

6-MAVZU. O'G'IL BOLALAR SHIMINING KONSTRUKTSIYA ASOSINI CHIZISH

REJA:

1. O'g'il bolalar shimining konstruktsiya asosini chizish uchun kerakli o'lchovlar.
2. Baza to'rini chizish.
3. Shim old bo'lagini chizish
4. Shim orqa bo'lagini chizish

Shim konstruksiyasini chizish uchun zarur o'lchamlar

№	O'lchov belgisi	O'lchov nomi	O'lchov, sm
1	C_b	Bel yarim aylanasi	30
2	C_s	Son yarim aylanasi	36,9
3	U_{tiz}	Tizzagacha uzunlik	45,8
4	U_{sh}	Shim uzunligi	80

Asosiy qo'shimchalar

Kiyim turi	Gavdaga yopishish darajasi	Bel yarim aylanasi	Son yarim aylanasi
Shim	O'rta	1,5 – 2	2 – 3,5
	Bemalol	2,5 – 3	4 – 6

SHIMNING BAZA TO'RINI QURISH

To

No

1. Shim uzunligi– TN

ToNo = Ush=90 sm

SHIMNING BAZA TO'RINI QURISH

To

A1

No

1. Shim uzunligi– ToNo

$$\text{ToNo} = U_{\text{sh}} = 80 \text{ sm}$$

2. Bo'ksa balandligi– ToA1

$$\begin{aligned} \text{ToA1} &= 0,5 C_s + 1,0 = \\ &0,5 \times 36,9 + 1,0 = 19,5 \text{ sm.} \end{aligned}$$

SHIMNING BAZA TO'RINI QURISH

To

B1

A1

No

2. Bo'ksa balandligi– ToA1

$$\begin{aligned} \text{ToA1} &= 0,5 C_s + 1,0 = \\ &0,5 \times 36,9 + 1,0 = 19,5 \text{ sm.} \end{aligned}$$

3. Bo'ksa chizig'i – A1B1

$$A_1B_1 = 1/3 T_0A_1 = 1/3 \times 19,5 = 6,5 \text{ sm}$$

SHIMNING BAZA TO'RINI QURISH

To

B1

A1

3. Bo'ksa chizig'i – A1B1

$$A_1B_1 = 1/3 T_0A_1 = 1/3 \times 19,5 = 6,5 \text{ sm}$$

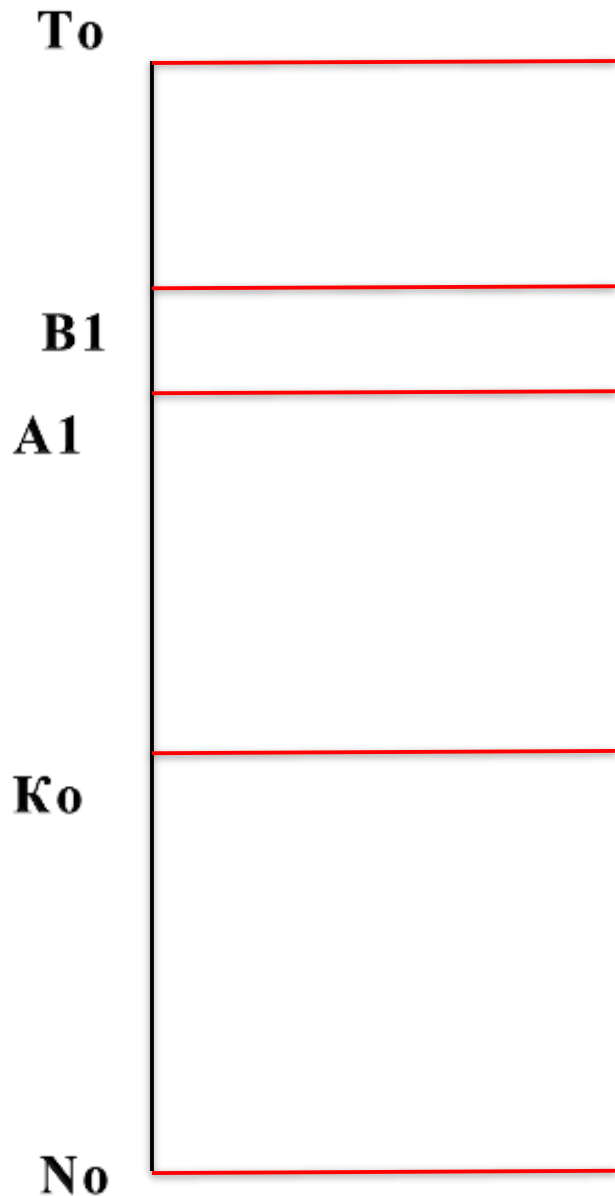
4. Tizza chizig'i – BK

$$T_0K_0 = U_{tiz} = 45,8 \text{ sm}$$

Ko

No

SHIMNING BAZA TO'RINI QURISH

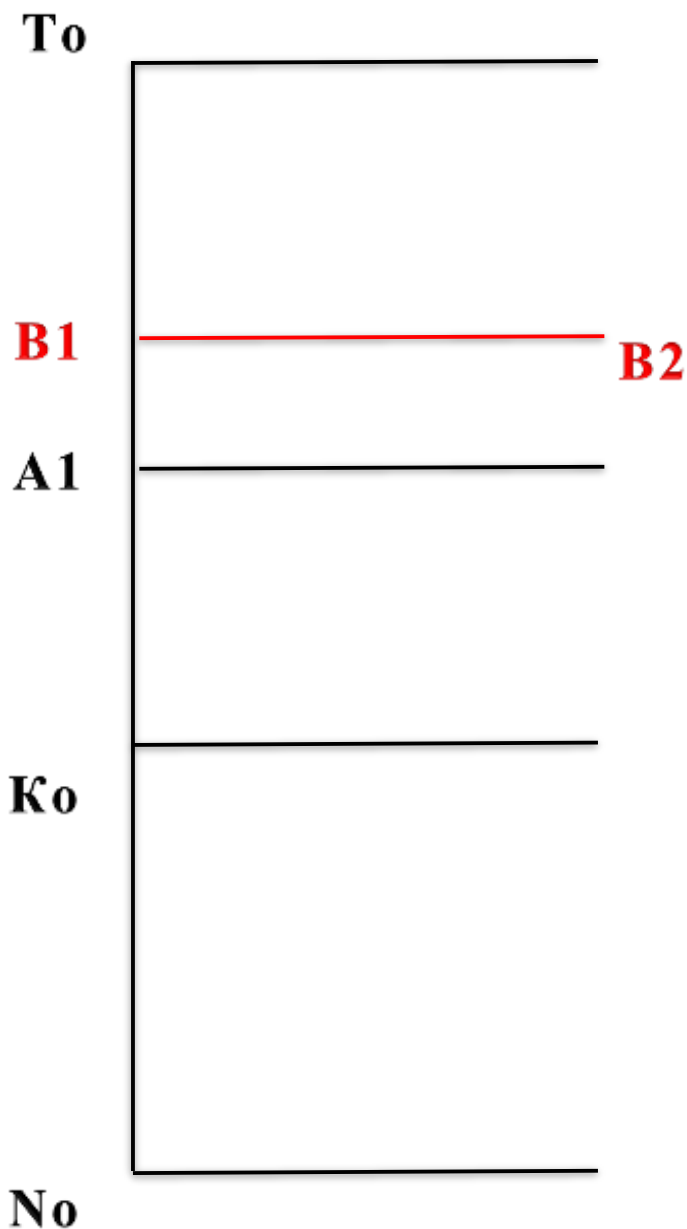


4. Tizza chizig'i— BK

$$T_0K_0 = U_{\text{tiz}} = 45,8 \text{ sm}$$

To, B1, A1, Ko, No nuqtalardan
gorizontal chiziqlar o'tkaziladi

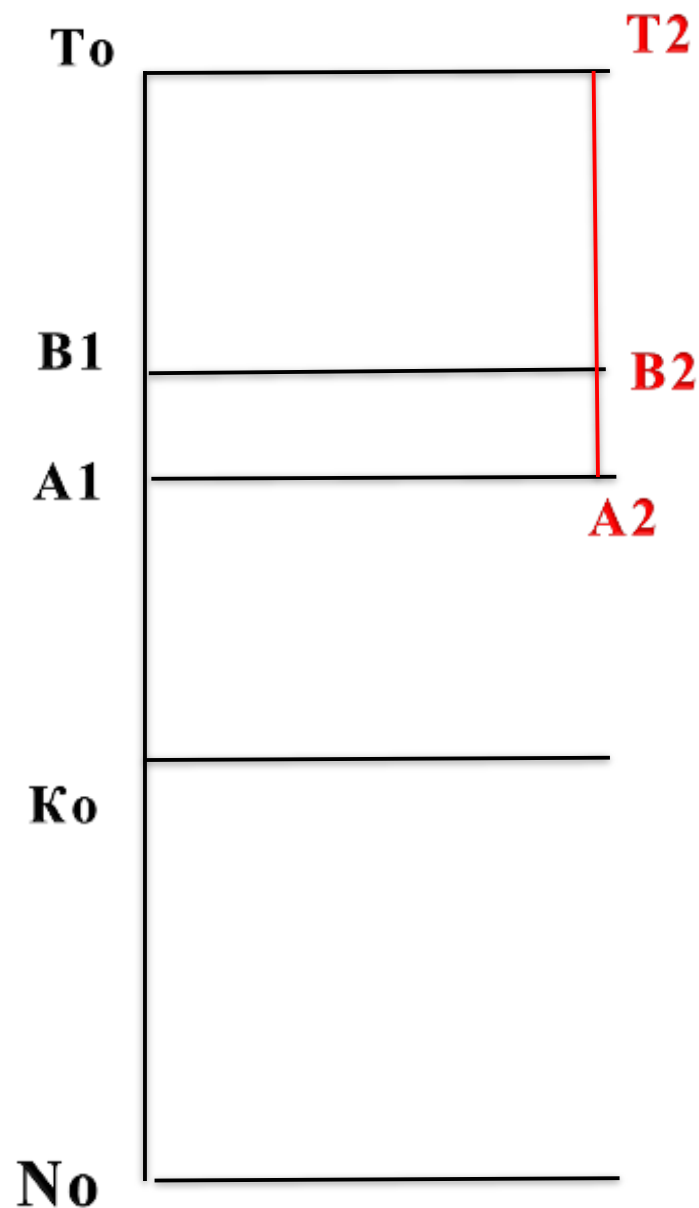
SHIMNING BAZA TO'RINI QURISH



To, B1, A1, Ko, No nuqtalardan
gorizontal chiziqlar o'tkaziladi

5. Old bo'lakning bo'ksa sathidagi eni:
 $B_1B_2 = 0,5(Cs + Ps) - 1,0 = 0,5(36,9 + 3,0) - 1,0 = 0,5 \times 39,9 - 1,0 = 20,0 - 1,0 = 19 \text{ sm}$

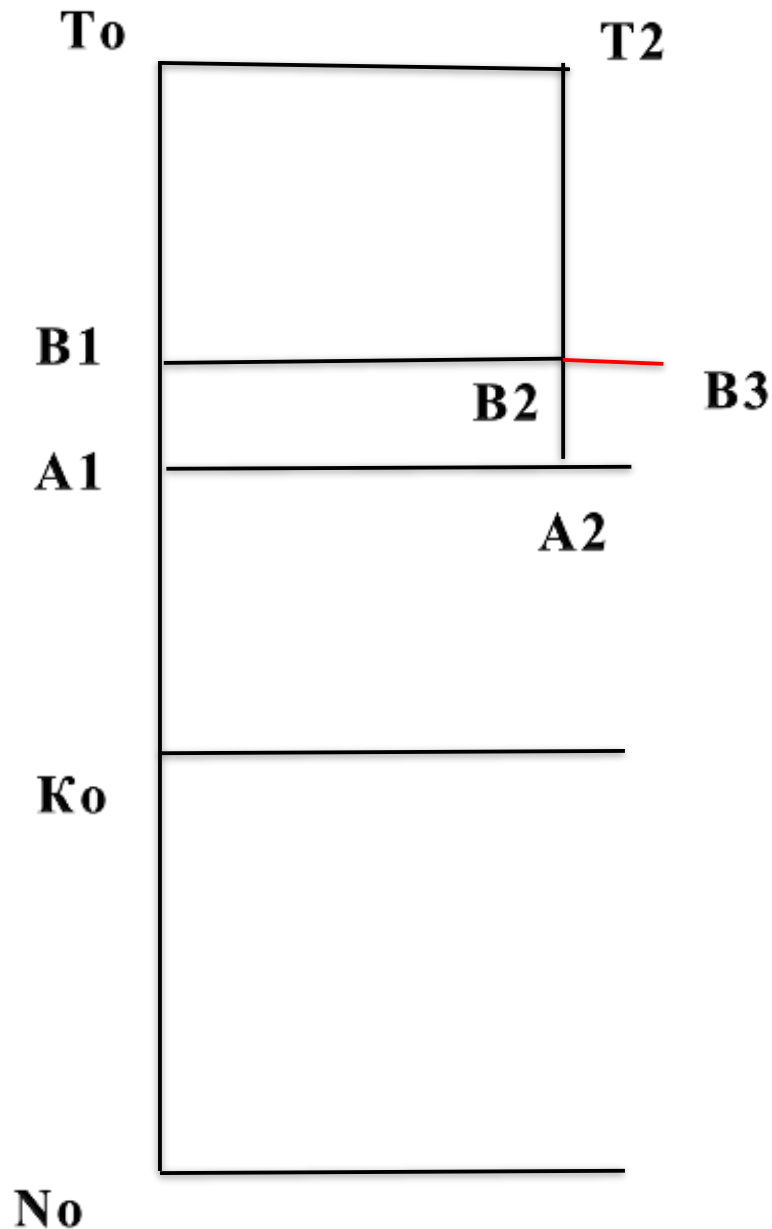
SHIMNING BAZA TO'RINI QURISH



5. Old bo'lakning bo'ksa sathidagi eni:
 $B_1B_2 = 0,5(C_s + P_s) - 1,0 = 0,5(36,9 + 3,0) - 1,0 = 0,5 \times 39,9 - 1,0 = 20,0 - 1,0 = 19 \text{ sm}$

B_2 nuqta orqali vertikal o'tkazib T_2 , A_2 nuqtalar bilan belgilanadi.

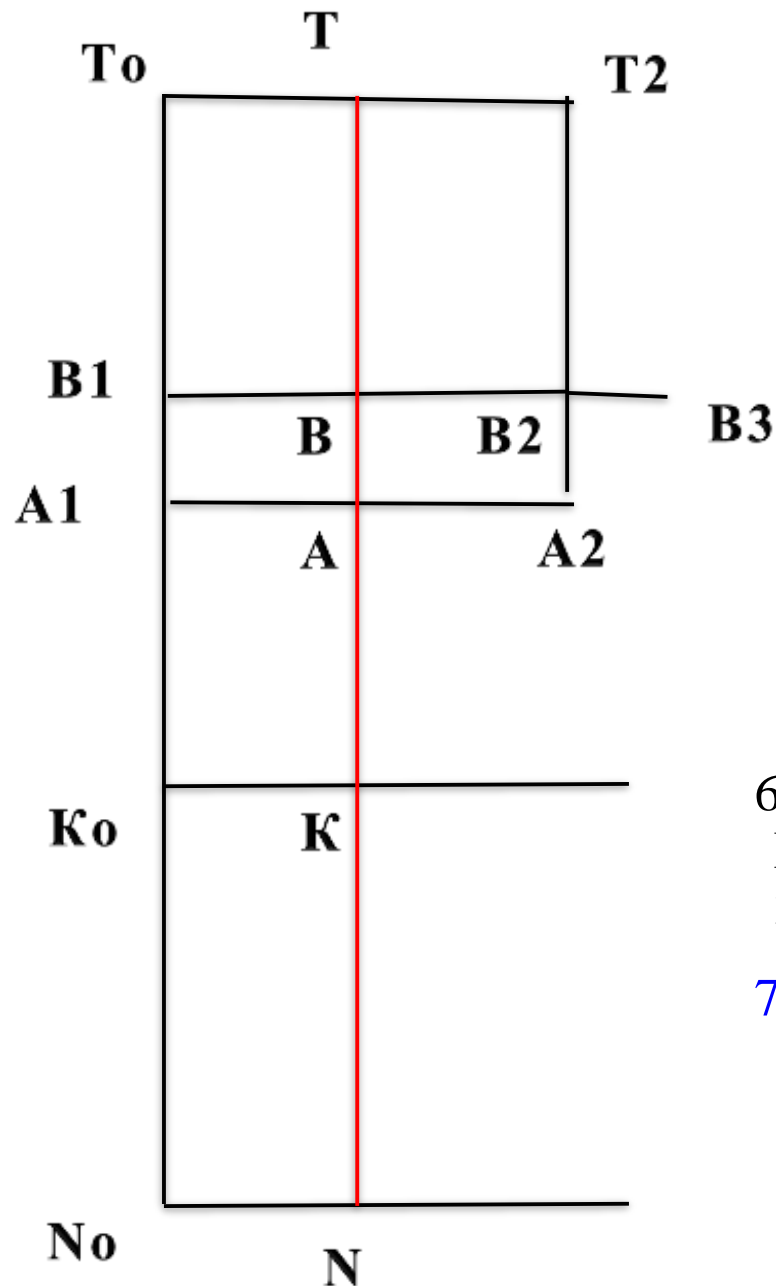
SHIMNING BAZA TO'RINI QURISH



B_2 nuqta orqali vertikal o'tkazib T_2 ,
 A_2 nuqtalar bilan belgilanadi.

6. Old bo'lakning dumba sathidagi eni:
 $B_2B_3 = 0,1C_s + 0,5 = 0,1 \times 36,9 + 0,5 =$
 $3,7 + 0,5 = 4,2 \text{ sm.}$

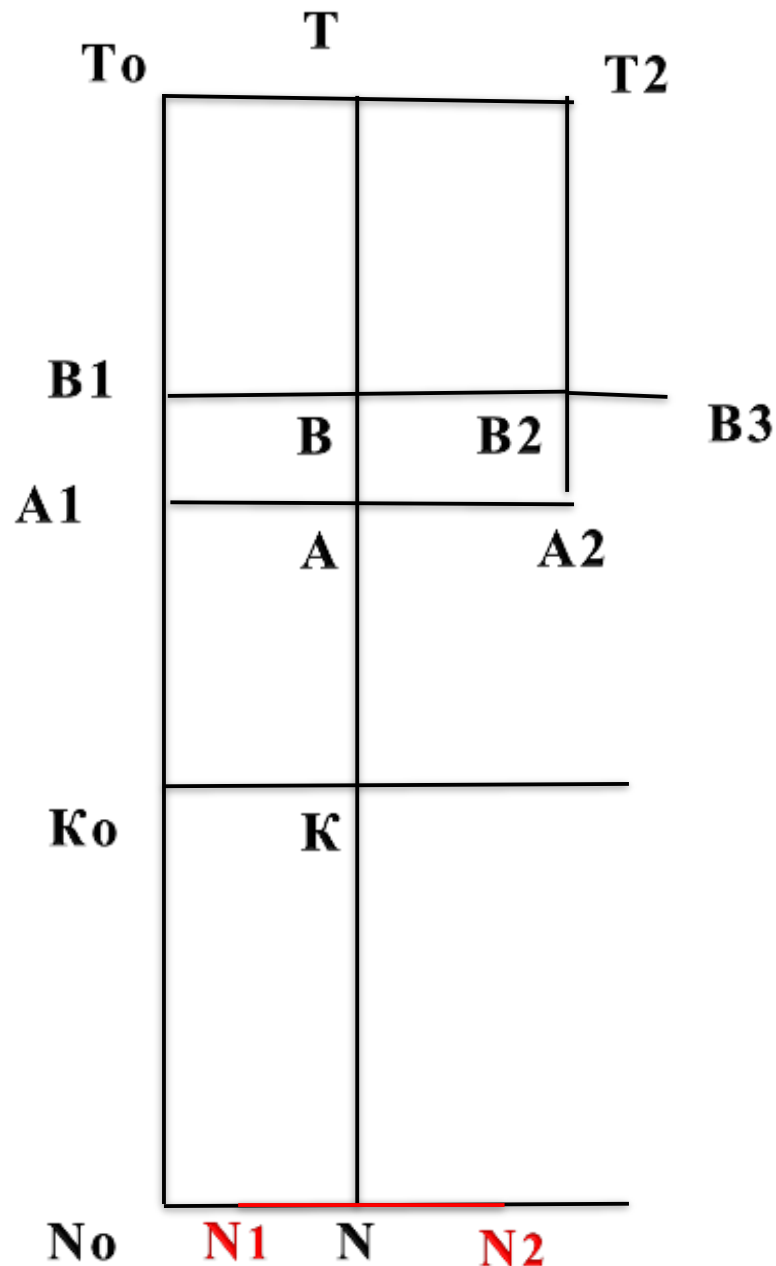
SHIMNING OLD BO'LAK CHIZMASINI CHIZISH



6. Old bo'lakning dumba sathidagi eni:
 $B_2B_3 = 0,1Cs + 0,5 = 0,1 \times 36,9 + 0,5 = 3,7 + 0,5 = 4,2 \text{ sm.}$

7. $B_1B = 0,5B_1B_3 = 0,5 \times 23,2 = 11.6 \text{ sm.}$

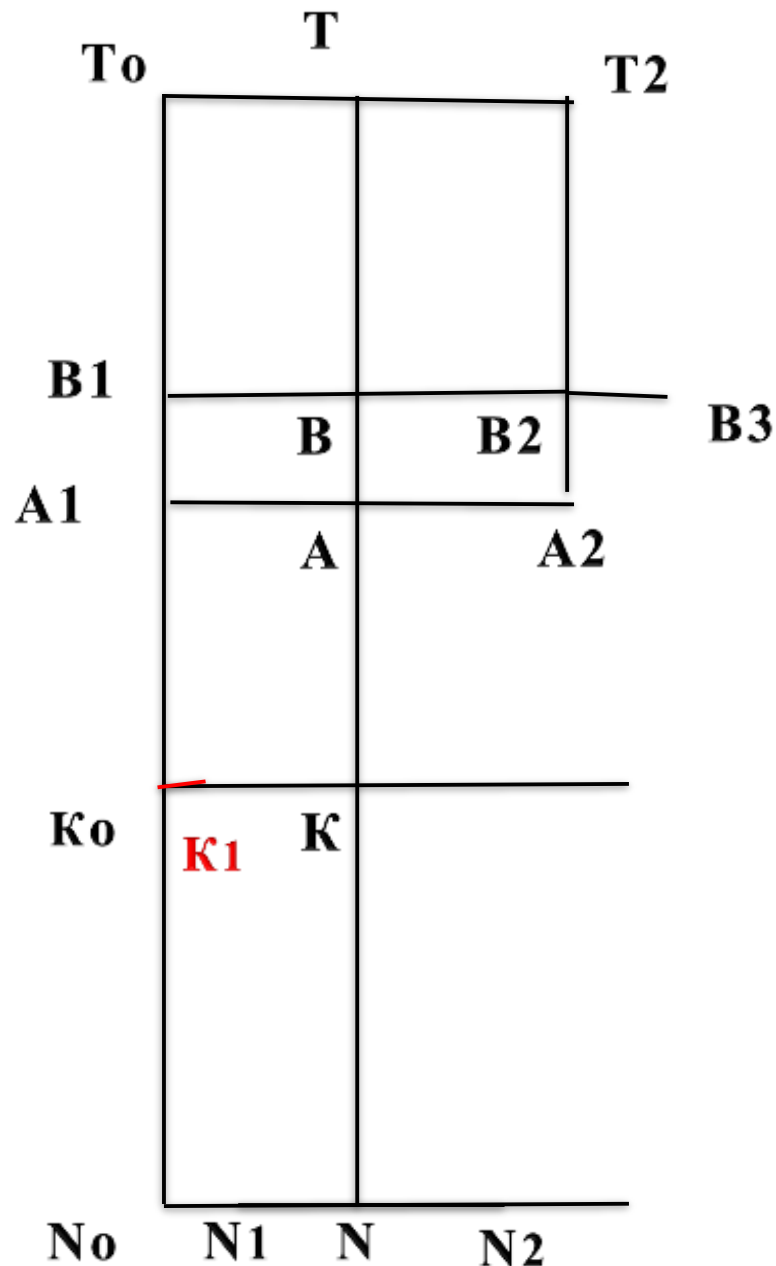
SHIMNING OLD BO'LAK CHIZMASINI CHIZISH



7. $B_1B = 0,5B_1B_3 = 0,5 \times 23,2 = 11.6 \text{ sm.}$

8. $NN_1 = NN_2 = 0,5N_1N_2 = 0,5(K_{\text{pocha}} - 2,0)$
 $= 0,5(16,0 - 2,0) = 0,5 \times 14,0 = 7,0 \text{ sm}$

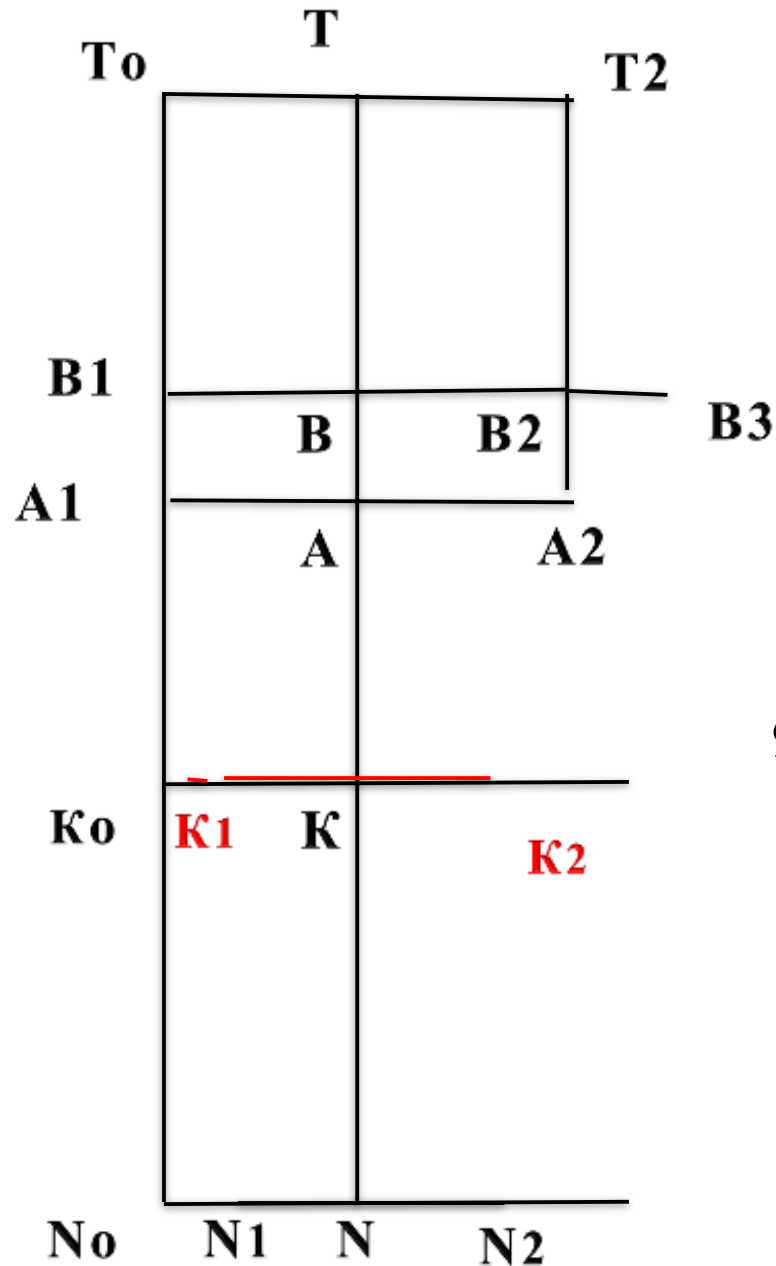
SHIMNING OLD BO'LAK CHIZMASINI CHIZISH



$$8. NN_1 = NN_2 = 0,5N_1N_2 = 0,5(K_{\text{pocha}} - 2,0) \\ = 0,5(16,0 - 2,0) = 0,5 \times 14,0 = 7,0 \text{ sm}$$

$$9. K_0K_1 = 1,0 \dots 1,5$$

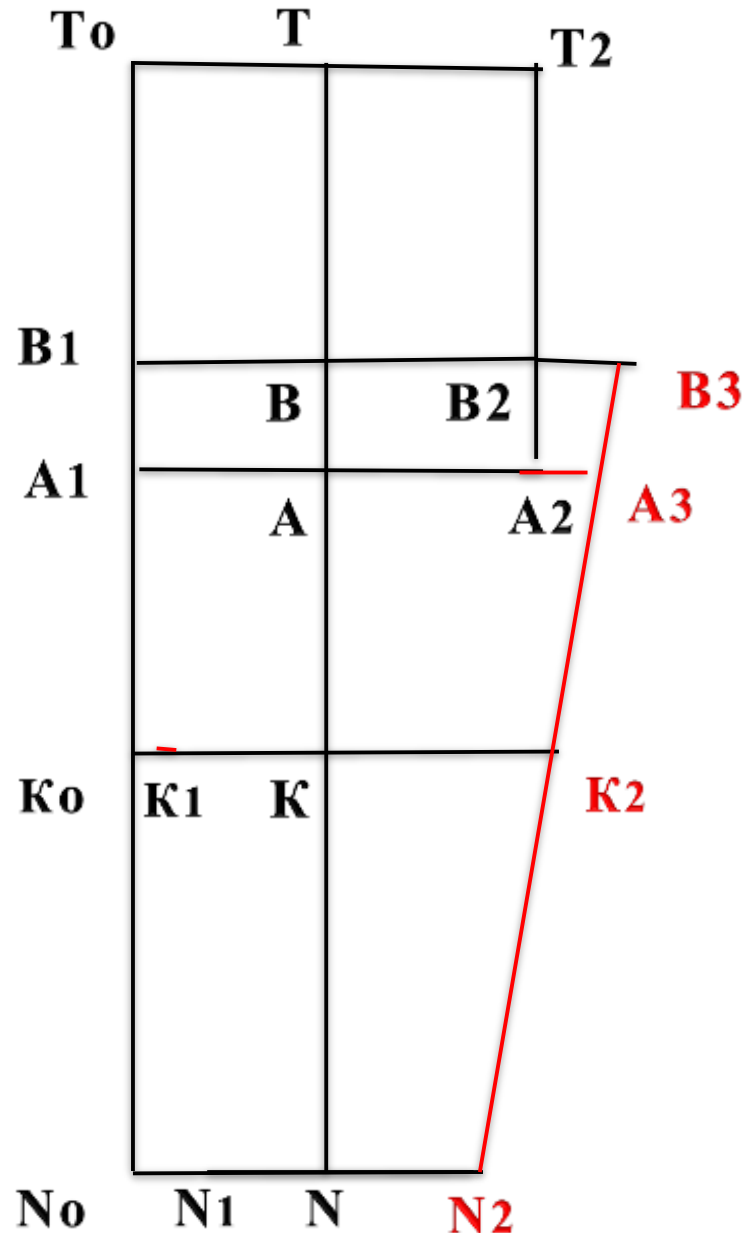
SHIMNING OLD BO'LAK CHIZMASINI CHIZISH



9. $K_0 K_1 = 1,0 \dots 1,5$

10. $KK_2 = KK_1$

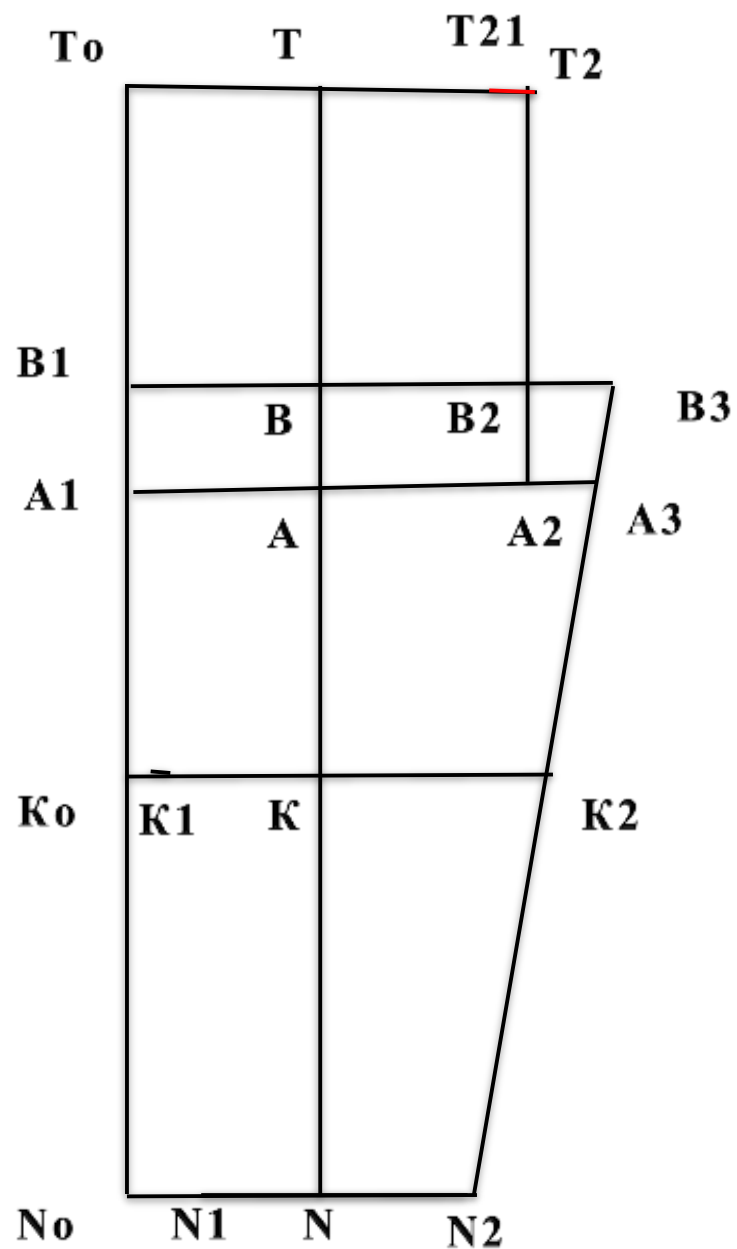
SHIMNING OLD BO'LAK CHIZMASINI CHIZISH



10. $KK_2 = K K_1$

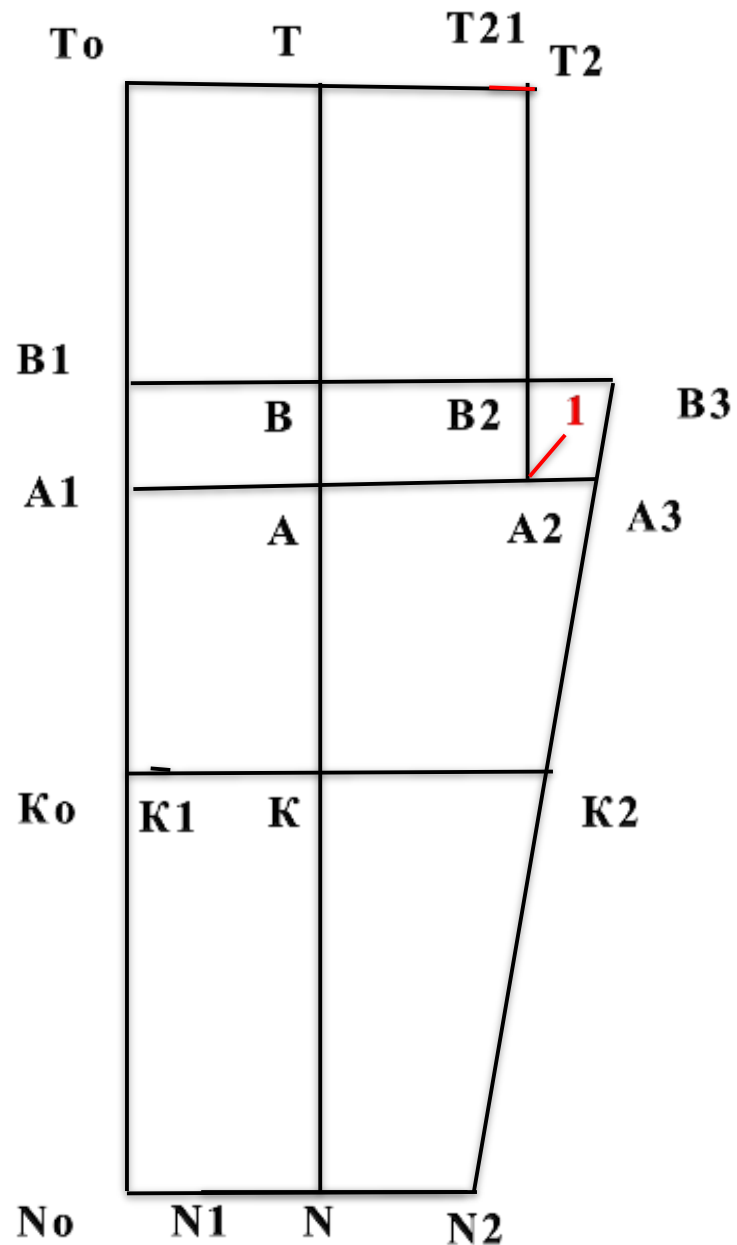
B_3 , K_2 , N_2 nuqtalar o'g'ri chiziq yordamida tutashtiriladi. A chizig'ida kesishgan nuqta A_3 bilan belgilanadi.

SHIMNING OLD BO'LAK CHIZMASINI CHIZISH



$$11. T_2 T_{21} = 0,5$$

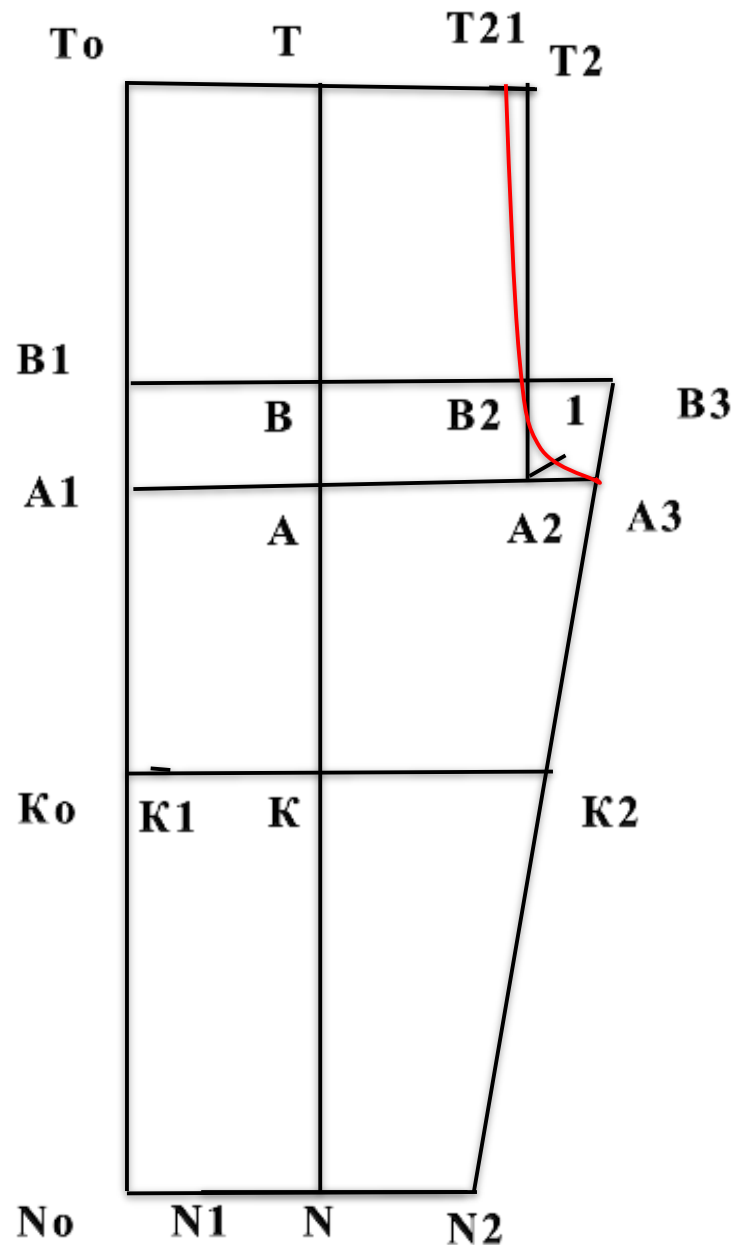
SHIMNING OLD BO'LAK CHIZMASINI CHIZISH



$$11. T_2 T_{21} = 0,5$$

$$12. A_2 1 = 0,4 A_2 B_2 = 0,4 \times 6,5 = 2,6 \text{ sm}$$

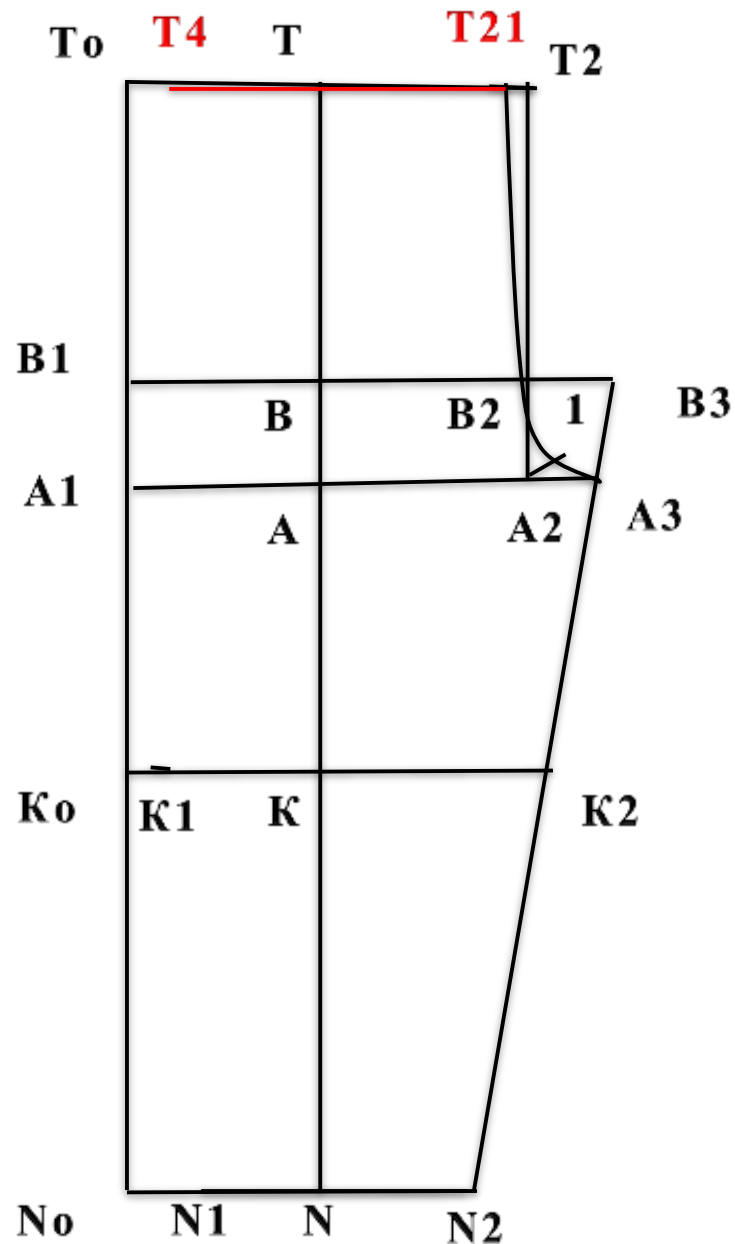
SHIMNING OLD BO'LAK CHIZMASINI CHIZISH



$$12. A_2 1 = 0,4 A_2 B_2 = 0,4 \times 6,5 = 2,6 \text{ sm}$$

T_{21} , B_2 , 1 , A_3 nuqtalarni birlashtirib, taqilma chizig'i chiziladi.

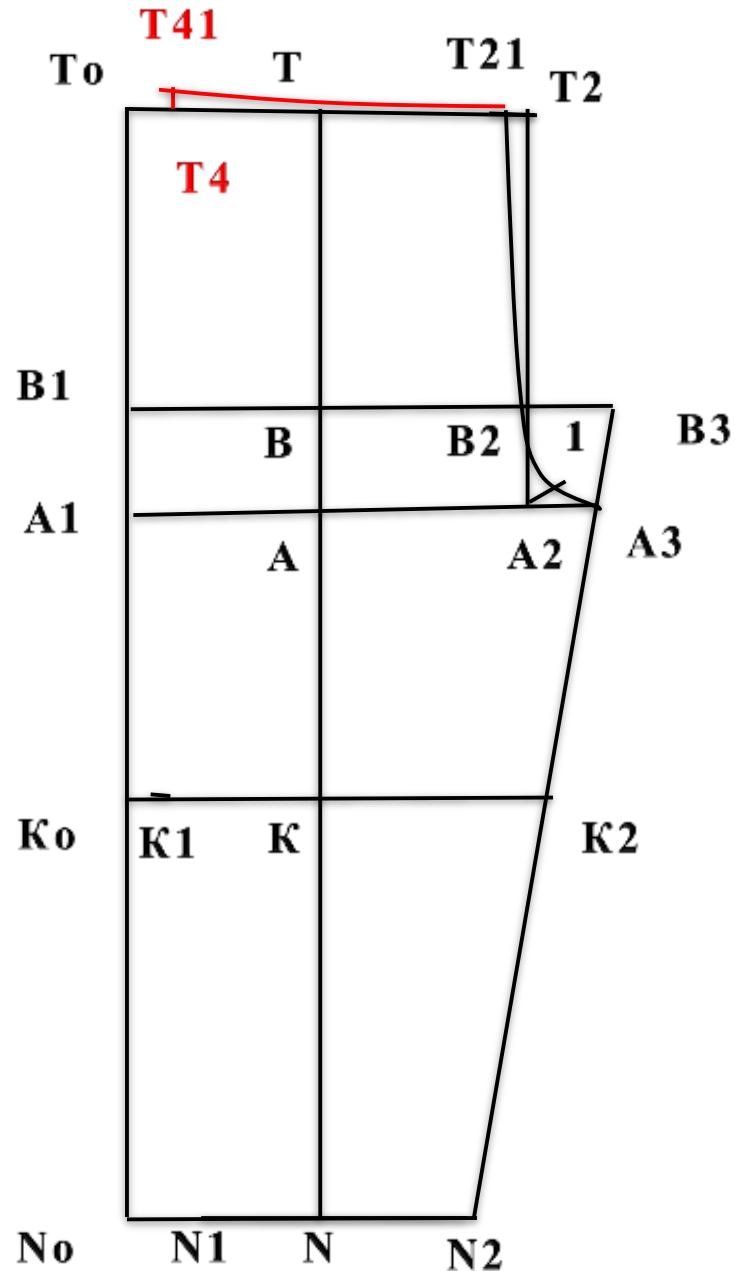
SHIMNING OLD BO'LAK CHIZMASINI CHIZISH



T_{21} , B_2 , 1, A_3 nuqtalarni birlashtirib, taqilma chizig'i chiziladi.

$$13. T_{21}T_4 = 0,5(Cb + Pb) + c = 0,5(30,0 + 1,0) + 3,0 = 18,5 \text{ sm}$$

SHIMNING OLD BO'LAK CHIZMASINI CHIZISH

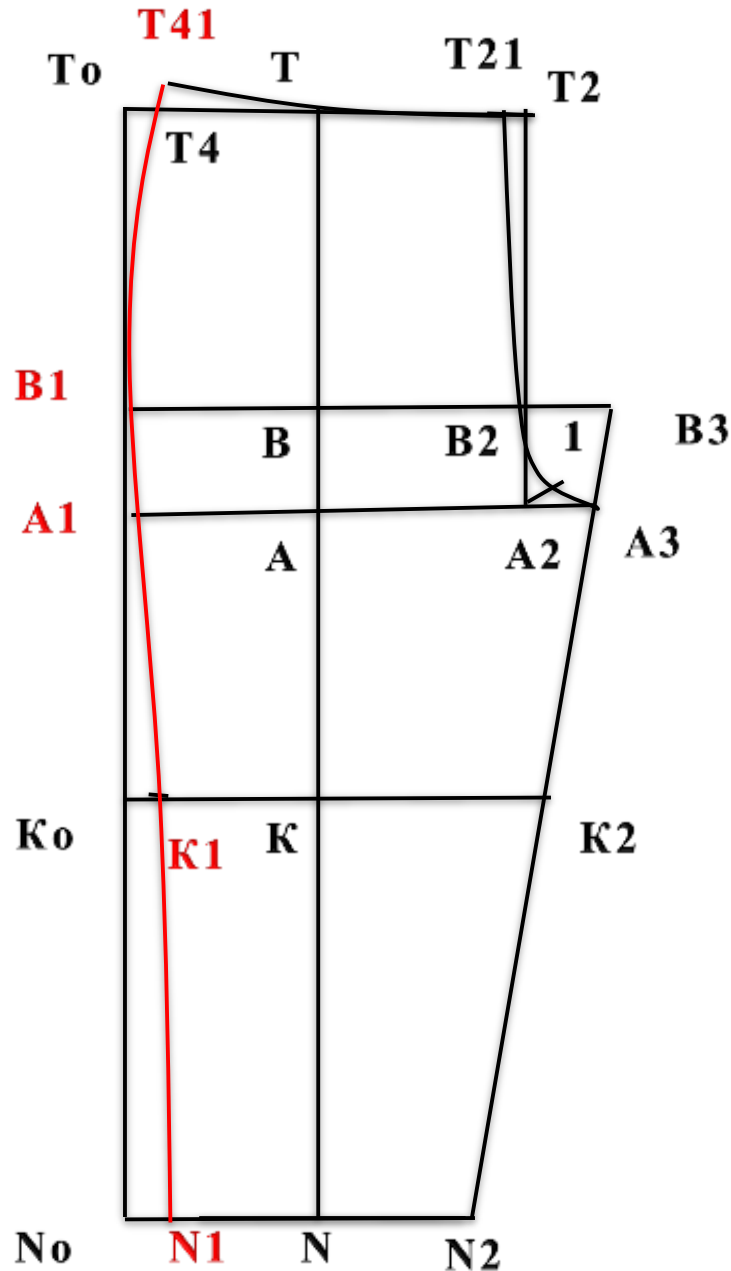


$$13. T_{21}T_4 = 0,5(Cb + Pb) + c = 0,5(30,0 + 1,0) + 3,0 = 18,5 \text{ sm}$$

$$14. T_4T_{41} = 0,5 \dots 0,7$$

T_4, T_{41} nuqtalari tutashtiriladi.

SHIMNING OLD BO'LAK CHIZMASINI CHIZISH

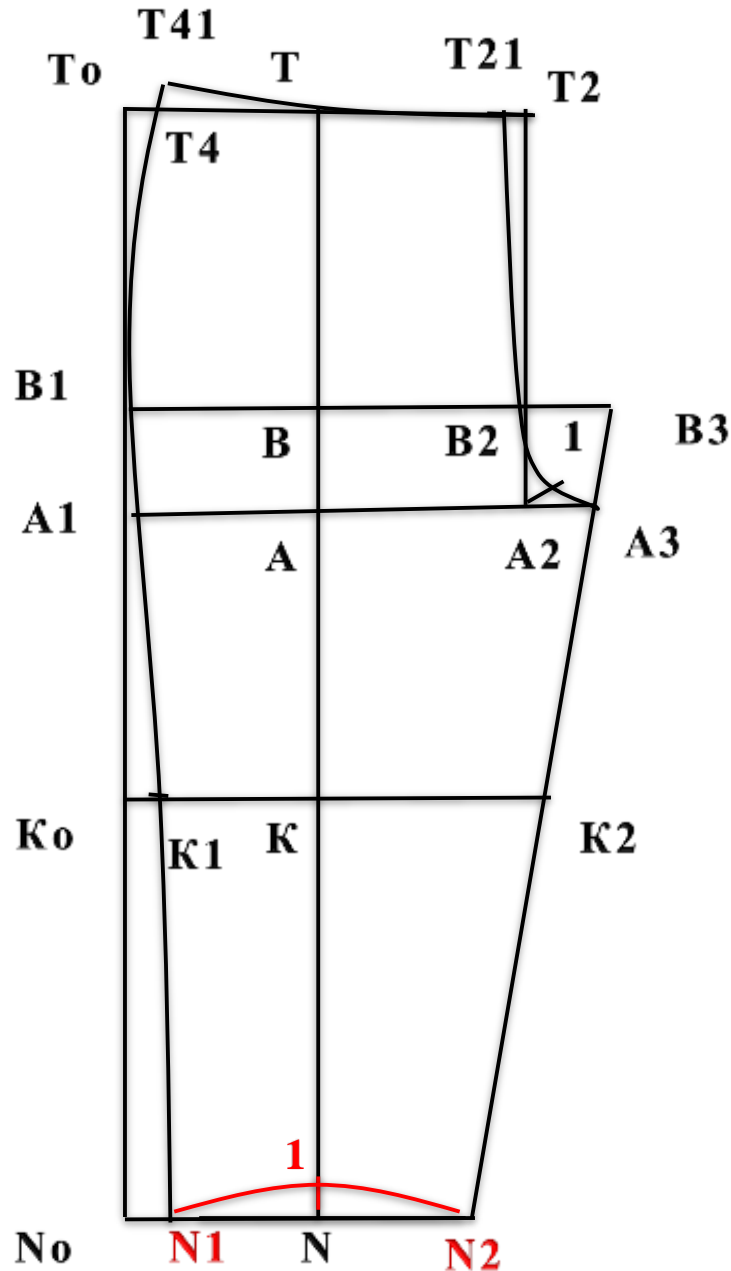


14. $T_4 T_{41} = 0,5 \dots 0,7$

T_4 , T_{41} nuqtalari tutashtiriladi.

Yon qirgim: T_{41} , B1; A1, N₁ nuqtalar ravon egri chiziq yordamida tutashtiriladi; K₂ nuqta belgilanadi; T_{41} B1 qismi 0,5—1 sm qabariq chiziq, B1K₁ qismi 0,5 sm egik chiziq bilan chiziladi.

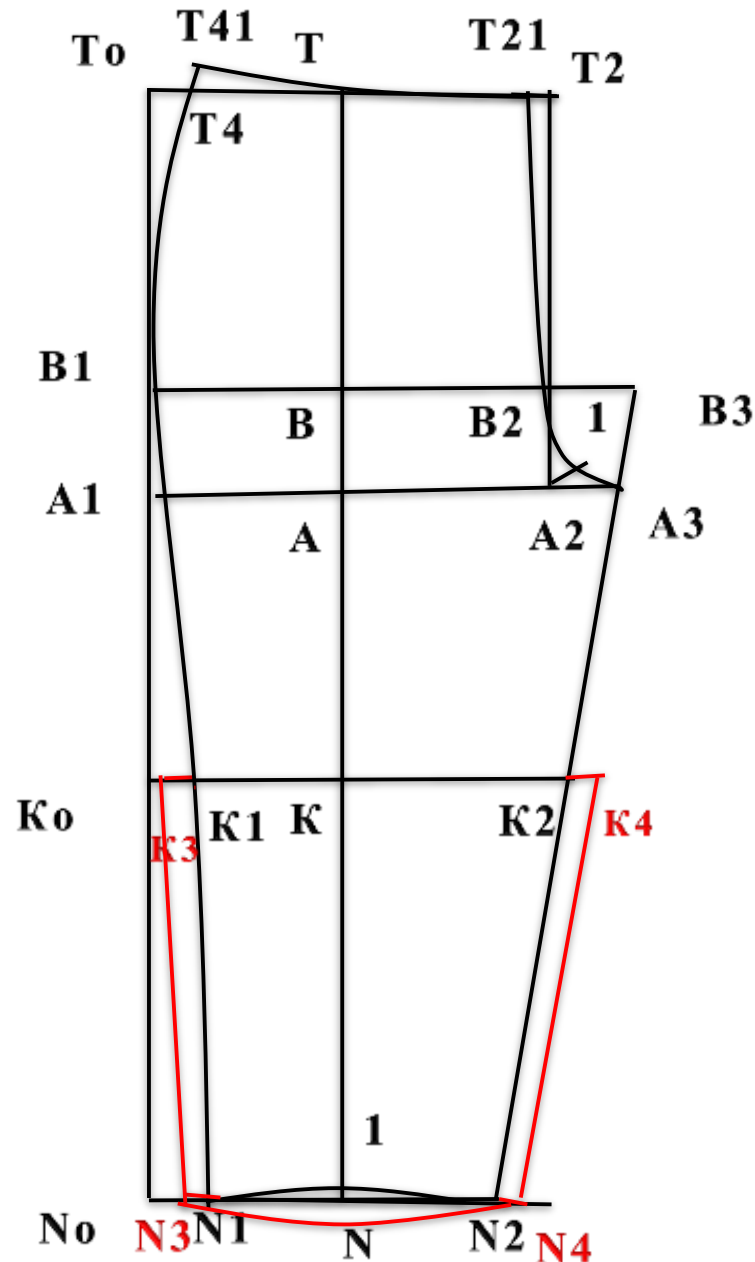
SHIMNING OLD BO'LAK CHIZMASINI CHIZISH



Yon qirqim: T_{41} , B1; A1, N_1 nuqtalar ravon egri chiziq yordamida tutashtiriladi; K_2 nuqta belgilanadi; $T_{41}B1$ qismi 0,5—1 sm qabariq chiziq, $B1K_1$ qismi 0,5 sm egik chiziq bilan chiziladi.

Pocha chizigi: N_1 nuqtadan yuqoriga 1 sm o'lchab qo'yiladi; N_2 , N_3 nuqtalarni egik chiziq bilan tutashtiriladi.

SHIMNING ORT BO'LAK CHIZMASINI CHIZISH



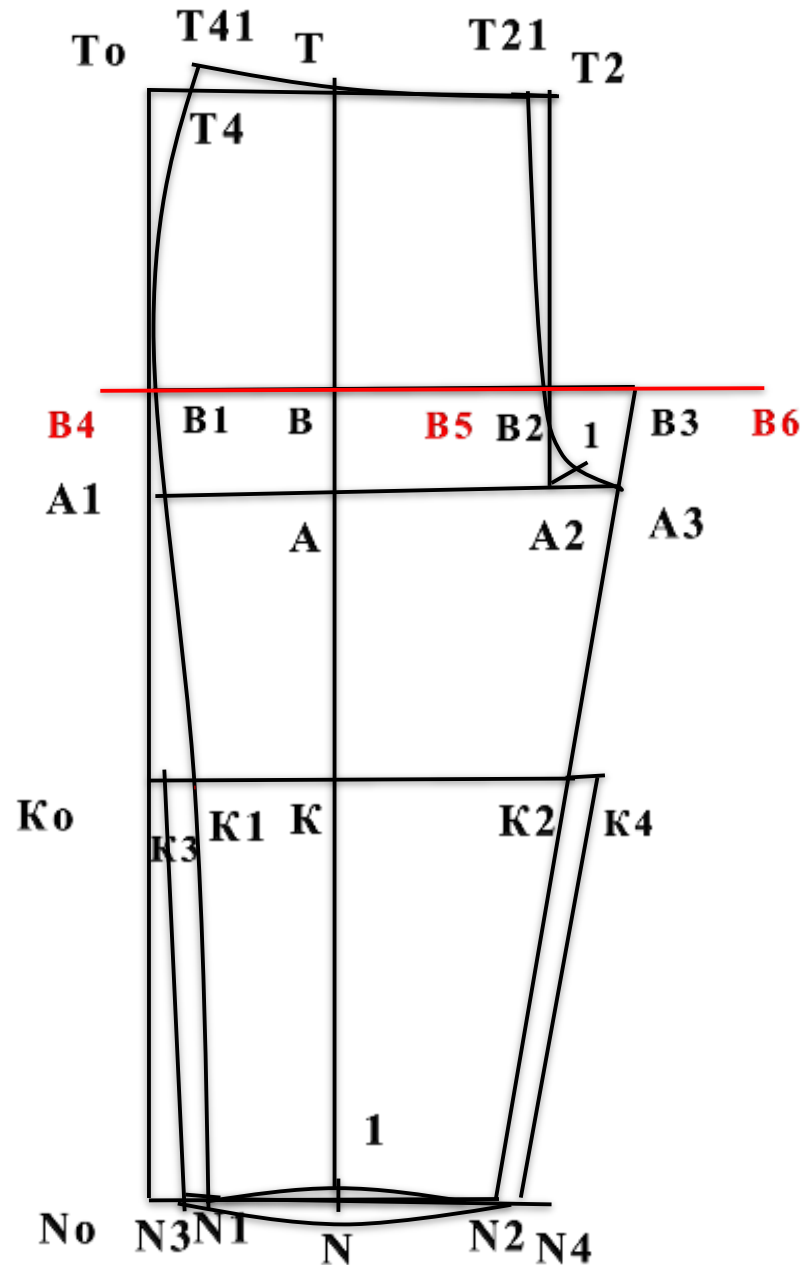
$$15. NN_3 = NN_4 = 0,5(K_{\text{pocha}} + 2,0) = 0,5(16,0 + 2,0) = 0,5 \times 18,0 = 9 \text{ sm}$$

$$16. K_1K_3 = K_2K_4 = 2,0 \text{ sm}$$

K3, N3 va K4, N4 nuqtalar tutashtiriladi.

Pocha chizig'i: N₄, N₅ nuqtalarni past tomonga 1 sm qabariq qilib birlashtiriladi.

SHIMNING ORT BO'LAK CHIZMASINI CHIZISH

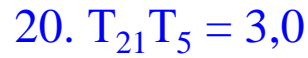


$$17. B_4B_5 = 0,5(C_5 + P_s) + 1,0 = 0,5(36,9 + 3,0) + 1,0 = 0,5 \times 39,9 + 1,0 = 21 \text{ sm};$$

$$18. B_5B_6 = 0,2C_s + 1,5 = 0,2 \times 36,9 + 1,5 = 8,9 \text{ sm}$$

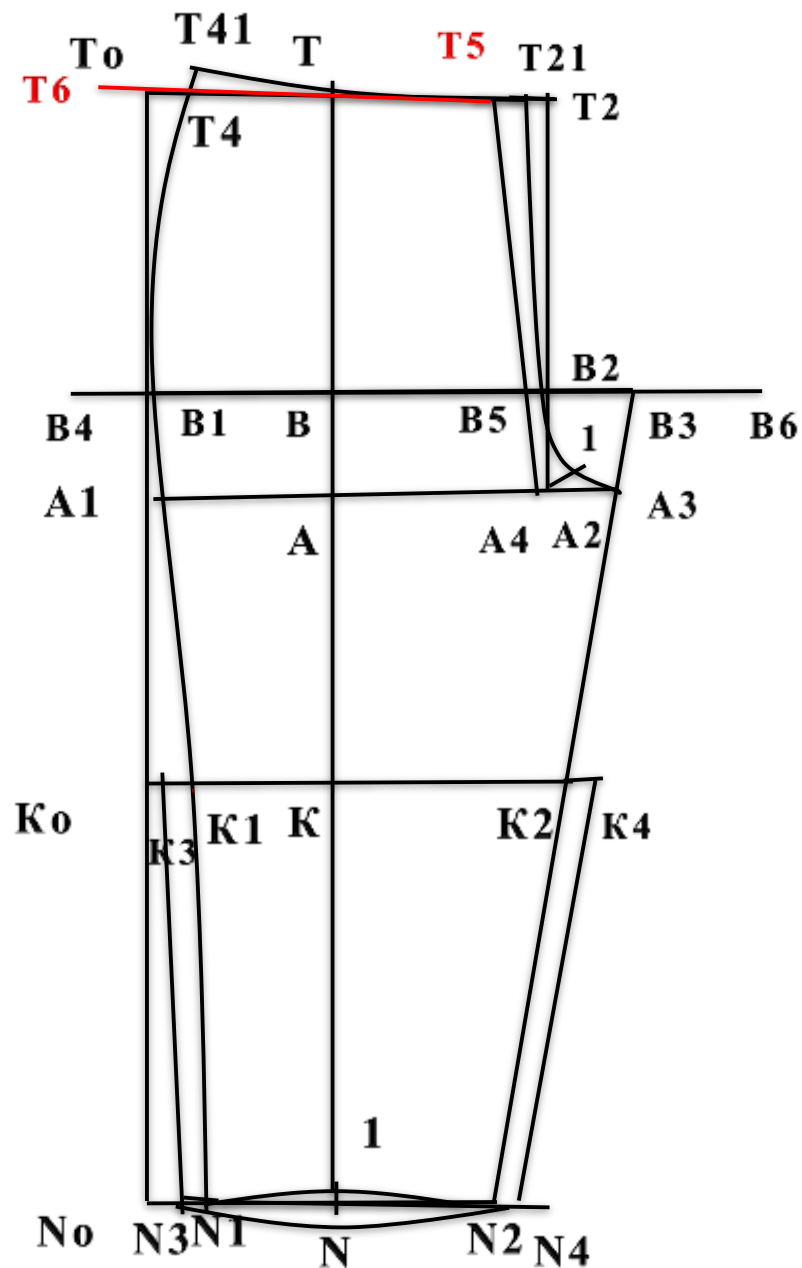
$$19. BB_4 = 0,5 (B_4B_5 + B_5B_6) = 0,5(21,0 + 8,9) = 0,5 \times 29,9 = 15,0 \text{ sm}$$

1



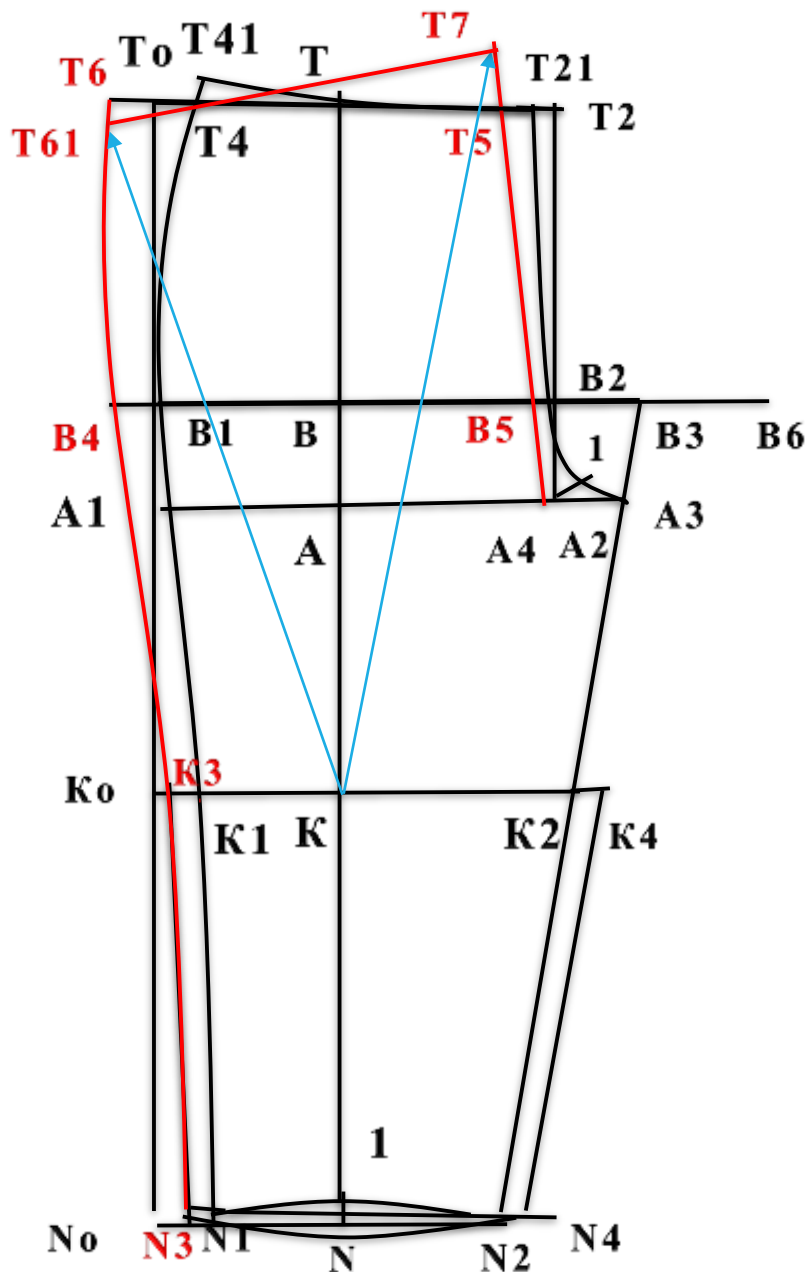
T_5 va B_5 nuqtalari to'g'ri chiziq yordamida tutashtiriladi. Ushbu chiziq A_1 nuqtadan o'tkazilgan gorizontaal chiziq bilan kesishgan nuqta A_4 nuqta bo'ladi. A_4 nuqta A_2 nuqtaning o'ngida yoki chapida joylashishi mumkin.

SHIMNING ORT BO'LAK CHIZMASINI CHIZISH



$$21. T_5 T_6 = 0,5(C_b + P_b) + v_1 = 0,5(30,0 + 1,0) + 2,0 = 17,5 \text{ sm}$$

SHIMNING ORT BO'LAK CHIZMASINI CHIZISH



T_6 , B_4 , K_3 nuqtalar egri chiziq yordamida tutashtirilib, N_3 nuqtasigacha to'g'ri chiziq o'tkaziladi.

K_3 nuqtadan $K_1B_1T_{41}$ uzunligiga teng masofani o'lchab, T_{61} nuqta topiladi.

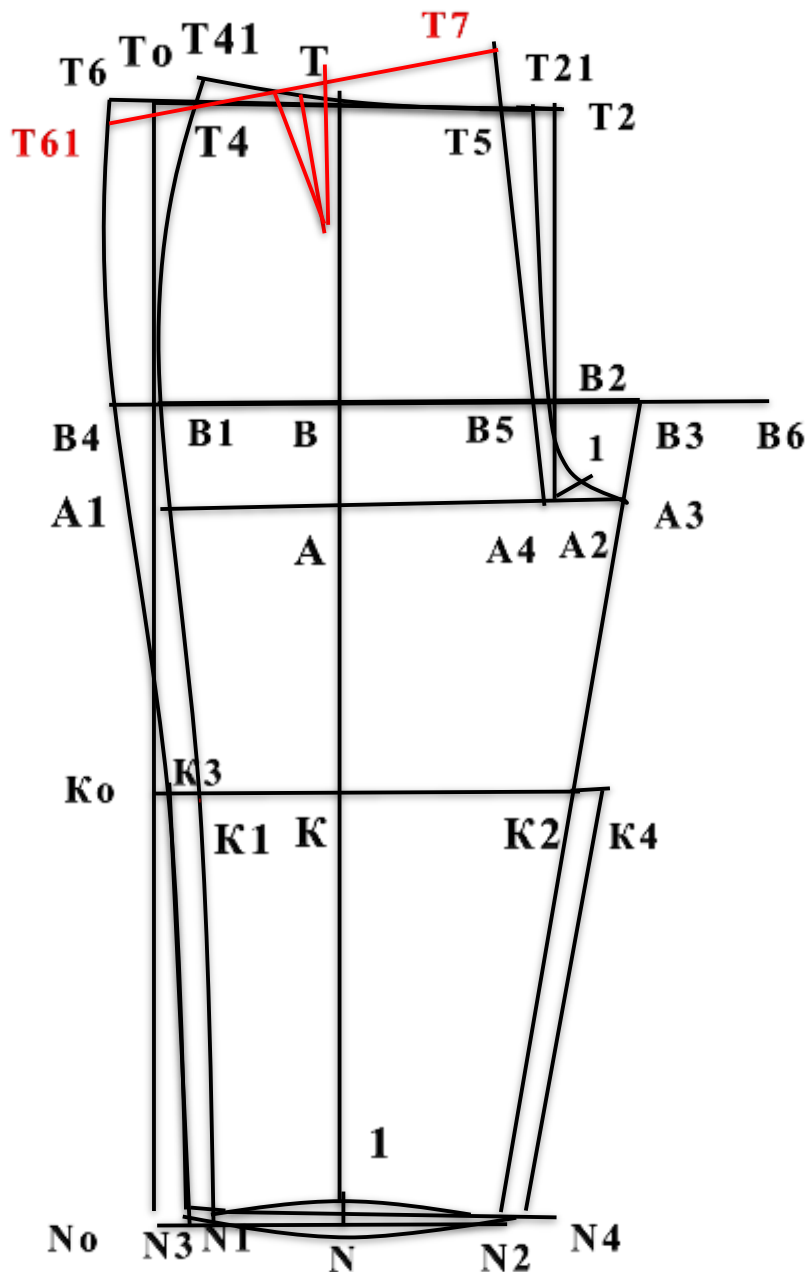
K nuqtadan T_{61} radiusida yoy chizilib, B_5T_5 chizig'ining davomida kesishgan nuqta T_7 bo'ladi.

T_{61} va T_7 nuqtalari tutashtirilib, orqa bel chizig'i hosil qilinadi.

Bel burmasi (vitachka) $T_{61}T_7$ kesmasining markazida joylashadi:

Uzunligi: 6,0...7,5 sm.

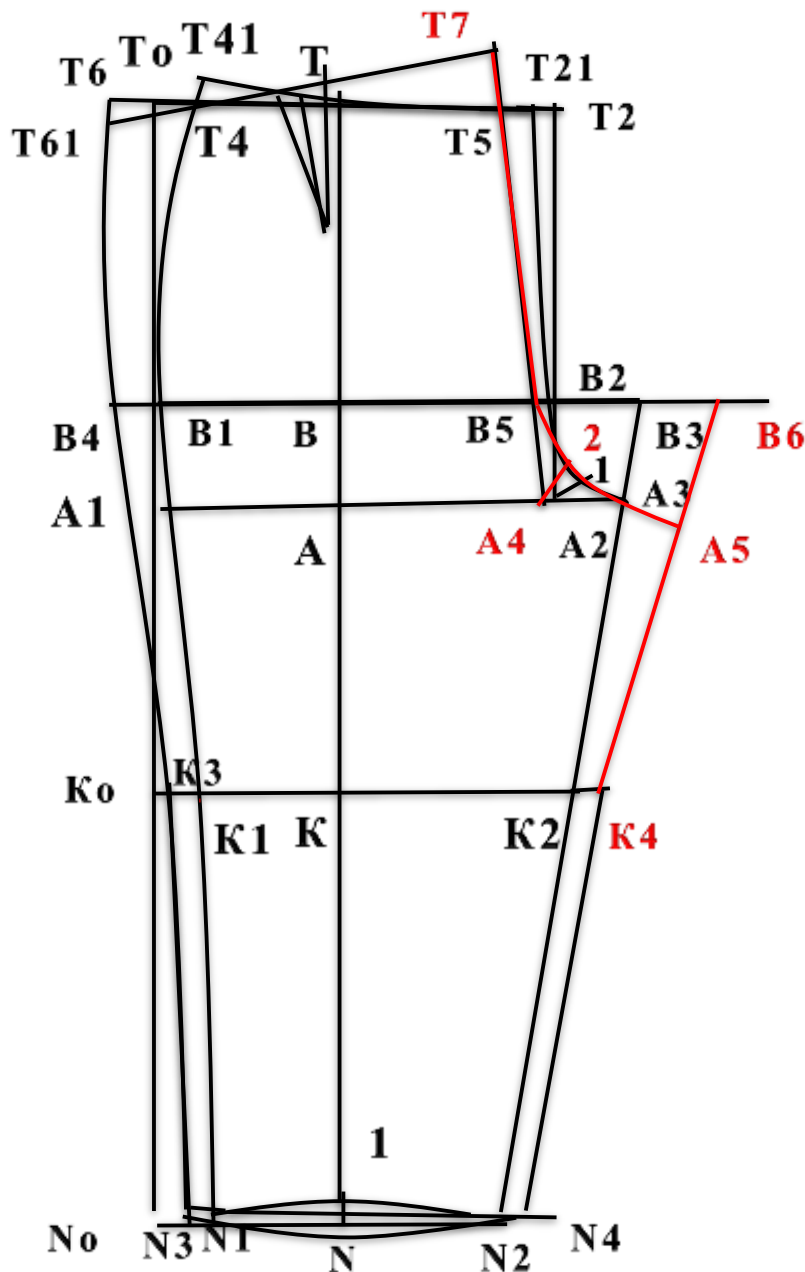
SHIMNING ORT BO'LAK CHIZMASINI CHIZISH



Bel burmasi (vitachka) T₆₁T₇
kesmasining markazida joylashadi:

Uzunligi: 6,0...7,5 sm.

SHIMNING ORT BO'LAK CHIZMASINI CHIZISH



24. K_4 va B_6 nuqtalar tutashtiriladi va ushbu chiziq bo'ylab K_4A_5 kesmasi o'lchanadi:

$$K_4A_5 = K_2A_3 - 0,5 = 26,4 - 0,5 = 25,9 \text{ sm}$$

$$25. A_42 = 2,5$$

A_5 , 2 va B_5 nuqtalari egri chiziq bilan tutashtiriladi, keyin T_7 nuqttagacha to'g'ri chiziq o'tkaziladi.

1



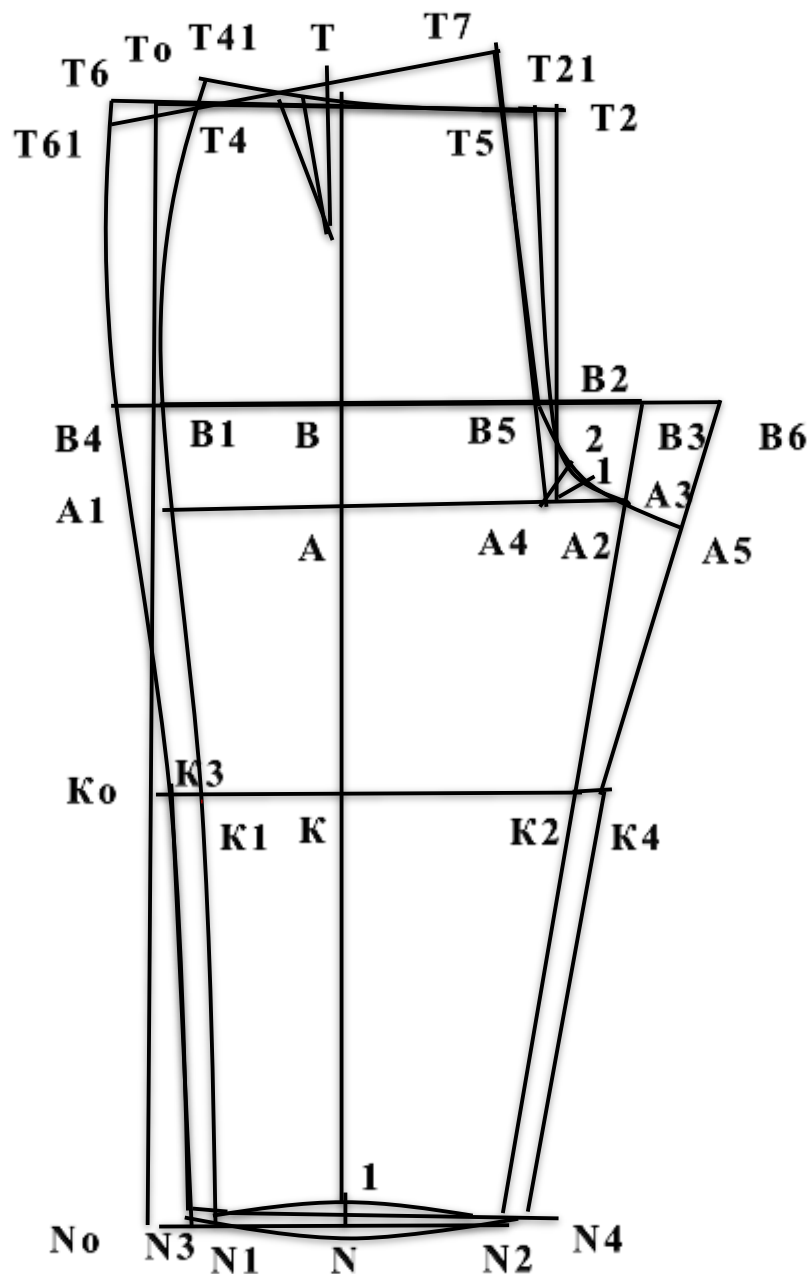
24. K_4 va B_6 nuqtalar tutashtiriladi va ushbu chiziq bo'ylab K_4A_5 kesmasi o'lchanadi:

$$K_4A_5 = K_2A_3 - 0,5 = 26,4 - 0,5 = 25,9 \text{ sm}$$

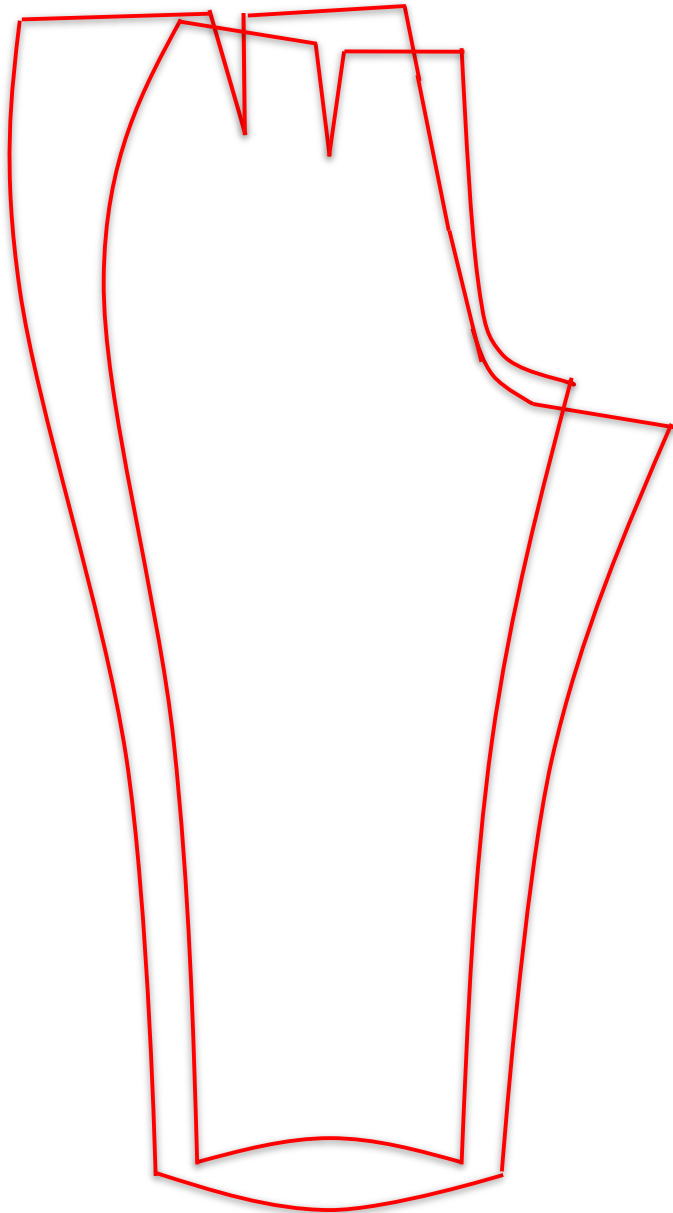
25. $A_4 2 = 2,5$

A_5 , 2 va B_5 nuqtalari egri chiziq bilan tutashtiriladi, keyin T_7 nuqttagacha to'g'ri chiziq o'tkaziladi.

SHIMNING ORT BO'LAK CHIZMASINI CHIZISH



SHIM ASOSINING CHIZMASI





Nazorat uchun savollar:

1. Shim konstruksiyasi chizmasini chizish qanday bosqichlardan iborat?
2. Shim konstruksiyasining chizmasini chizish uchun qanday dastlabki ma'lumotlar kerak?
3. Baza to'rining asosiy gorizontal chiziqlari qanday ataladi?
4. Old qismining son, o'tirish balandligi, tizza va pastki chiziqlari bo'yicha kengligi qanday hisoblanadi?
5. Old qismning o'rta chizig'i va bel chizig'i qanday hisoblanadi?
6. Old qismning o'rta chizig'i, bel chizig'i, yon va qadam chiziqlari qanday shakllantiriladi?
7. Orqa qismining son, o'tirish balandligi, tizza va pastki chiziqlari bo'yicha kengligi qanday hisoblanadi?
8. Orqa qismning o'rta chizig'i, bel chizig'i, yon va qadam chiziqlari qanday shakllantiriladi?



***E'tiboringiz uchun
raxmat!***

