

Aksonometrik proeksiyalar

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Turli hildagi buyumlarni yaqqol tasvirlarini chizish uchun qo'laniladi

DSt 2.317-69 nazarda tutadi:

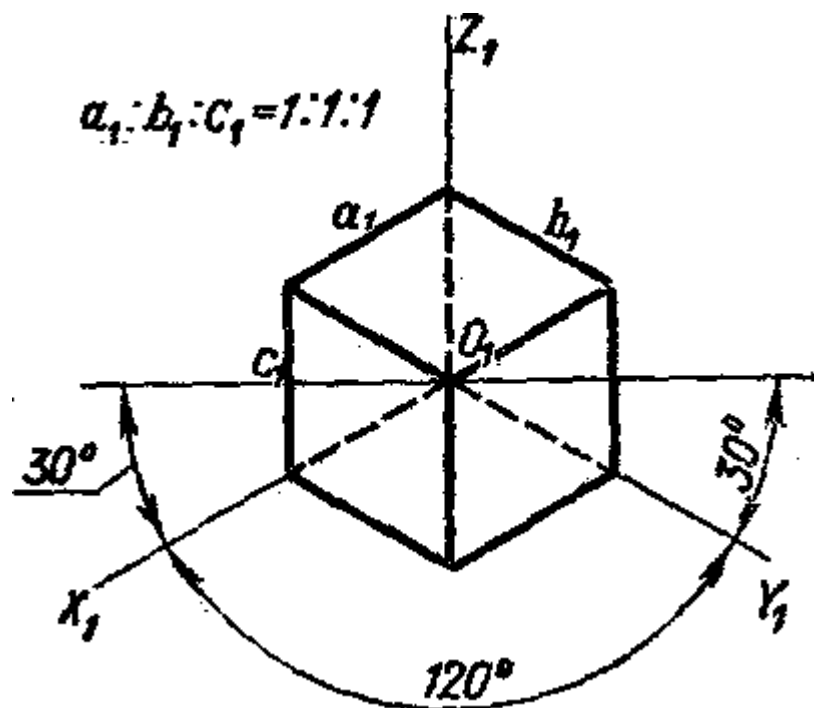
To'g'ri burchakli aksonometrik proeksiyalar

- Izometrik proeksiya
- To'g'ri burchakli dimetrik proeksiya

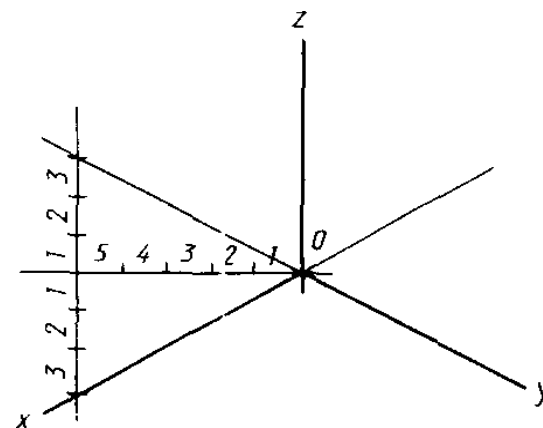
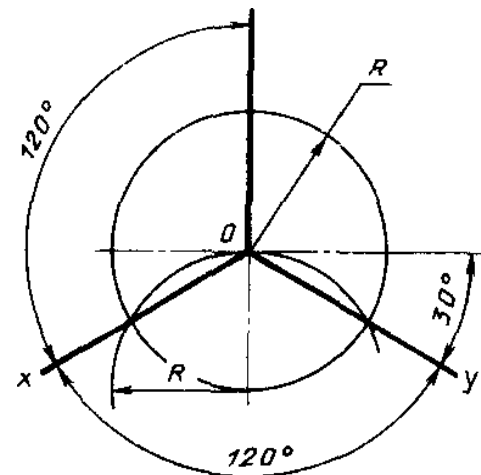
Qiyshiq burchakli aksonometrik proeksiyalar

1. Frontal izometrik proeksiya
2. Gorizontal izometrik proeksiya
3. Frontal dimetrik proeksiya

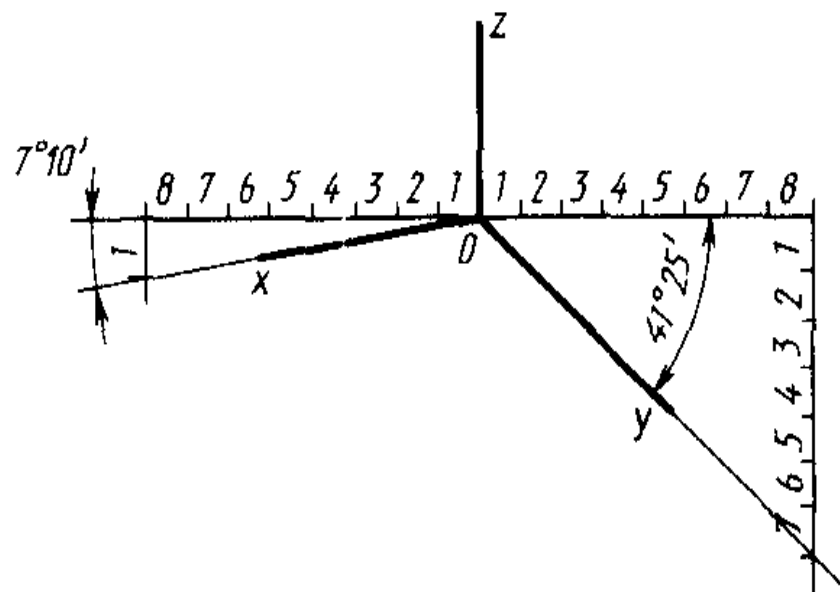
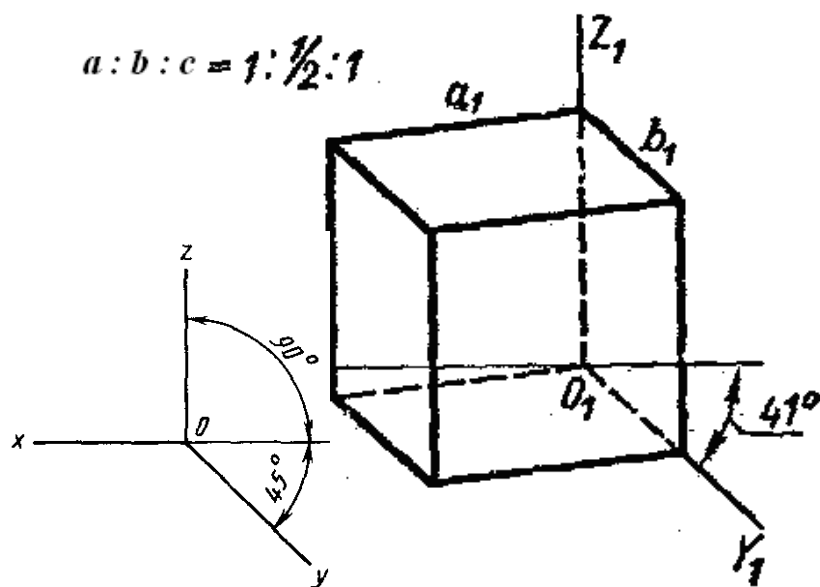
Izometrik proeksiya



Qisqarish koeffitsienti 0,82

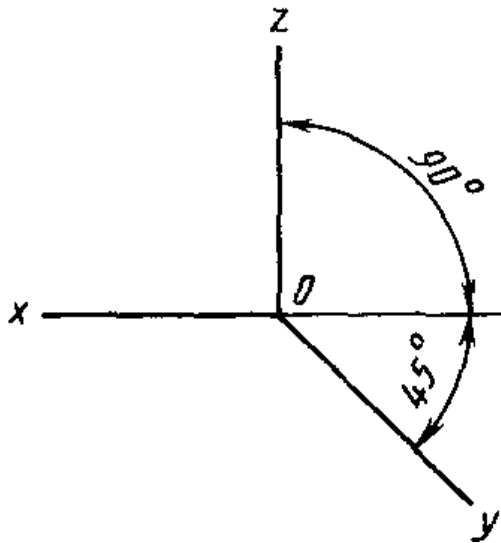


To'g'ri burchakli dimetrik proeksiya



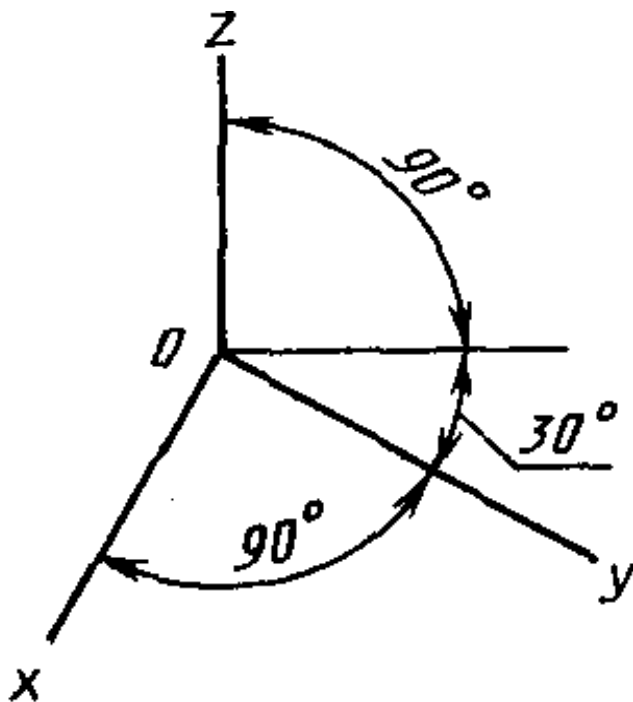
Z va X o'qlari bo'yicha qisqarish
koeffitsienti = 0,94, Y o'qi bo'yicha – 0,47

Frontal izometrik proeksiya



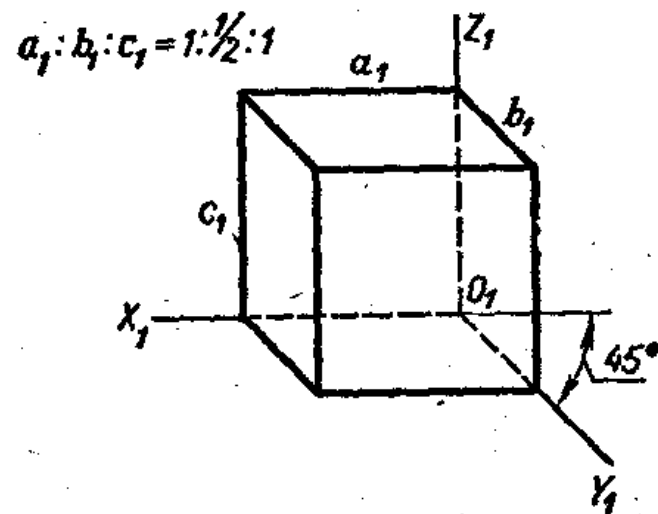
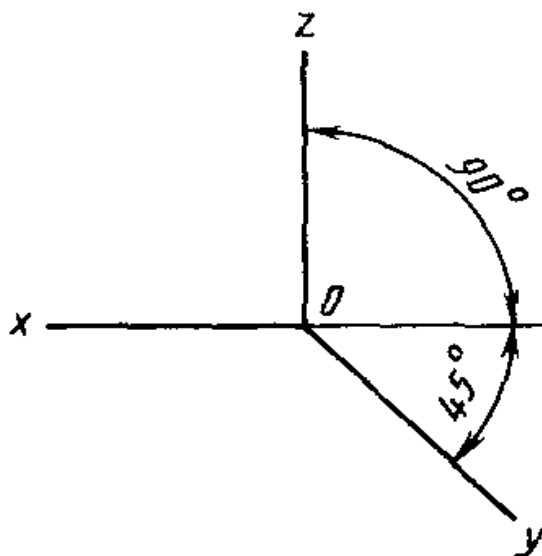
- Odatda OY o'qi bo'yicha ogish burchagi 45° ga teng, ammo 30° yoki 60° bo'lisi ham mumkin.

Gorizontal izometrik proeksiya



- Odatda OY o'qining gorizontal chiziqqa nisbatan og'ish burchagi 30° ga teng, ammo 45° yoki 60° bo'lisi ham mumkin, shunda OX va OY burchagi 90° saqlanishi lozim.

Frontal dimetrik proeksiya



Gorizontal chiziqqa nisbatan OY o'qi 30 yoki 60 °

OZ va OX o'qlari bo'yicha qisqarish koeffitsienti = 1, OY o'qi bo'yicha qisqarish koeffitsienti – 0,5 olingan

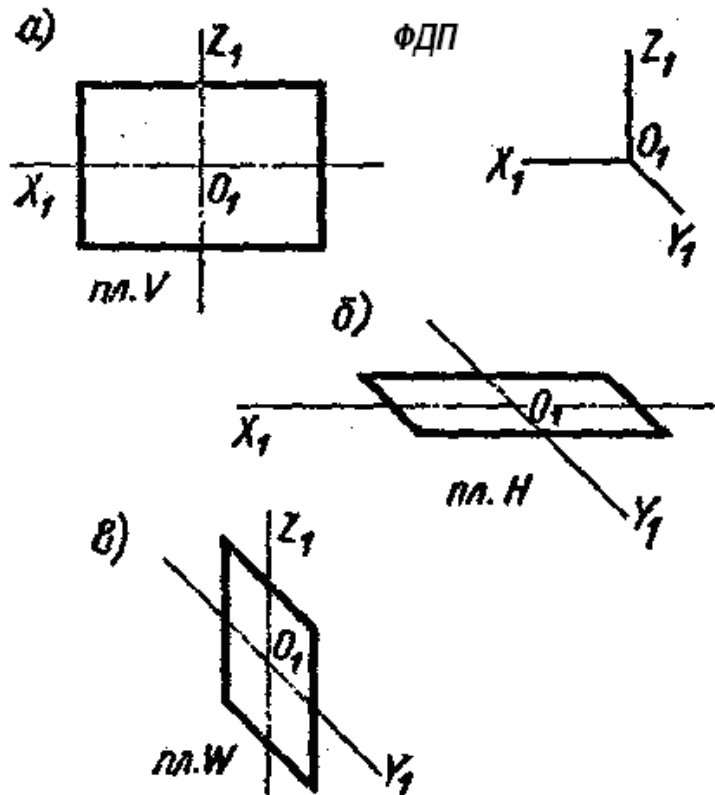
Yassi shakllarning aksonometrik proeksiyalari

Geomerik sakl va unga tegishli barcha nuqtalar bitta tekslikda yotgan bo'lsa, yassi shakl deyiladi.

Краткое обозначение проекций:

- Frontal dimetrik proeksiya - **FDP**
- To 'g 'ri burchakli dimetrik proeksiya – **TDP**
- To 'g 'ri burchakli izometrik proeksiya– **IP**

Frontal dimetrik proeksiya - To'g'ri to'rt burchak (FDP)si.

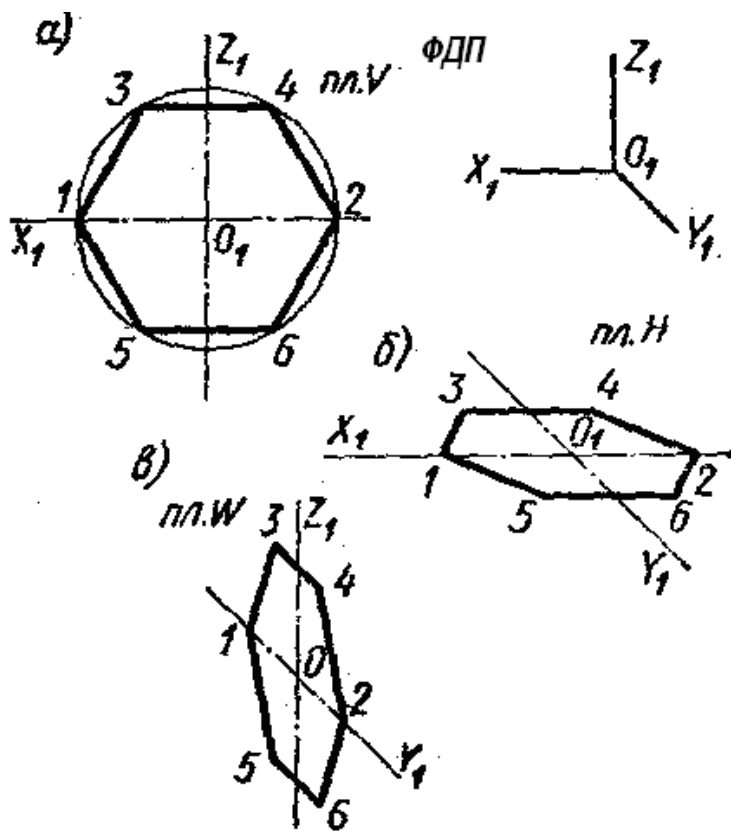


To'g'ri to'rt burchak o'lchamlar
30x20 mm

OY- o'qining gorizontal chiziqqa
nisbatan og'ish burchagi **45°**ga
teng

- To'g'ri to'rt burchakning **O_1X_1** -
o'qi bo'yicha uzunligi xaqiqiy
kattalikda olingan, **O_1Y_1** - o'qi
bo'yicha esa ikki barobar
qisqartirilib olingan

Frontal dimetrik proeksiya. Muntazam olti burchakning (FDP)si.

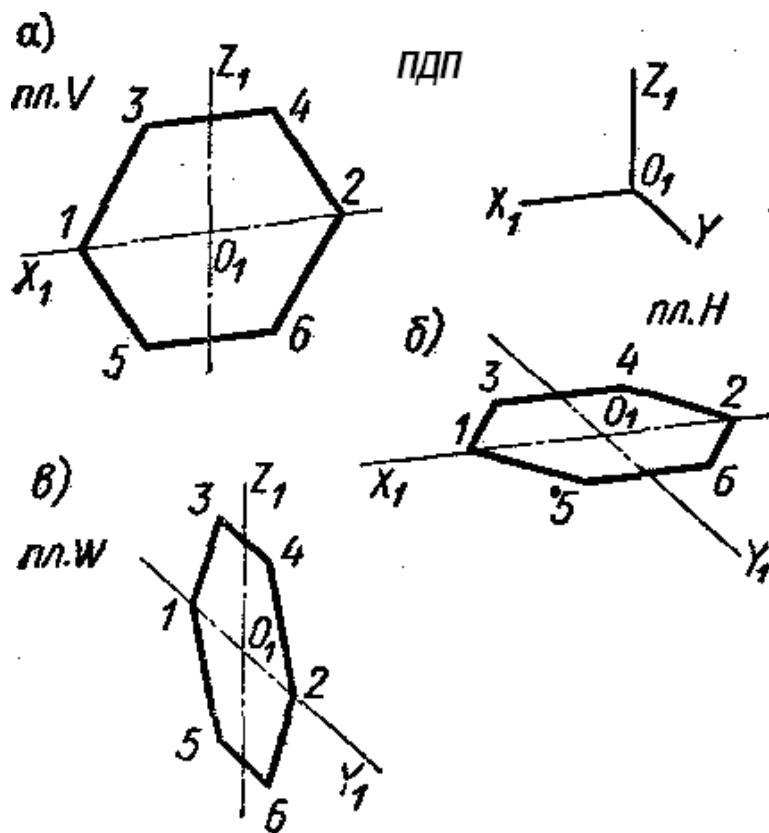


Muntazam olti burchakning
o'lchamlari: tomoni **30 mm**

0Y- o'qining gorizontall chiziqqa
nisbatan og'ish burchagi
45°ga teng

- **O_1X_1** - o'qi bo'yicha katta
diagonalning uzunligi xaqiqiy
kattalikda olingan, **O_1Y_1** — o'qi
bo'yicha kichik diagonalning
uzunligi ikki marta
kichiklashtirib olingan.

To'g'ri burchakli dimetrik proeksiya. Muntazam olti burchakning (TDP)si.

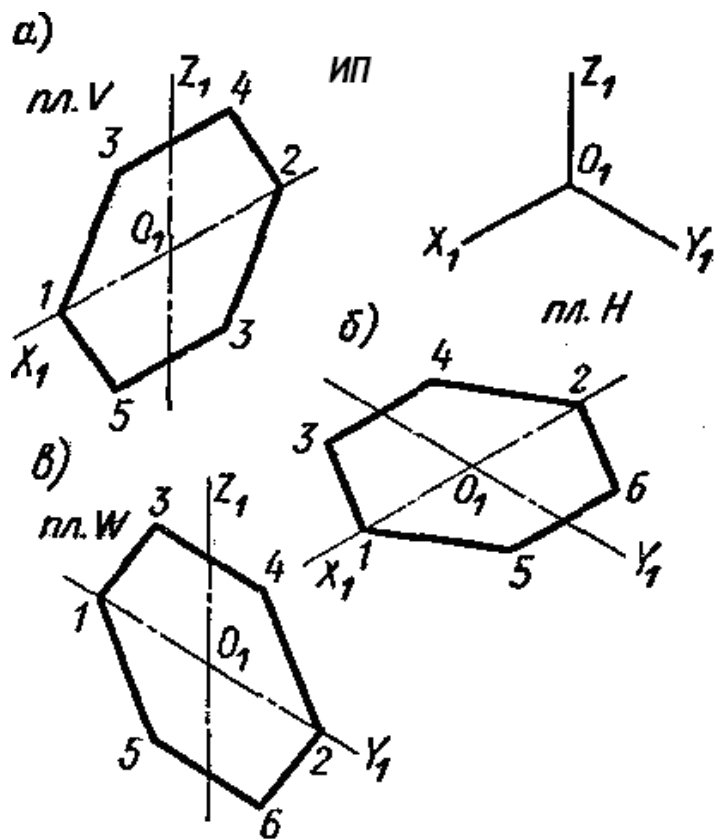


Muntazam olti burchakning o'lchamlari: tomoni **30 mm**

OY - o'qining gorizontal chiziqqa nisbatan og'ish burchagi **$41^{\circ}25'$** ga, **OX** - o'qining gorizontal chiziqqa nisbatan og'ish burchagi **$7^{\circ}10'$** teng

- **O_1X_1** - o'qi bo'yicha katta diagonalning uzunligi xaqiqiy kattalikda olingan, **O_1Y_1** — o'qi bo'yicha kichik diagonalning uzunligi ikki marta kichiklashtirib olingan.

To'g'ri burchakli izometrik proeksiya. Muntazam olti burchakning (TIP)si.



Muntazam olti
burchakning
o'lchamlari: tomoni

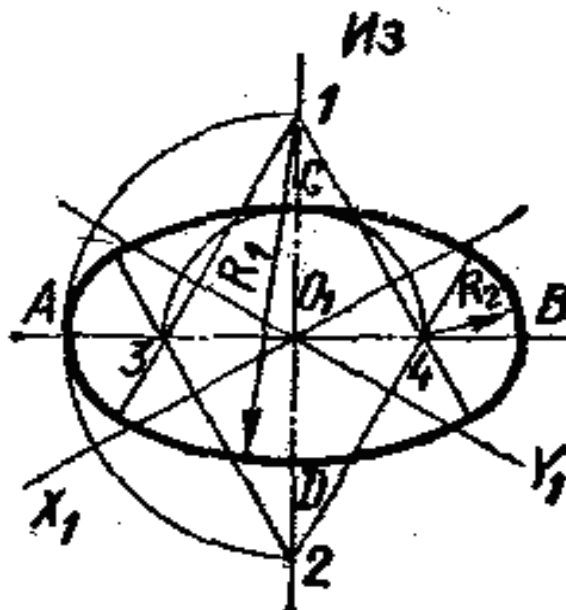
30 mm

**O'qlar orasidagi burchak 120°
teng**

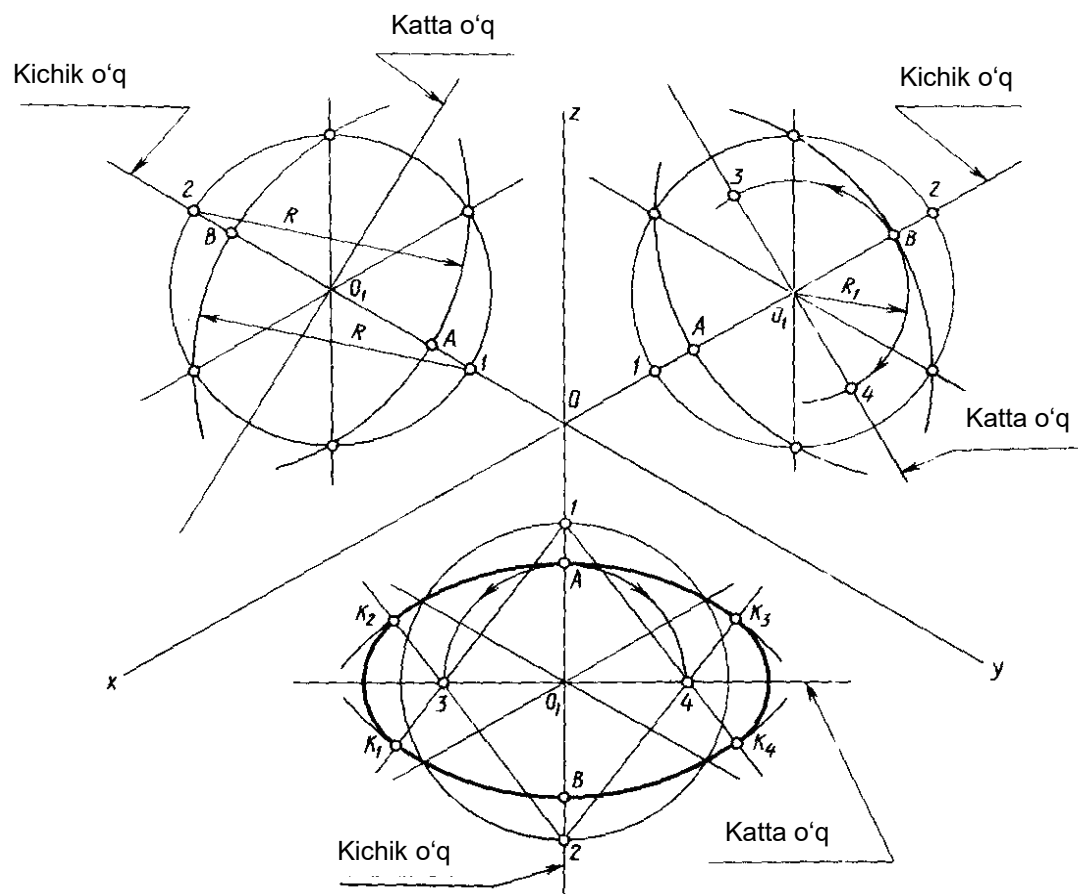
- Sakl diogonal va tomonlari uzunligi xaqiqiy kattalikda olinadi.

Aylananing izometrik proeksiyasi

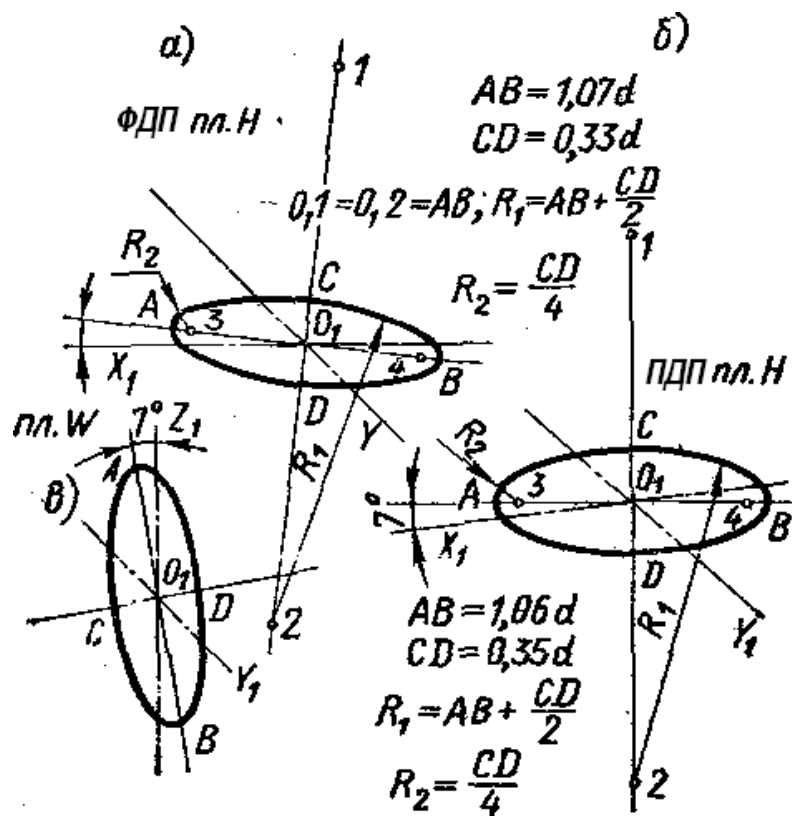
$$\begin{aligned}AB &= 1,22d \\ CD &= 0,7d \\ R_1 &= \frac{AB+CD}{2} \\ R_2 &= \frac{AB-CD}{2}\end{aligned}$$



To'g'ri burchakli izometriyada aylanani chizmasi (IP)



FDP va PDP larda aylananing proeksiyasi



To'g'ri burchakli frontal dimetrik proeksiya teksligidagi ovallarni chizish usullari, gorizont tekslikdagisi (a, б rasm.) va profil tekslikdagi (в rasm.)

Etiboringiz uchun raxmat