankaagu waa inuu ku darayaa korodhka xoojinta (intensity)/sets/reps iyo dhimista wakhtiga nasashada.

| Hadafka Tababarka                       | Sets  | Reps   | Wakhtiga Nasashada   | Xoojinta (Intensity) |
|-----------------------------------------|-------|--------|----------------------|----------------------|
| Adkaysiga (Endurance)                   | 3 - 4 | > 12   | Ilaa 30 ilbiriqsi    | < 67% ee 1RM         |
| Jilicsanaanta murqaha (Muscle leanness) | 3 - 6 | 6 - 12 | 30 ilaa 90 ilbiriqsi | 67 - 85% ee 1RM      |
| Xoogga murqaha (Muscle strength)        | 4 - 6 | < 6    | 2 ilaa 5 daqiiqo     | > 85% ee 1RM         |

Qorshaha khabiirka (Expert plan).

Xoojinta (Intensity):

$$110\% \times 120 = 132 \text{ kg}$$

Qaybo/Jiidmo

6 qaybood oo 6 jiidmo ah

(Sets/Reps):

Wakhtiga nasashada

90 ilbiriqsi inta u dhaxaysa qaybaha

(Rest periods):

Nasashada ugu yar waa 2 daqiiqo oo loogu talagalay xoogga murqaha (muscle strength).

Maxay tahay waxa qaldan ee qorshahan ku jira ee horumarinta xoogga murqaha (muscle strength) qof leh 1RM 120 kg?

| Hadafka tababarka<br>(Training Goal)       | Qaybo<br>(Sets) | Jiidmo<br>(Reps) | Wakhtiga nasashada (Rest<br>Period) | Xoogga (Intensity) |
|--------------------------------------------|-----------------|------------------|-------------------------------------|--------------------|
| Adkaysiga (Endurance)                      | 3 - 4           | > 12             | Ilaa 30 ilbiriqsi                   | < 67% ee 1RM       |
| Jilicsanaanta murqaha<br>(Muscle leanness) | 3 - 6           | 6 - 12           | 30 ilaa 90 ilbiriqsi                | 67 - 85% of 1RM    |
| Xoogga murqaha<br>(Muscle strength)        | 4 - 6           | < 6              | 2 ilaa 5 daqiiqo                    | > 85% of 1RM       |

1) Walaalka Suad ee ka weyn ayaa u tababaranaaya heptathlon, sidaa darteed wuxuu u baahan yahay inuu horumariyo jilicsanaanta murqaha (muscle leanness). Wuxuu ka shaqeynayaa benc press-kiisa wuxuuna leeyahay 1RM 80 kg. U samee isaga:

- a) Qorshaha bilowga (Starter plan)
- b) Qorshaha horumarinta (Improver plan)
- c) Qorshaha khabiirada (Expert plan)

| Hadafka tababarka<br>(Training Goal)       | Sets  | Ku celis<br>(Reps) | Wakhtiga nasashada (Rest<br>Period) | Xoojinta (Intensity) |
|--------------------------------------------|-------|--------------------|-------------------------------------|----------------------|
| Adkaysiga (Endurance)                      | 3 - 4 | > 12               | Ilaa 30 ilbiriqsi                   | < 67% of 1RM         |
| Jilicsanaanta murqaha<br>(Muscle leanness) | 3 - 6 | 6 - 12             | 30 ilaa 90 ilbiriqsi                | 67 - 85% of 1RM      |
| Xoogga murqaha<br>(Muscle strength)        | 4 - 6 | < 6                | 2 ilaa 5 daqiiqo                    | > 85% ee 1RM         |

2) a) Qof 1RM-kiisu yahay 125 kg oo sameynaya ku celis (reps) 76 kg. Waa maxay hadafkiisa tababarka?

b) Qof kuu sheega inuu sameeyay 60 ku celis (repetitions) dhamaan set-yadiisa. Waa maxay hadafkiisa tababarka?

c) Qof ayaa kuu sheegaya inuu si xooggan u tababbaranayo muruq-caddayn (muscle leanness) oo uu kor u qaaday 136 kg. Waa maxay 1RM-kiisa?

| Hadafka Tababarka<br>(Training Goal) | Gogol<br>(Sets) | Ku-celin<br>(Reps) | Waqtiga Nasashada (Rest<br>Period) | Xoojinta (Intensity) |
|--------------------------------------|-----------------|--------------------|------------------------------------|----------------------|
| Adkaysiga<br>(Endurance)             | 3 - 4           | > 12               | Ilaa 30 ilbiriqsi                  | < 67% ee 1RM         |
| Muruq-caddayn<br>(Muscle leanness)   | 3 - 6           | 6 - 12             | 30 ilaa 90 ilbiriqsi               | 67 - 85% ee 1RM      |
| Xoogga Muruqa<br>(Muscle strength)   | 4 - 6           | < 6                | 2 ilaa 5 daqiiqo                   | > 85% ee 1RM         |

1) Walaalka Suud ee ka weyn ayaa u tababaraya heptathlon, sidaa darteed wuxuu u baahan yahay inuu horumariyo muruq-caddayn (muscle leanness). Wuxuu ka shaqeynayaa benc press kiisa wuxuuna leeyahay 1RM ah 80 kg. U samee isaga:

- a) Qorshaha bilowga (Starter plan)
- b) Qorshaha horumarinta (Improver plan)
- c) Qorshaha khabiirka (Expert plan)

| Hadafka Tababarka<br>(Training Goal) | Sets  | Reps   | Wakhtiga Nasashada (Rest<br>Period) | Xoojinta (Intensity) |
|--------------------------------------|-------|--------|-------------------------------------|----------------------|
| Adkaysiga (Endurance)                | 3 - 4 | > 12   | Ilaa 30 ilbiriqsi                   | < 67% of 1RM         |
| Jir-caato (Muscle<br>leanness)       | 3 - 6 | 6 - 12 | 30 ilaa 90 ilbiriqsi                | 67 - 85% of 1RM      |
| Xoogga Muruqa (Muscle<br>strength)   | 4 - 6 | < 6    | 2 ilaa 5 daqiiqo                    | > 85% of 1RM         |

a) Qorshaha Bilowga (Starter plan)

b) Qorshaha Horumarinta (Improver plan)

c) Qorshaha Khabiirka (Expert plan)

Xoojinta (Intensity):

Sets/Reps:

Wakhtiyada nasashada:

Kani ma aha milan (solution) keliya. Milan (solution)-kaagu waa inuu ka bilaabmaa darajooyinka fudud uguna gudbaa kuwa adag.

| Hadafka Tababarka                | Qaybaha | Ku celcelinta | Wakhtiga Nasashada   | Xoogga (Intensity) |
|----------------------------------|---------|---------------|----------------------|--------------------|
| Adkaysiga (Endurance)            | 3 - 4   | > 12          | Ilaa 30 ilbiriqsi    | < 67% ee 1RM       |
| Jir-xadida (Muscle leanness)     | 3 - 6   | 6 - 12        | 30 ilaa 90 ilbiriqsi | 67 - 85% ee 1RM    |
| Xoogga murqaha (Muscle strength) | 4 - 6   | < 6           | 2 ilaa 5 daqiiqo     | > 85% ee 1RM       |

2) a) Qof 1RM-kiisu yahay 125 kg oo sameynaya deadlift, wuxuu samaynayaa 76 kg reps. Waa maxay hadafkiisa tababarka?

$$\frac{76}{125} \times 100 = 60.8\%$$

Xoojin (Intensity) < 67% kg sidaas darteed tababar u ah adkaysiga (endurance).

| Hadafka Tababarka                | Sets  | Reps   | Wakhtiga Nasashada   | Xoojin (Intensity) |
|----------------------------------|-------|--------|----------------------|--------------------|
| Adkaysi (Endurance)              | 3 - 4 | > 12   | Ilaa 30 ilbiriqsi    | < 67% ee 1RM       |
| Jir-xumaan (Muscle leanness)     | 3 - 6 | 6 - 12 | 30 ilaa 90 ilbiriqsi | 67 - 85% ee 1RM    |
| Xoogga Murqaha (Muscle strength) | 4 - 6 | < 6    | 2 ilaa 5 daqiiqo     | > 85% ee 1RM       |

b) Qof kuu sheegay inuu sameeyay 60 jeer (repetitions) dhamaan sets-kiisa.

Waa maxay hadafkiisa tababarka?

4 sets oo 15 reps ah waa tababar u adkaysiga (endurance).

3 sets oo 20 reps ah waa tababar u adkaysiga (endurance).

6 qaybood oo 10 jeer ah waa tababarka muruqyada caatada (muscle leanness).

5 qaybood oo 12 jeer ah waa tababarka muruqyada caatada (muscle leanness).

$6 \times 5 = 30$  waa tirada ugu badan (max reps) ee xoogga muruqyada (muscle strength) marka kani ma noqon karo taas.

| Hadafka Tababarka<br>(Training Goal)   | Qaybaha<br>(Sets) | Ku celcelinta<br>(Reps) | Waqtiga Nasashada (Rest<br>Period)         | Xoogga (Intensity) |
|----------------------------------------|-------------------|-------------------------|--------------------------------------------|--------------------|
| Adkaysiga (Endurance)                  | 3 - 4             | > 12                    | Ilaa 30 ilbiriqsi (Up to 30<br>seconds)    | < 67% of 1RM       |
| Muruqyada caatada<br>(Muscle leanness) | 3 - 6             | 6 - 12                  | 30 ilaa 90 ilbiriqsi (30 to 90<br>seconds) | 67 - 85% of 1RM    |
| Xoogga muruqyada<br>(Muscle strength)  | 4 - 6             | < 6                     | 2 ilaa 5 daqiiqo (2 to 5<br>minutes)       | > 85% of 1RM       |

c) Qof ayaa kuu sheegaya inuu si xooggan u tababarayo muruqyada caatada (muscle leanness) isagoo kor u qaadaya 136 kg. Waa maxay 1RM-kiisa?

Heerka ugu xooggan (most intense level) ee muruqyada caatada (muscle leanness) waa 85% of 1RM-kiisa

Tababarayaasha ciyaaraha waxay isticmaalaan xog (data) si ay u la socdaan waxqabadka ciyaartoyga oo ay u muujiyaan horumarka.

Waxay sidoo kale isticmaalaan xog (data) si ay u qorsheeyaan baahida tababarka ee ciyaartoyga si ay u caawiyaan ciyaartoygooda inay horumaraan.