

Tema: O'g'il bolalar ko'ylagining konstruktsiya asosini chizish



Reja:

1. O'g'il bolalar ko'ylagining konstruktsiya asosini chizish uchun kerakli o'lchovlar.
2. Chizma to'rini qurish.
3. Ort bo'lakni chizish
4. Old bo'lakni chizish
5. Yoqa konstruktsiyasini chizish
6. Yeng konstruktsiyasini chizish
7. Yeng uchun manjetni chizish





O'g'il bolalar ko'ylaging chizma asosini chizish uchun quyidagi o'lchovlar zarur:

№	O'lchovlar belgisi	O'lchov nomlari	Standart o'lchov
1	Uk	Ko'ylak uzunligi	65
2	Kyel	Yelka kengligi	11
3	Cbo'y	Bo'yin yarim aylanasi	16,5
4	Ck	Ko'krak yarim aylanasi	36
5	Uyeng	Yeng uzunligi	50

Barcha o'lchamlar uchun (32 -38) ko'krak chizig'i bo'yicha bemalol turish qo'shimi $P_k=9$ sm.

Chizmada 128-32 o'lchamli, 8 yoshli bola uchun o'lchovlar qo'llaniladi.

Baza to'rini chizish

1. Ko'ylak uzunligi

$$AN = U_k = 65 \text{ sm}$$

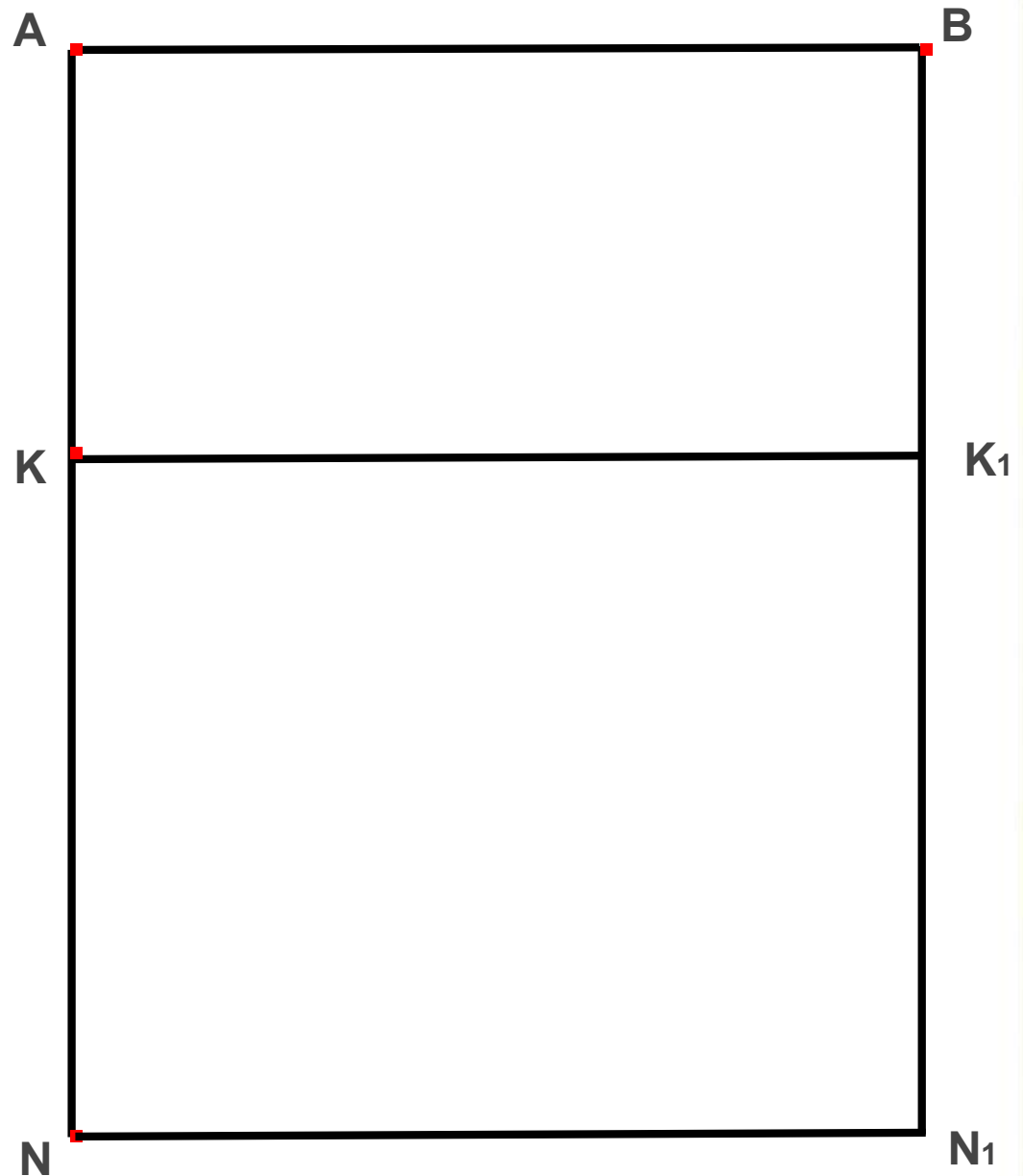
2. Ko'ylak kengligi

$$AB = C_k + P_k = 36 + 9 = 45 \text{ sm.}$$

3. O'miz chuqurligi

$$AK = \frac{1}{3} C_k + 6 = 36 : 3 + 6 = 18 \text{ cm}$$

4. $AB = KK_1 = HH_1$



Baza to'rini chizish

5. Ort kenglik

$$KK_2 = 1/3 Ck + 5 = 36 :$$

$$3 + 5 = 17 \text{ sm.}$$



6. Yeng o'mizi kengligi

$$K_2K_3 = 1/4 Ck + 2 = 36 :$$

$$4 + 2 = 11 \text{ sm.}$$



7. K_2P ; K_3P_1



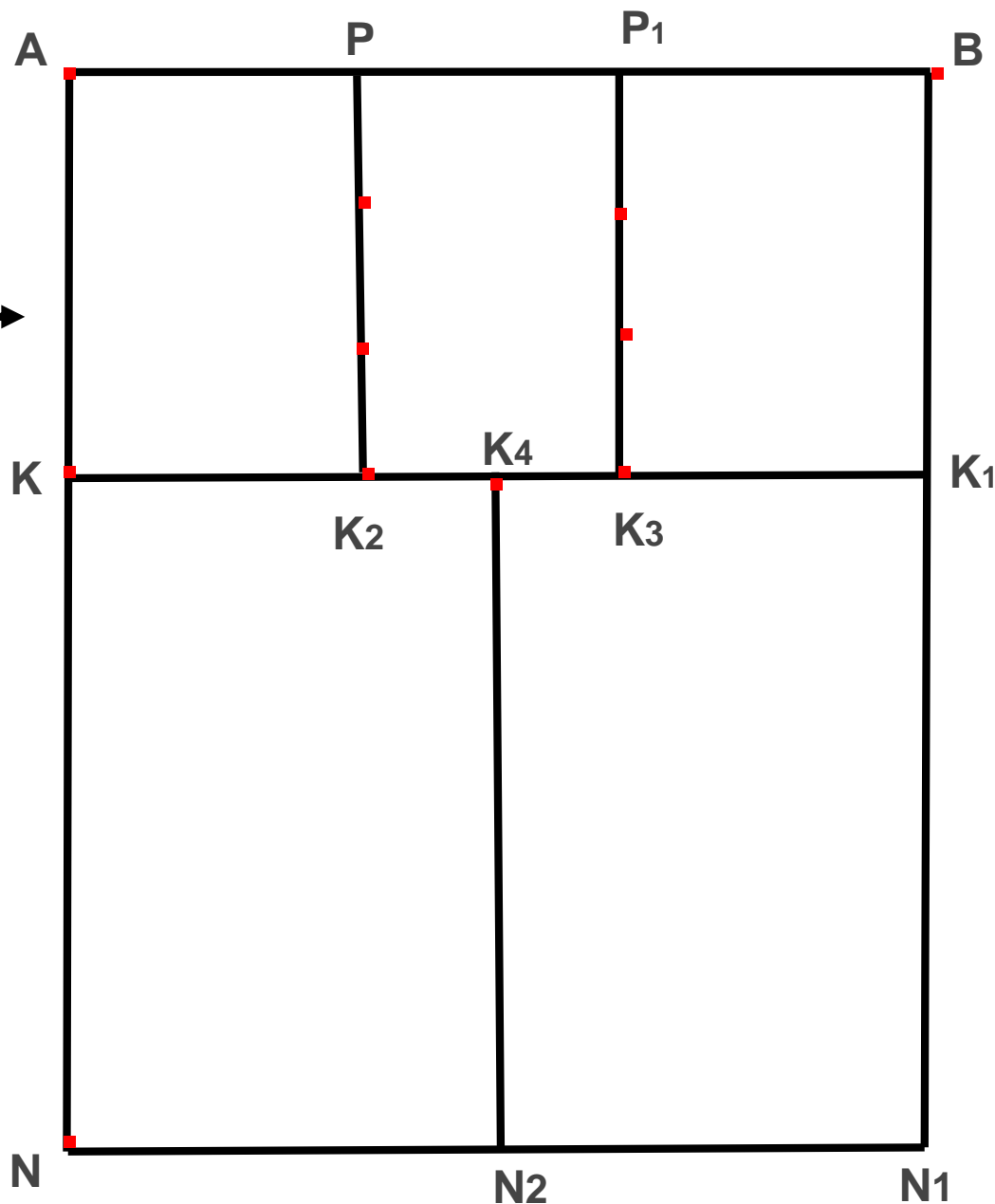
8. Yon chiziq

$$K_4 N_2 = K_2K_3 : 2$$



9. Nazorat nuqtalari.

$P-K_2$ va P_1-K_1 teng 3 qismga bo'linadi.



Ort bo'lakni chizish

10. Bo'yin kengligi

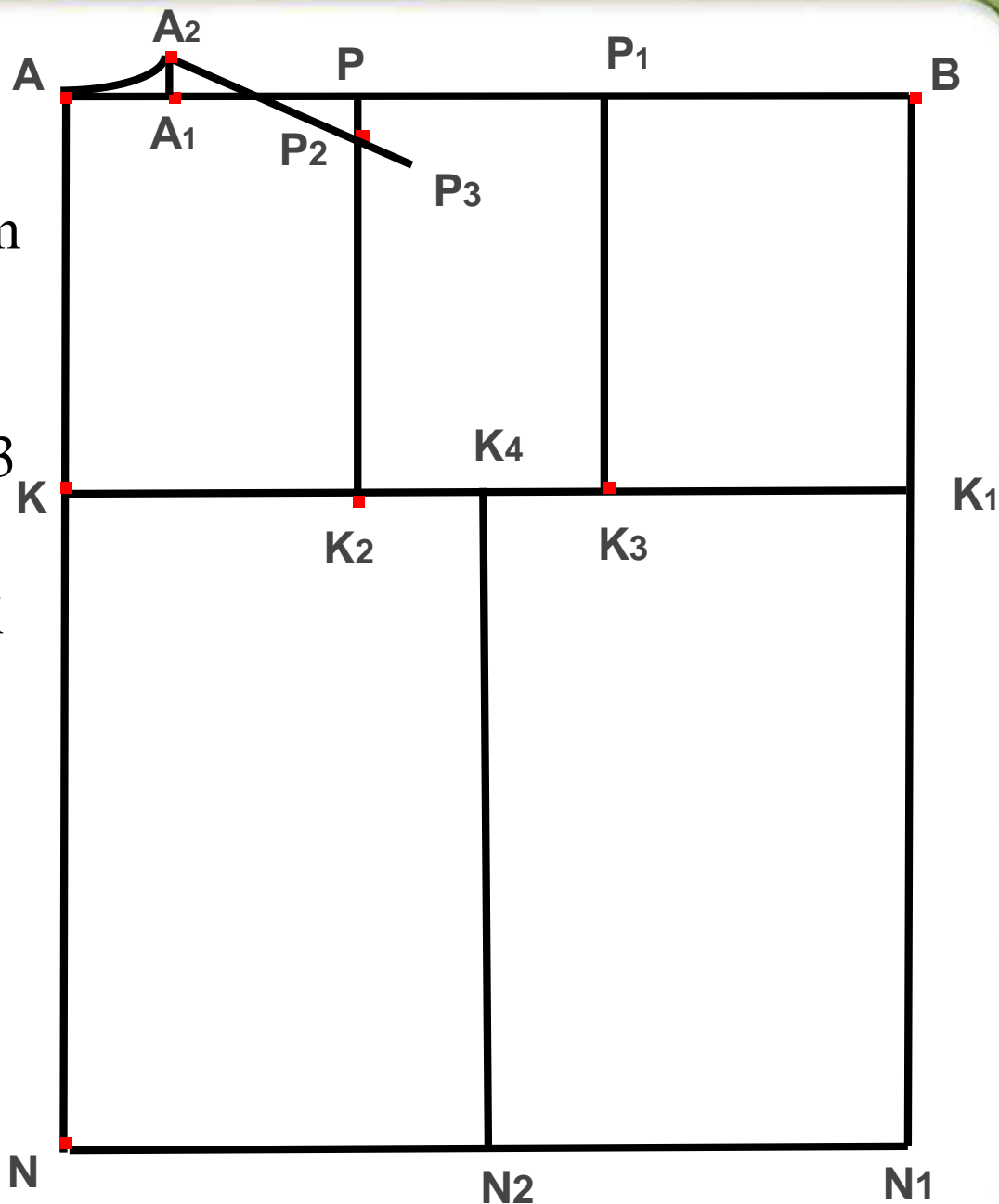
$$\begin{aligned} AA_1 &= 1/3 C_{bo'y} + 0,5 \text{ sm} \\ &= (16,5 : 3) + 0,5 = 6,0 \\ &\text{sm.} \end{aligned} \quad \rightarrow$$

$$\begin{aligned} 11. A_1A_2 &= AA_1 : 3 = 6 : 3 \\ &= 2 \text{ cm} \end{aligned} \quad \uparrow$$

12. Orqa yelkasi chizig'i

$$PP_2 = 1,5 - 2 \text{ sm} \quad \downarrow$$

$$\begin{aligned} 13. A_2P_3 &= K_{yel} + 1,5 \text{ sm} \\ &= 11 + 1,5 = 12,5 \text{ sm.} \end{aligned} \quad \searrow$$



Ort bo'lakni chizish

14. Orqa yeng o'mizi chizig'i.

$K21 = 2-2,5$ sm.

(burchak $K2:2$ bissektrisa)

13. Nazorat nuqtasi

$PK2 : 3$

14. Yeng o'miz chizig'i

$P31K4$

15. **Yon chiziq**

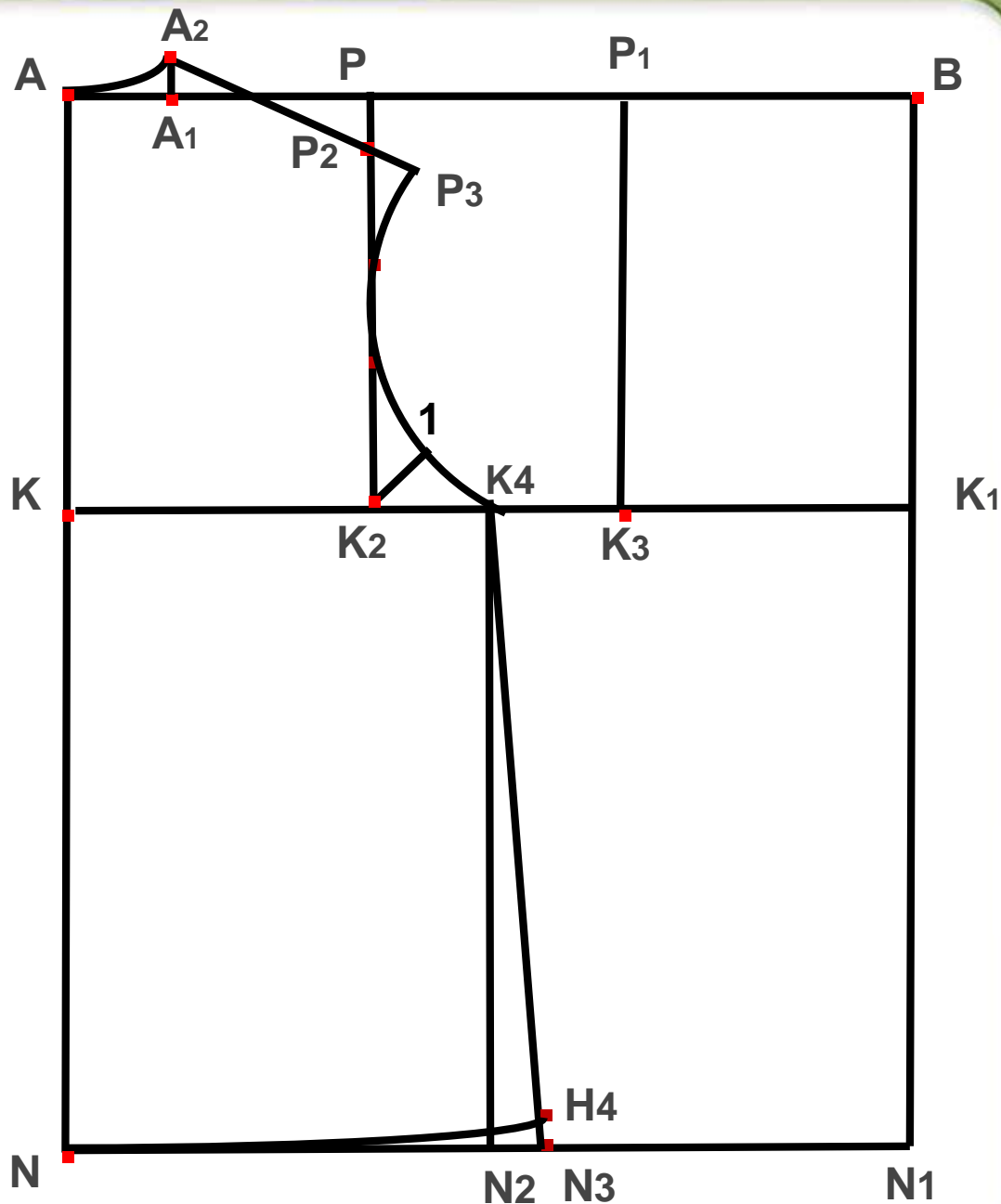
$N2N3 = 1-3$ sm

$K4N3$ – yon chiziq

16. **Etak chizig'i**

$N3N4 = 0,5-1$ sm

$NN4$ – etak chizig'i



Ort bo'lakni chizish

18. Koketka chizig'i

$AA_3 = 5 \text{ sm}$ ↓

19. (.) $P_4 = 1 \text{ sm}$

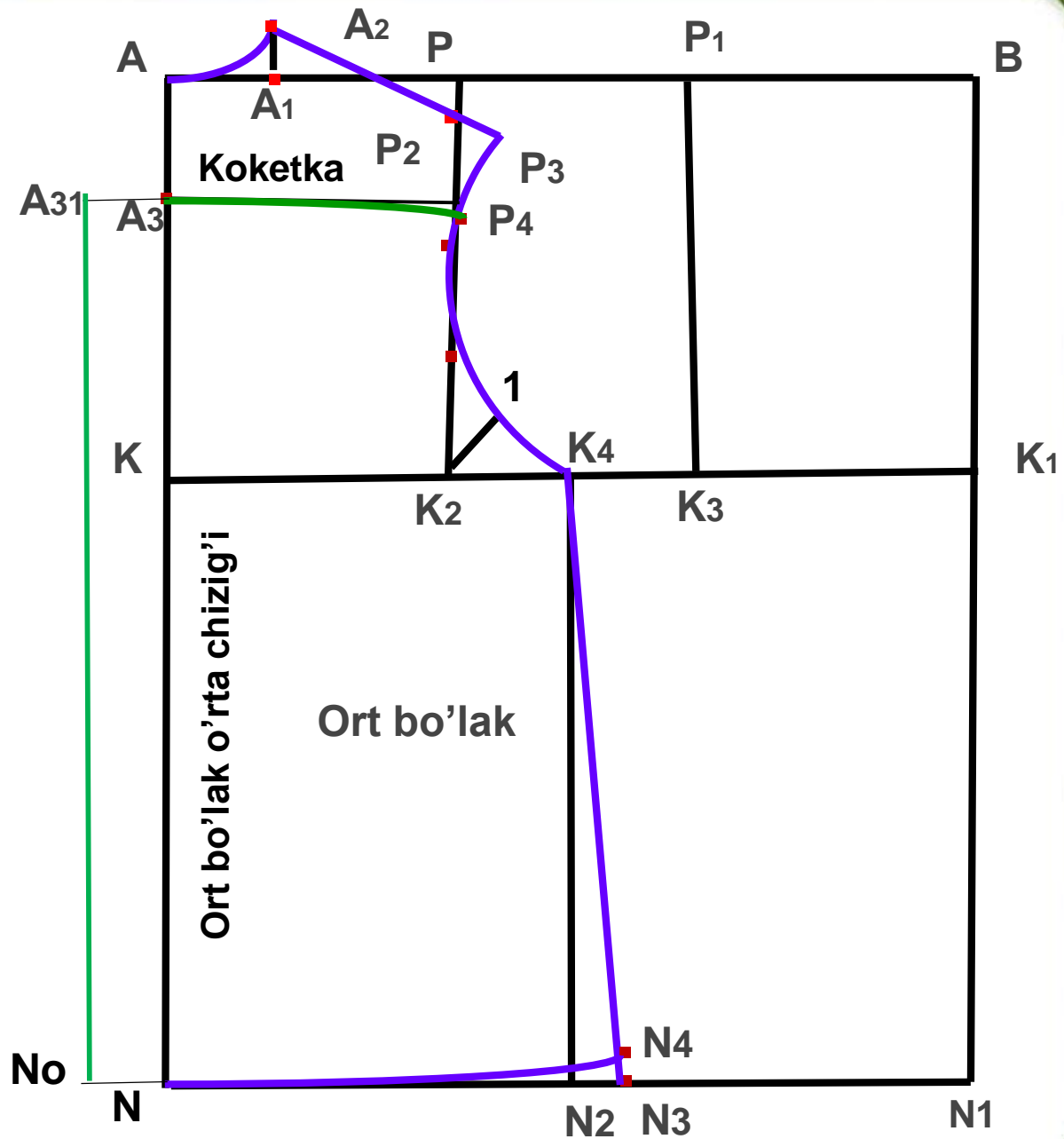
(yeng o'mizi
chizig'i
bilan kesishgan
nuqta)

20. A_3P_4 – koketka
chizig'i

Taxlama:

$A_3A_{31} = 4 \text{ sm}$

$NN_0 = 4 \text{ sm}$



Old bo'lak chizmasi

1. Yoqa o'mizi

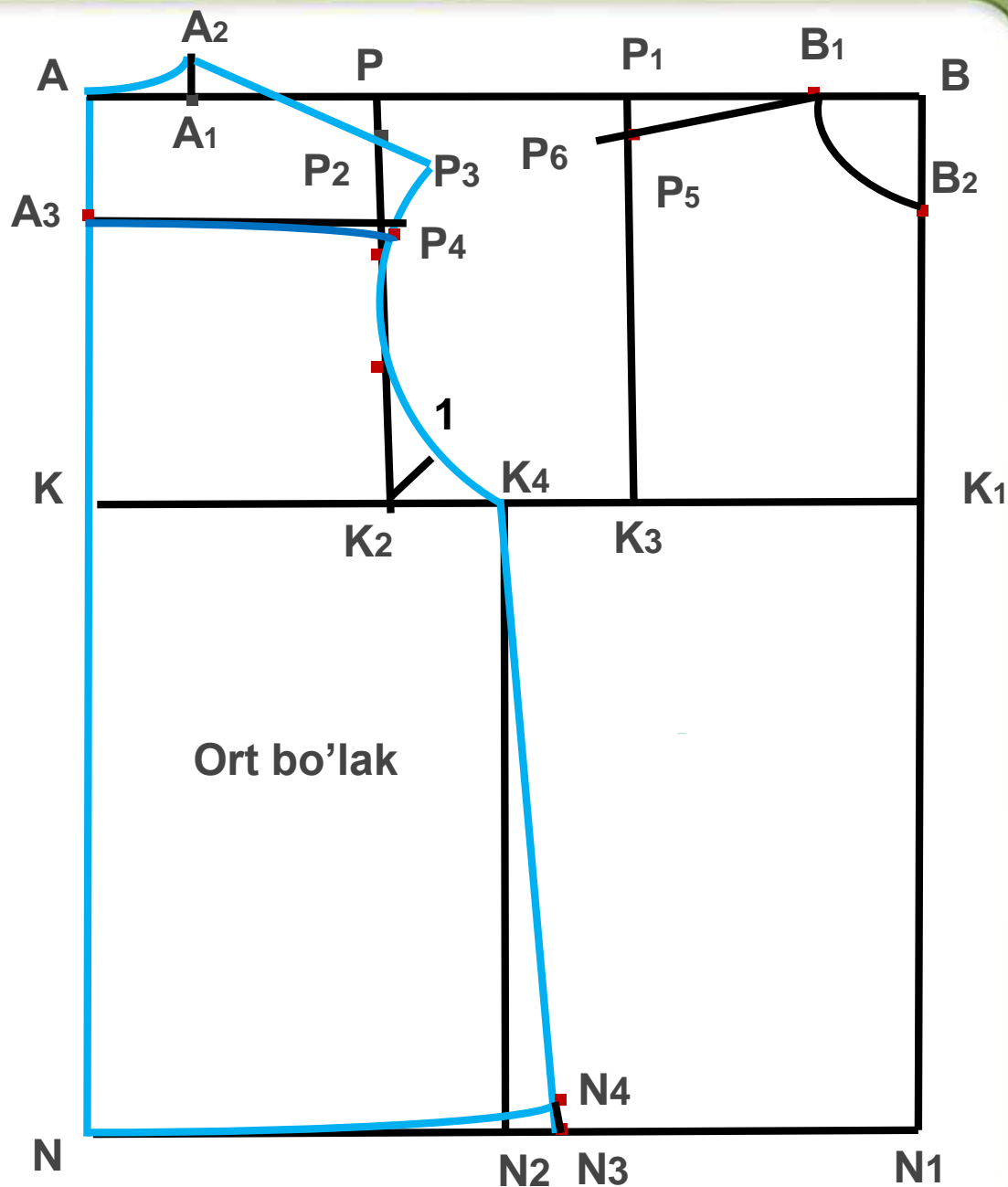
$$BB1 = BB2 = \frac{1}{3} C_{bo'y} + P_{bo'y} = (16,5 : 3) + 0,5 = 6,0 \text{ sm}$$

B1B2 – o'miz chizig'i

2. Yelka chizig'i

$$P1P5 = 2-3 \text{ sm}$$

$$3. B1P5P6 = K_{yel} + 1,5 \text{ sm} = 11 + 1,5 = 12,5 \text{ sm}$$



Old bo'lak chizmasi

4. Yeng o'mizi

$K32 = 2 \text{ sm}$ (burchak bissektisasi)

5. Nazorat nuqtasi

$P1K3 : 3$

$P6 \ 2K4$ – o'miz chizig'i

Yon chiziq

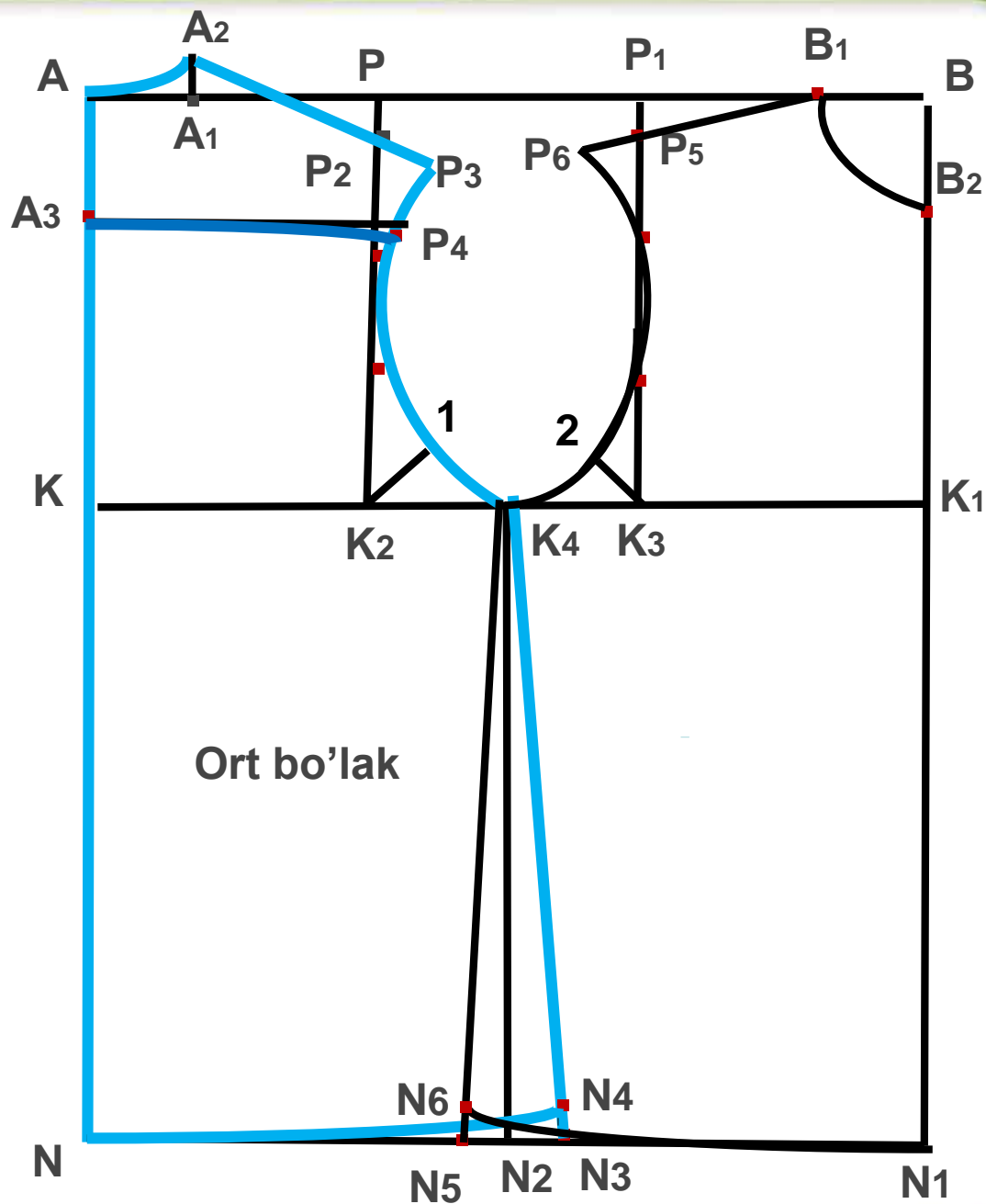
8. $N2N5 = 1-3 \text{ sm}$

9. $K4N5$ – yon chiziq

Etak chizig'i

10. $N5N6 = 0,5-1 \text{ cm}$

11. $N1N6$ – etak chizig'i



Old bo'lak chizmasi

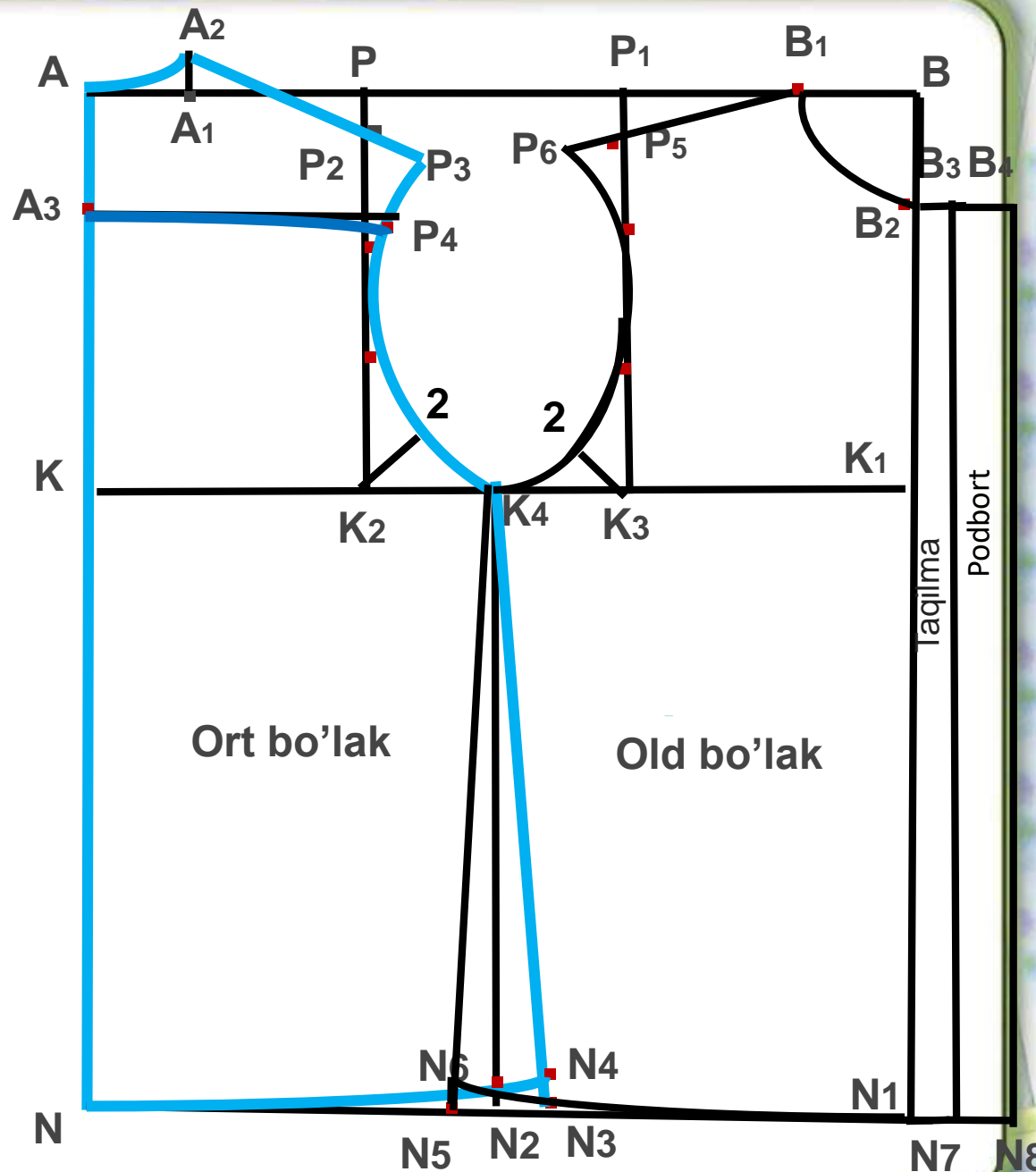
Taqilma

12. $B_2B_3 = 1,5 \text{ sm}$

13. $B_2B_3 = H_1H_7 \rightarrow$

Podbort

14. $B_3B_4 = 3 \text{ sm} \rightarrow$



Qaytarma tik yoqa chizmasini chizish.

$$AB = DC = C_{bo'y} + P_{cbo'y} = 16,5 + 2,5 = 19 \text{ sm} \quad \rightarrow$$

2. Yoqa kengligi

$$AD = BC = 8-10 \text{ sm} \quad \downarrow$$

3. To'g'ri burchak- AA₁BB₁

Yoqani o'tqazish chizig'i

$$4. AA_1 = 1 \text{ sm}, DD_1 = 2,5 \text{ sm} \quad \downarrow$$

$$5. CC_1 = 1 \text{ sm}$$

$$6. DN = DC:2 \quad \downarrow$$

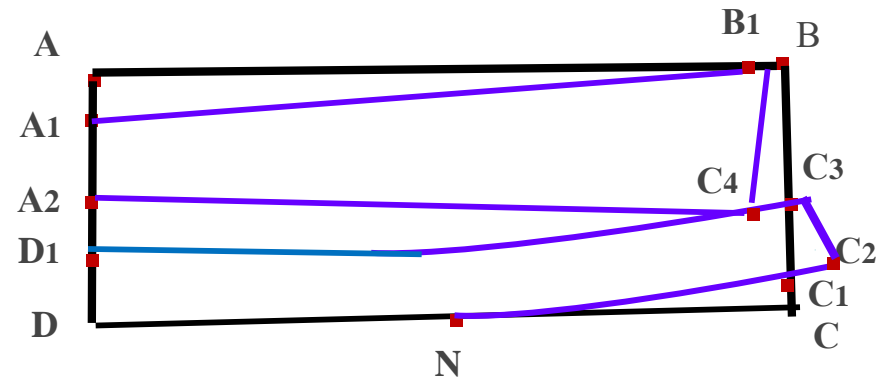
$$C_1C_2 = 0,5 \text{ sm}$$

$$C_2C_3 = 2,5 \text{ sm}$$

$$BB_1 = 1; \quad \uparrow$$

$$C_3C_4 = 1,5 \text{ sm};$$

$$D_1A_2 = 2 \text{ sm}$$



Yeng konstruksiyasini chizish

1. Yeng uzunligi

$$AN = A_1N_1 = U_{yeng} - 2,5 \downarrow = 52 \text{ sm} - 2,5 \text{ sm} = 49,5 \text{ sm}.$$

2. Yeng kengligi \longrightarrow

$$AA_1 = NN_1 = O_{yel} + P = 24 \text{ sm} + 10 \text{ sm} = 34 \text{ sm}.$$

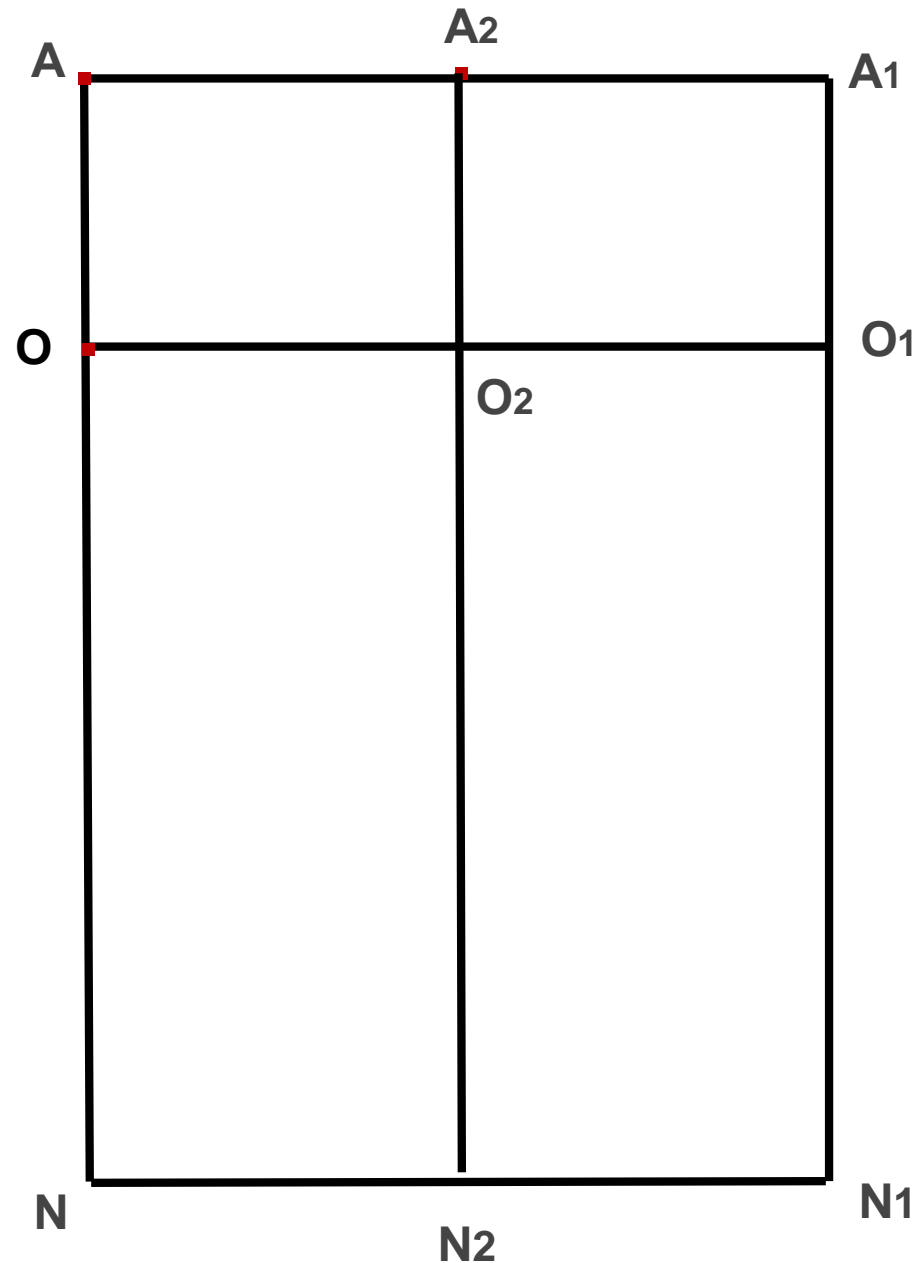
3. To'g'ri to'rtburchak -
AA₁HH₁

4. Yeng boshi balandligi.

$$AO = C_k : 6 + 2 = 36 : 6 + 2 = 8 \text{ sm} \quad \longrightarrow$$

$$5. AA_1 = OO_1 = NN_1$$

$$AA_2 = AA_1 / 2$$



Yeng konstruksiyasini chizish

Yeng boshi chizig'i

8. A_2O , A_2O_1

9. $A_2O : 2$; $1O_3 = 1,5 \text{ sm}$

10. $A_2O_1 : 4$

$2O_4 = 1 \text{ sm}$; $4O_6 = 0,5 \text{ sm}$

11. $O, O_3, A_2, O_4, 3, O_6, O_1$ - okat

Yeng yon chizig'i

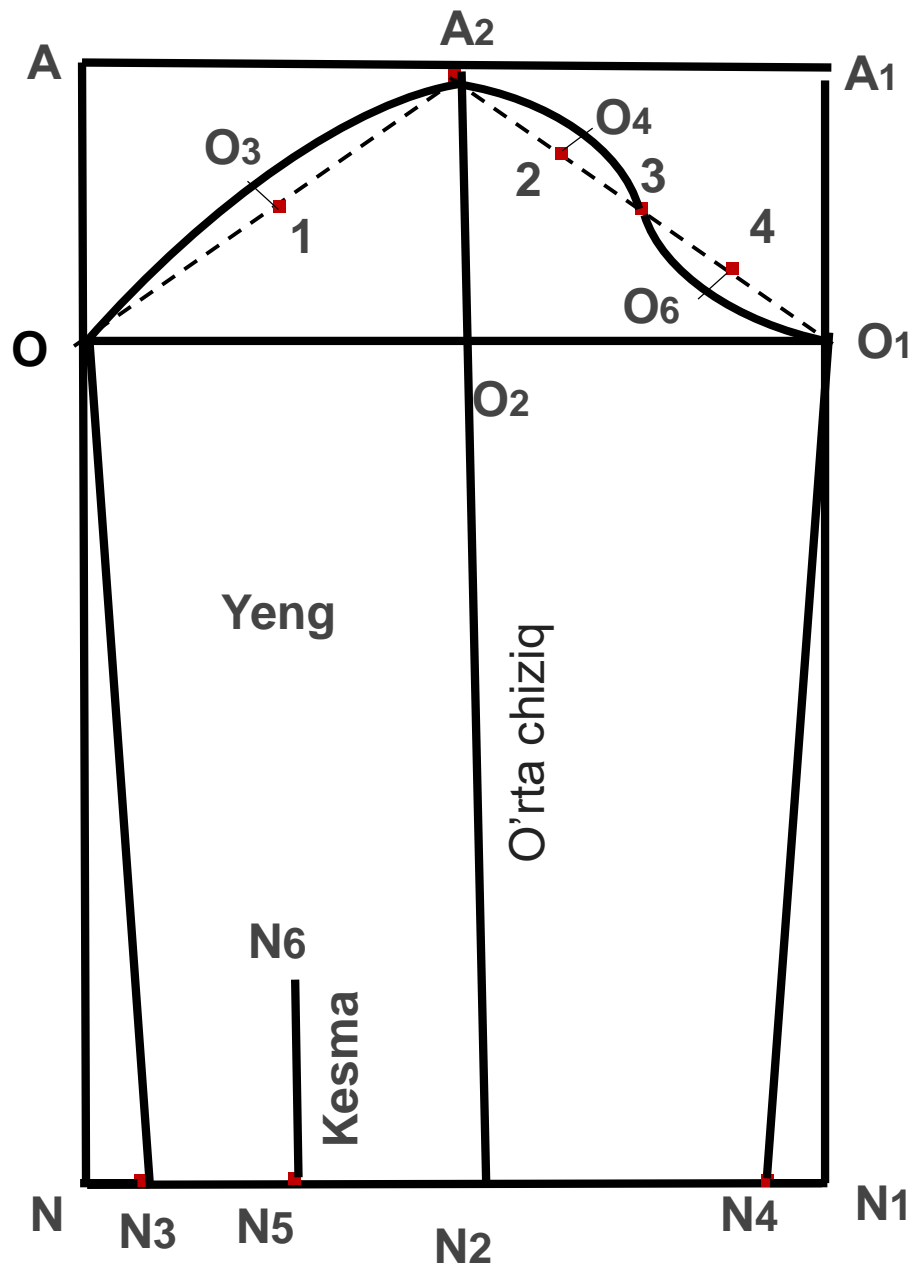
12. $NN_3 = N_1N_4 = 3 \text{ sm}$

13. ON_3 va O_1N_4 – yon chiziq

Taqilma uchun kesma

14. $N_2N_5 = N_2N_3 : 2$;

$N_5N_6 = 8 \text{ sm}$



Manjet chizmasini chizish

1. Manjet uzunligi

$$AA_1 = \text{Obil} + 4\text{sm} = 16 + 4 = 20 \text{ sm}$$

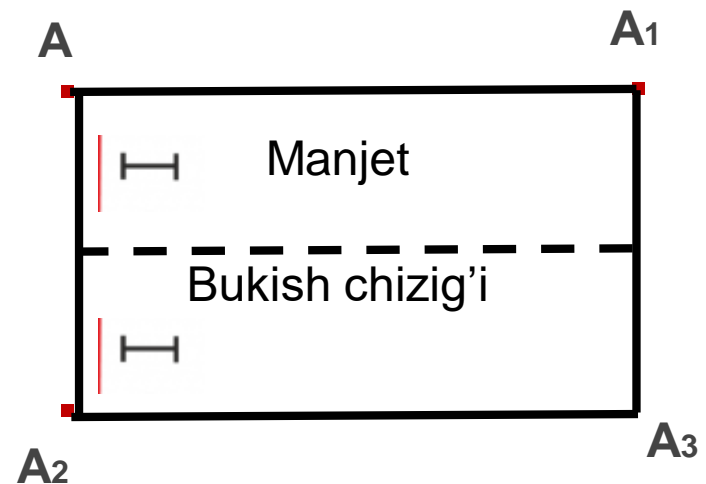
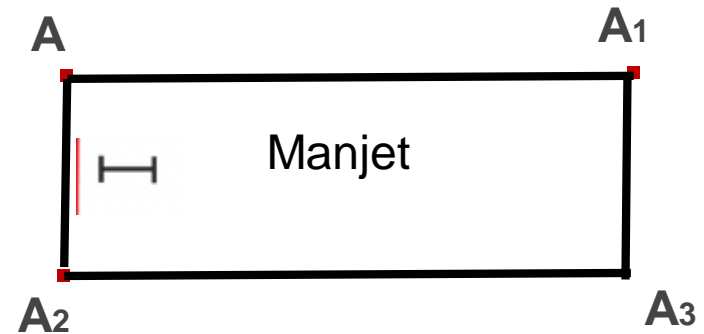
2. Manjet kengligi

$$AA_2 = 5-6 \text{ sm}$$

Yaxlit manjet uchun 10-12 sm

3. To'g'ri to'rtburchak

AA₁A₂A₃



E'tiboringiz uchun raxmat!