

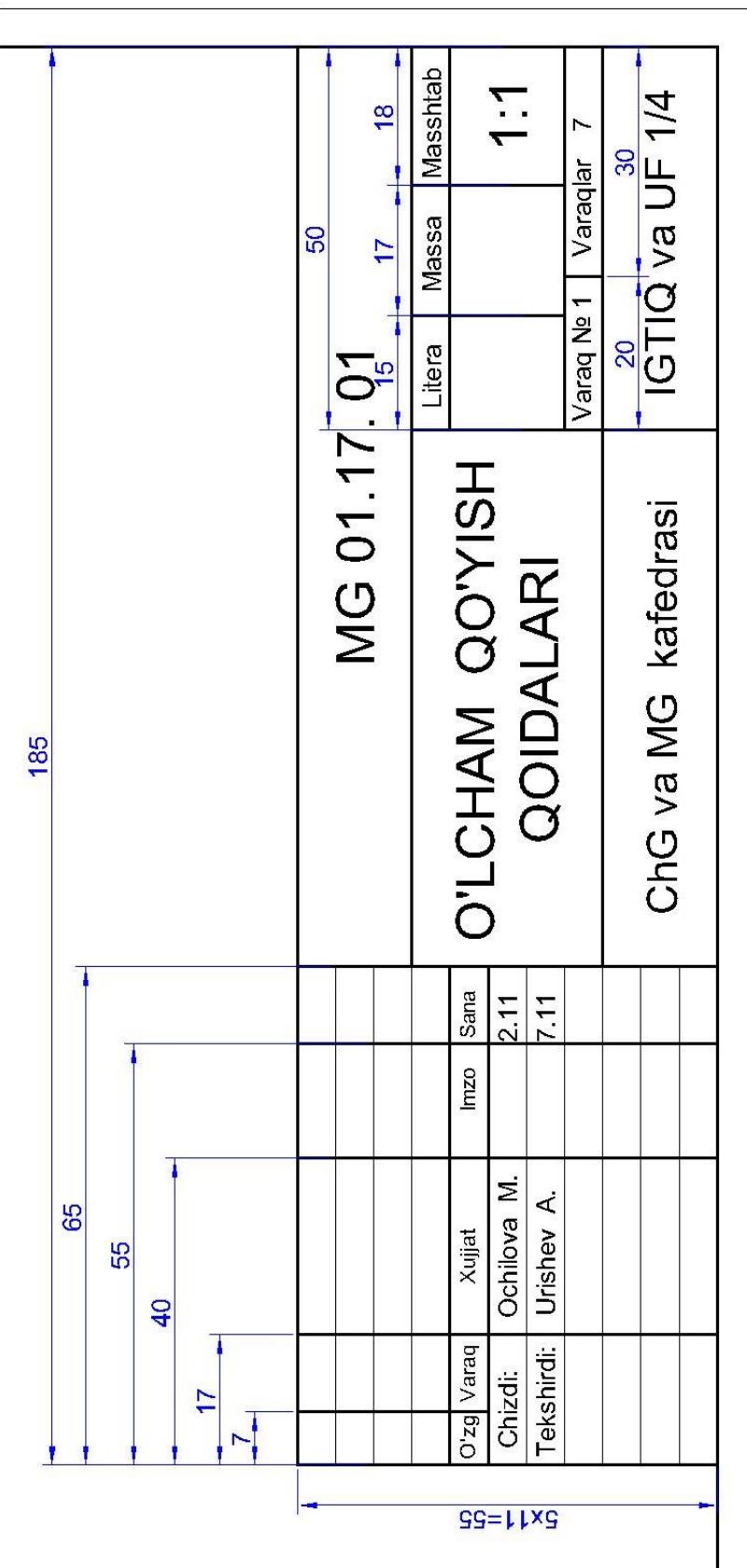
Adhamjon Ergashaliyevich Urishev

Jahongir Avloqulovich Qosimov

„Cizma geometriya va muhandislik grafikasi“ kafedrasи

**„Cizma geometriya va
muhandislik grafikasi“
fanidan mashqlar to‘plami**

Toshkent 2022



Asosiy yozuv chizma qog'ozining pastki o'ng burchagida, hoshiya chizig'iga qadalgan holda chizildi. Chizmada asosiy yozuvning o'lchamlari va to'ldirish namunasi keltirilgan.

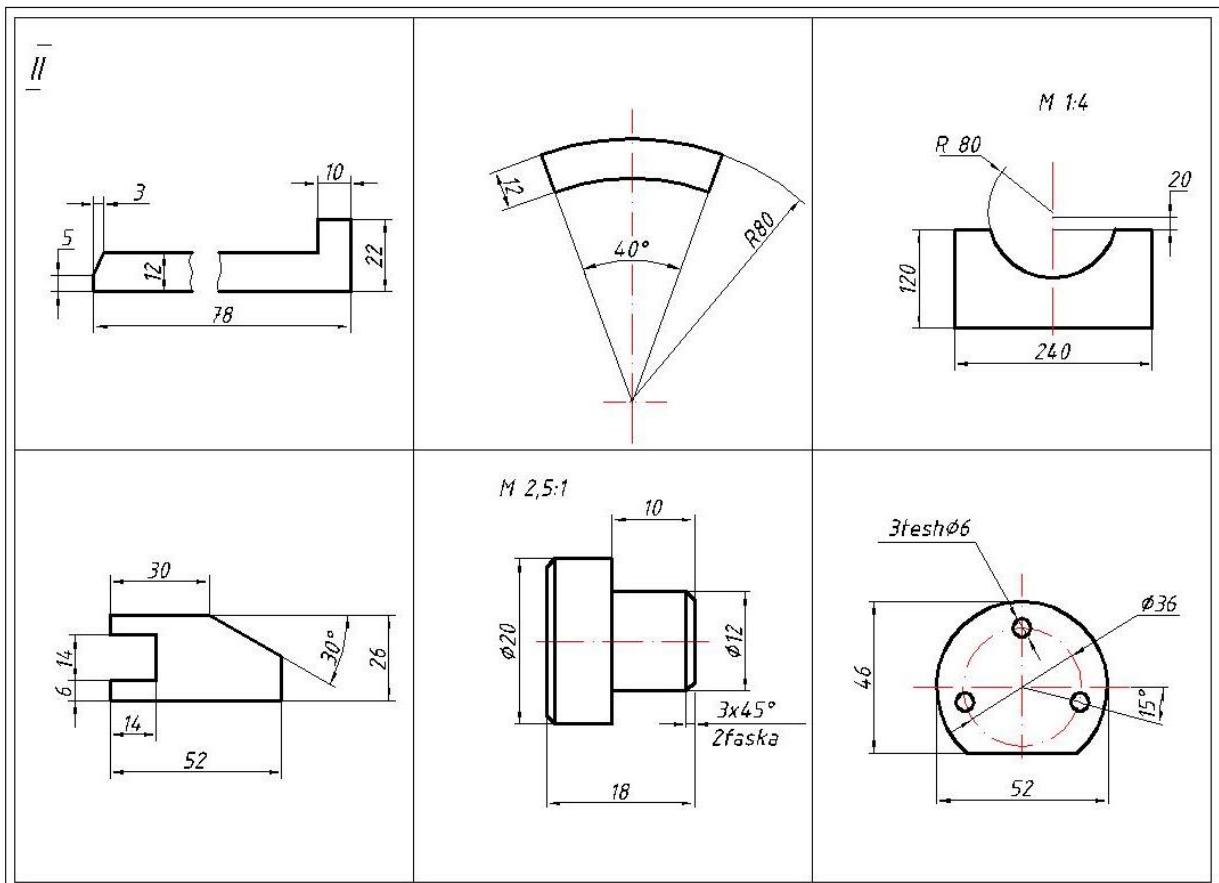
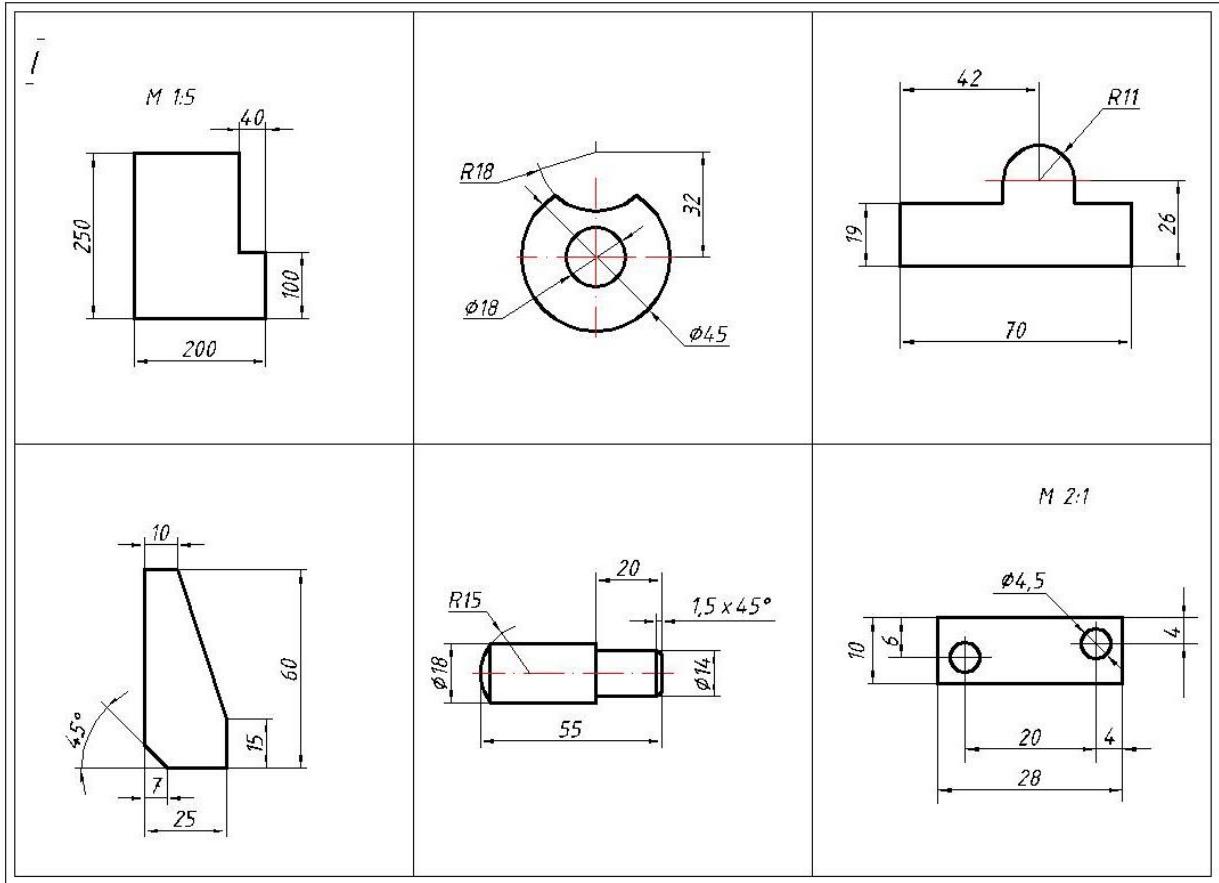
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O‘LCHASM QO‘YISH

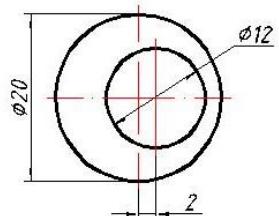
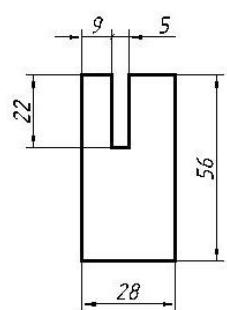
QOIDALARI

MAVZUSIGA DOIR

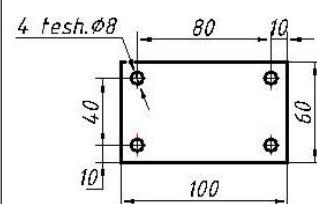
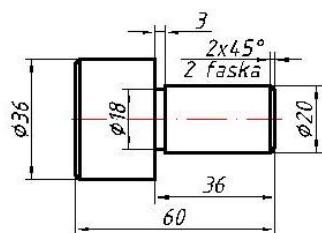
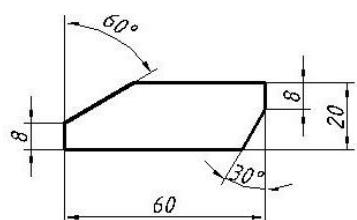
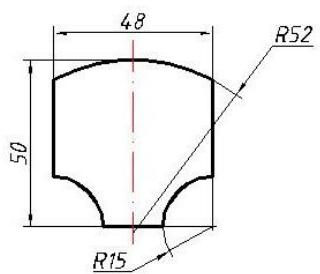
VARIANTLAR



III

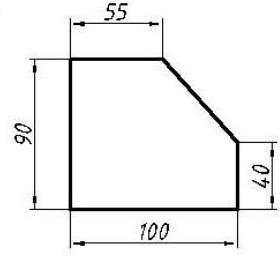


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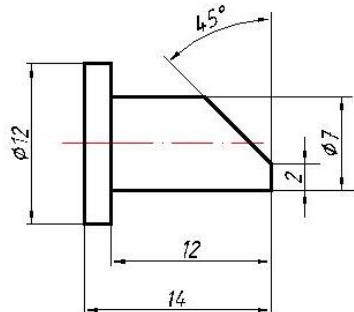
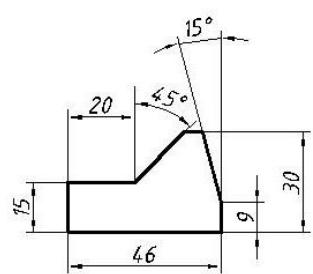
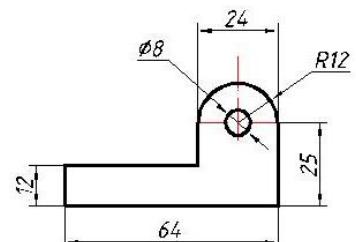
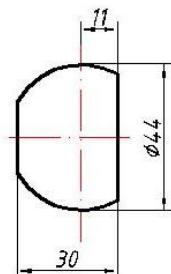


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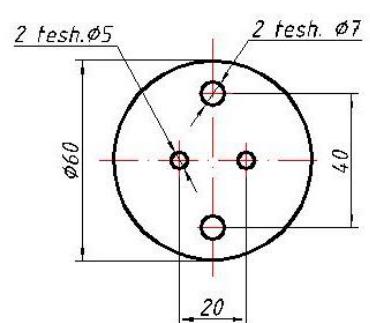
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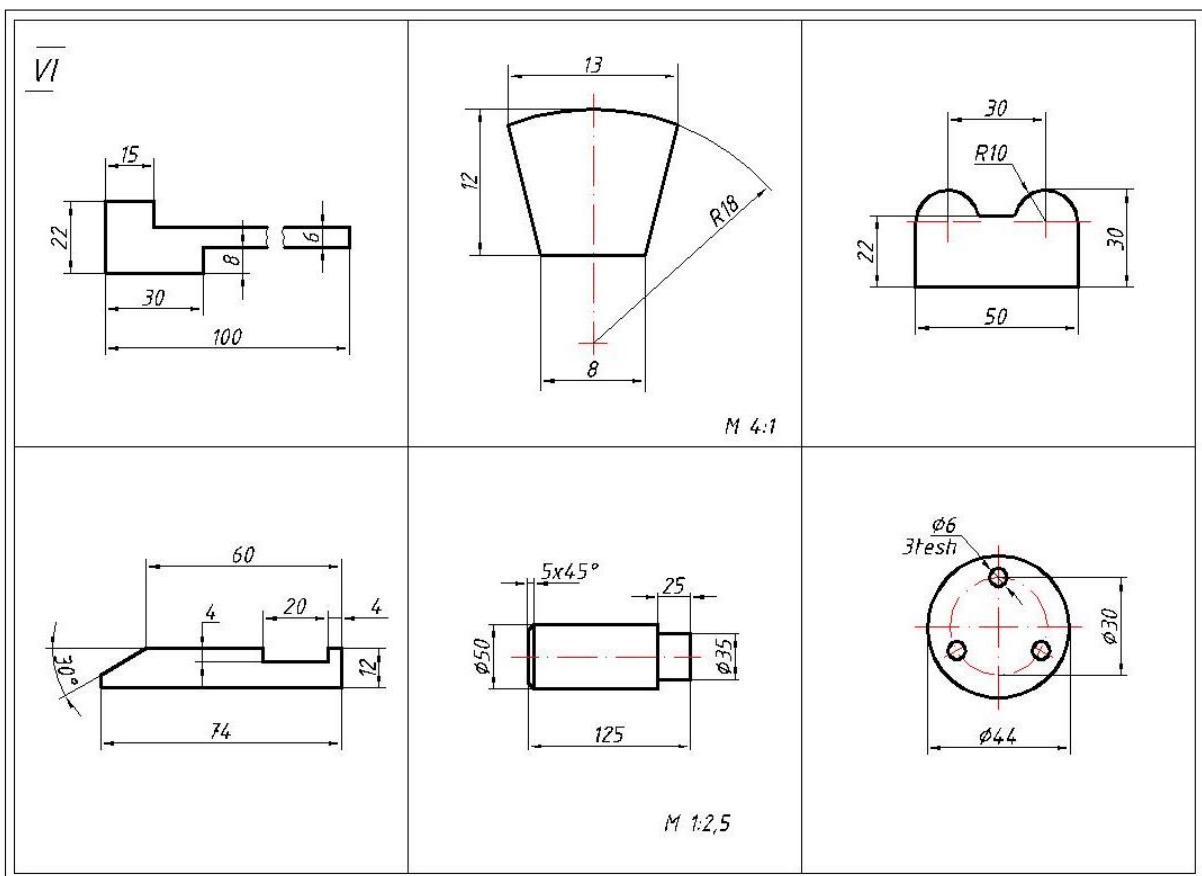
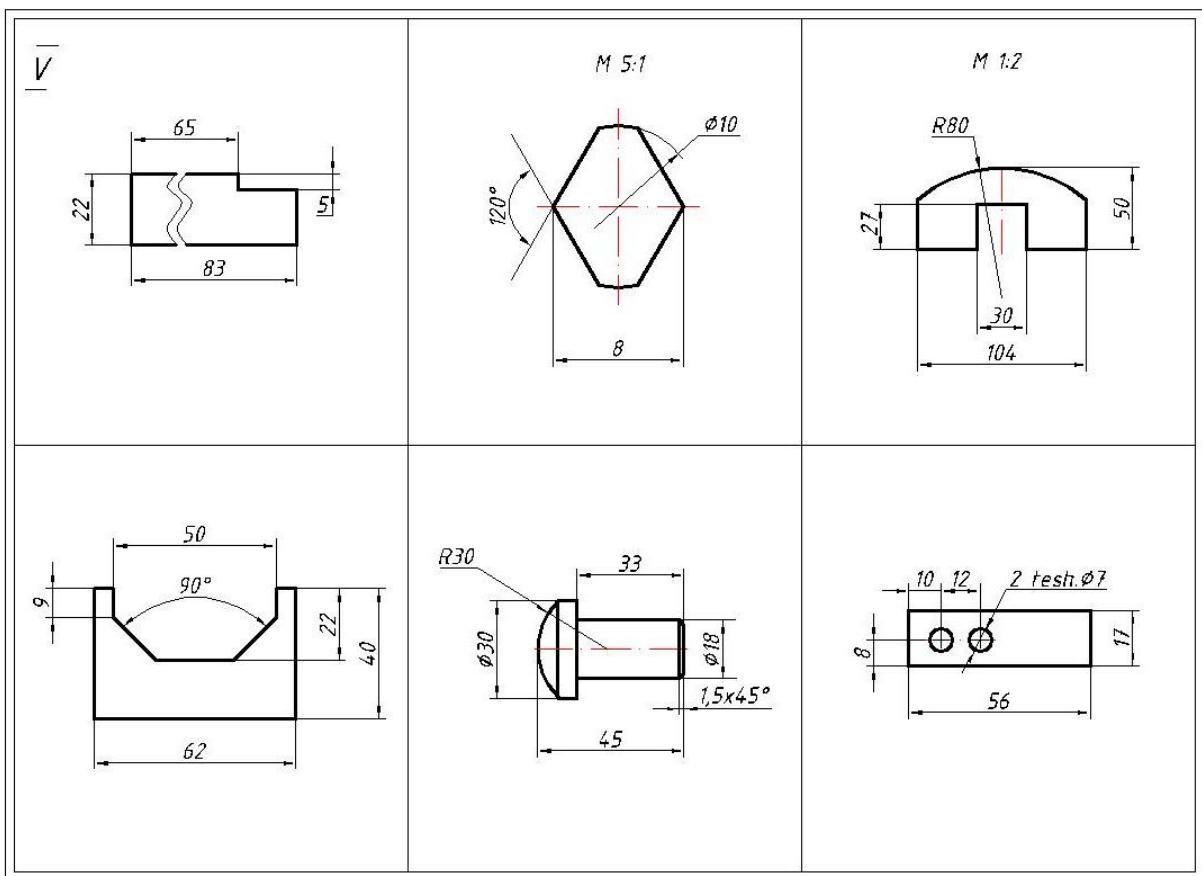


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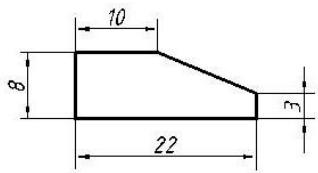


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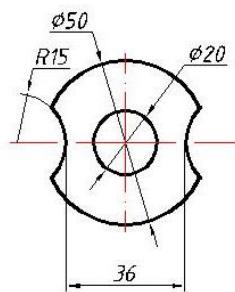




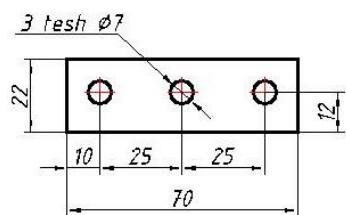
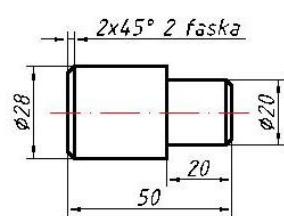
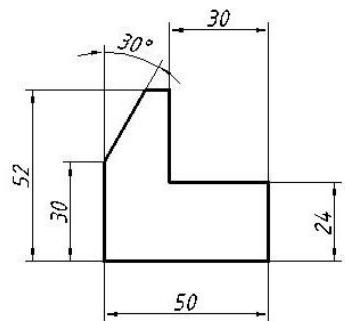
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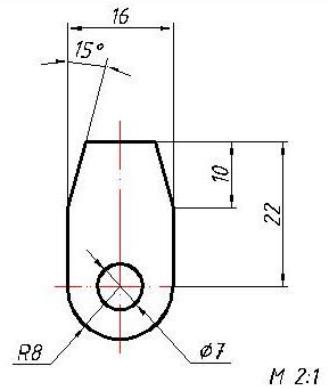
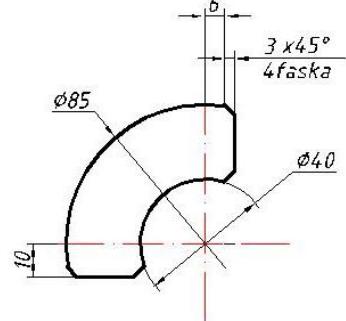
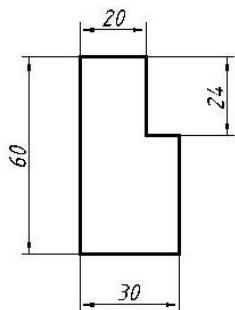
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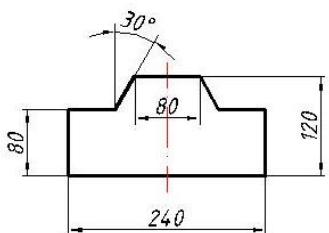
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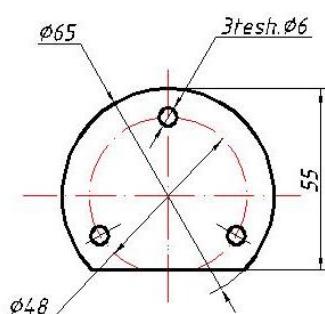
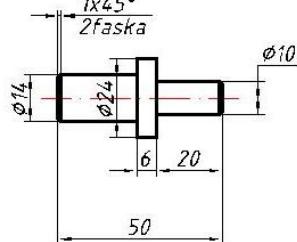
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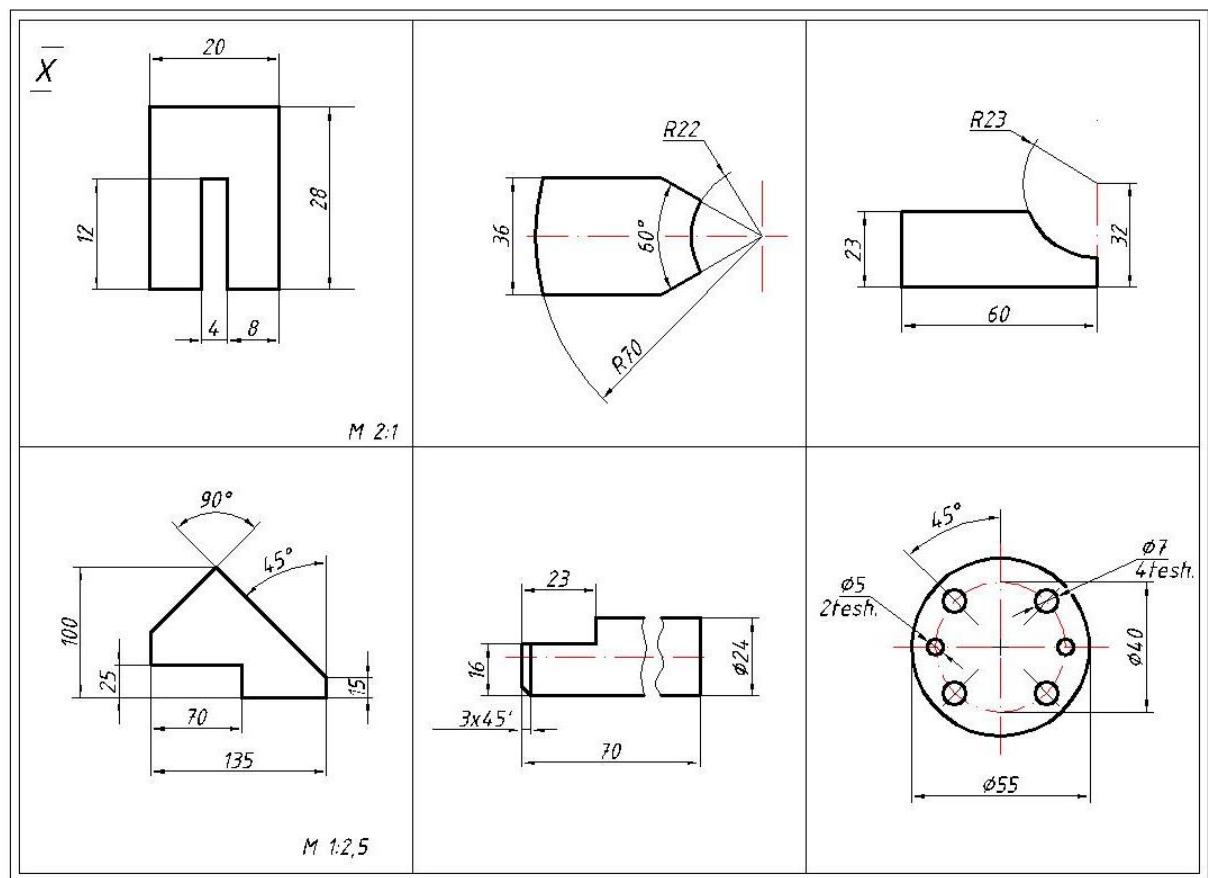
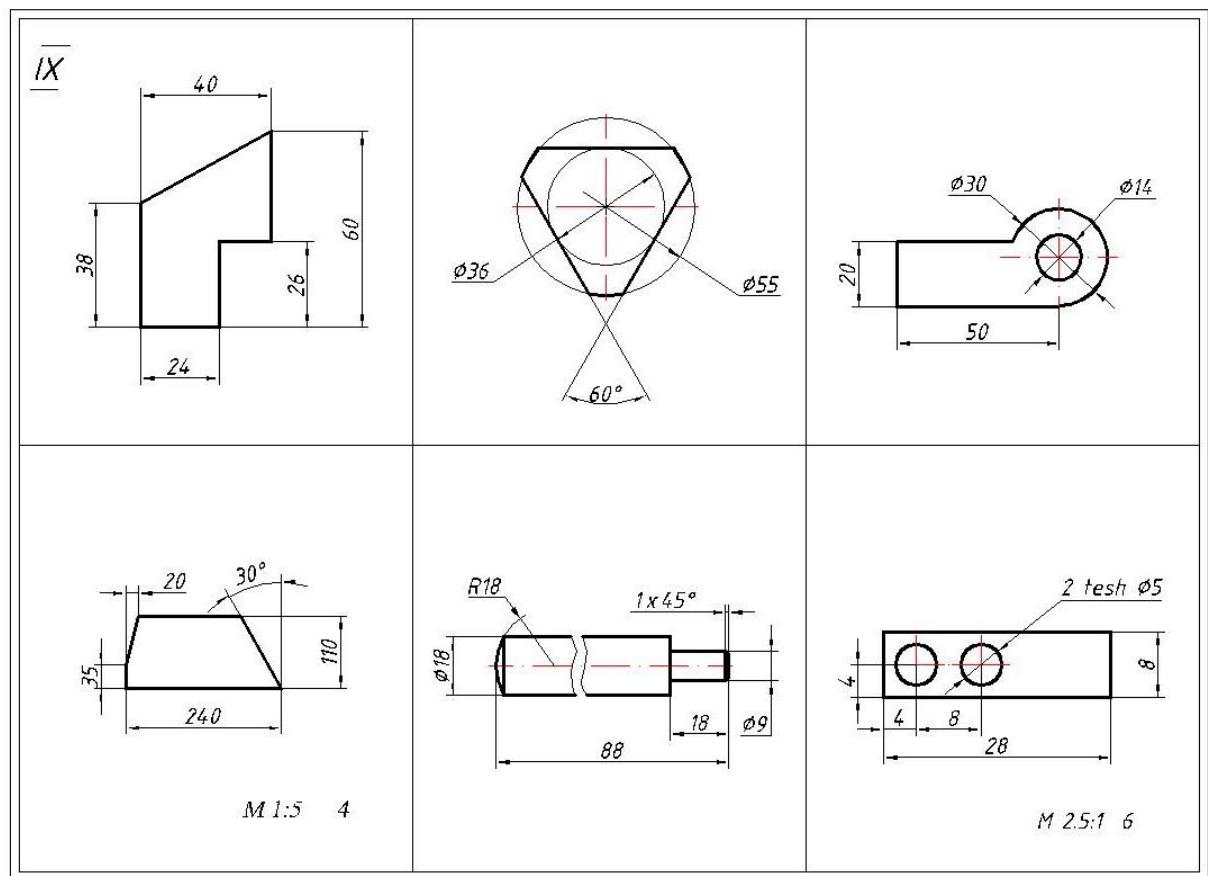


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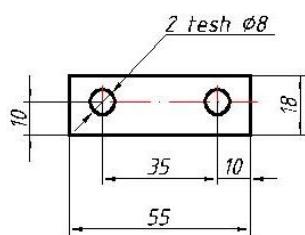
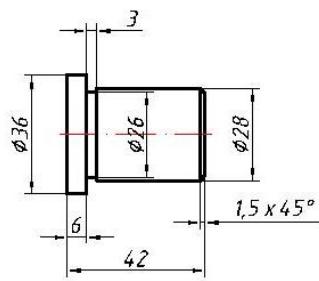
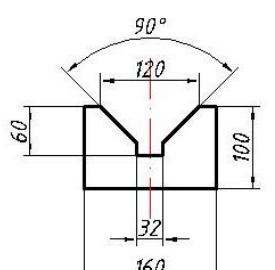
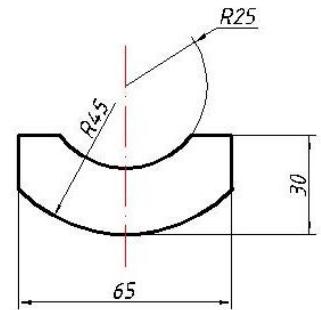
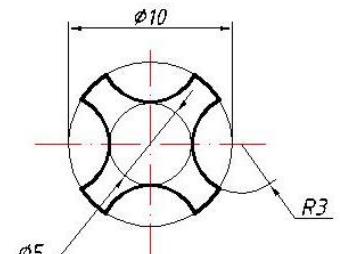
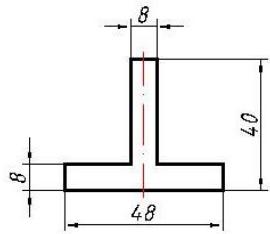


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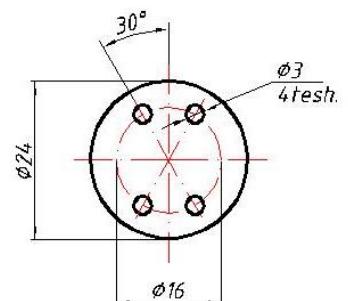
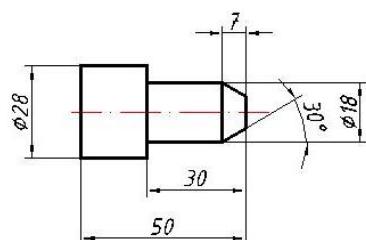
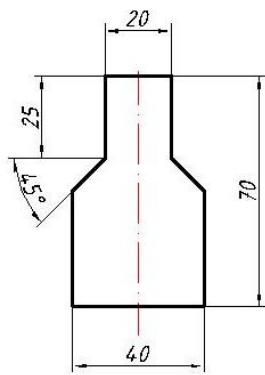
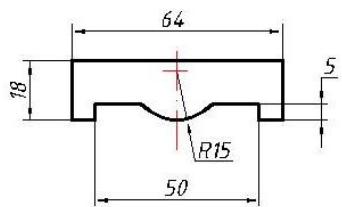
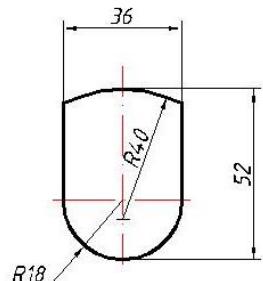
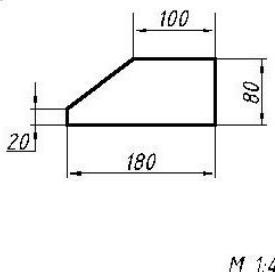




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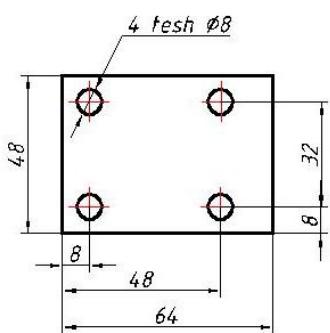
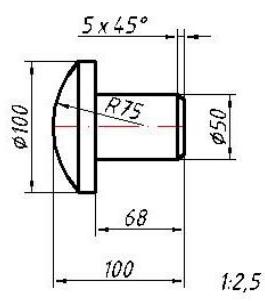
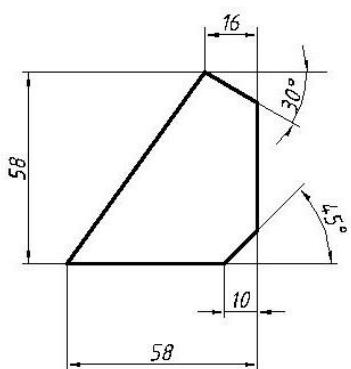
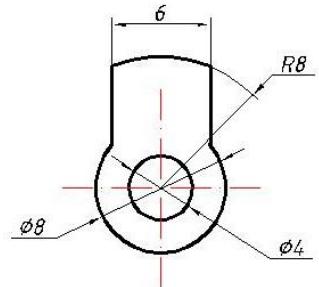
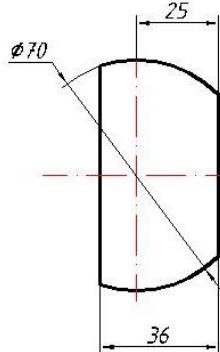
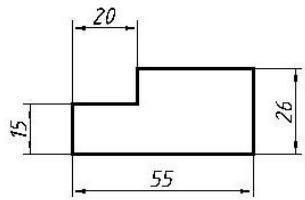


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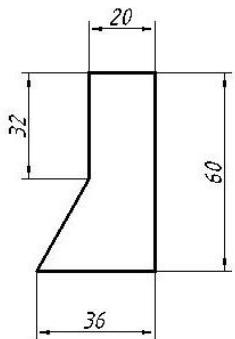


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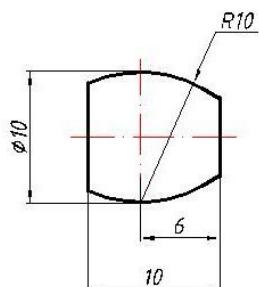
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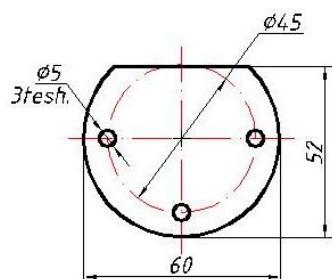
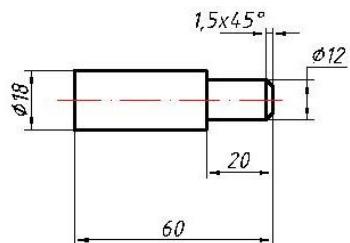
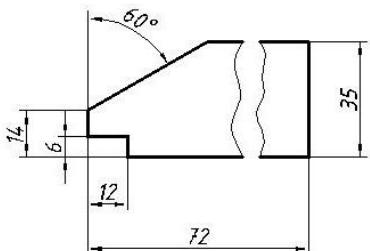
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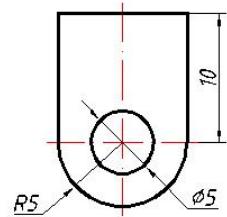
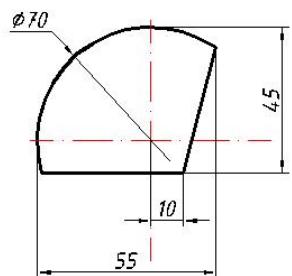
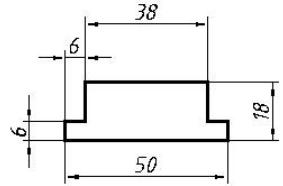
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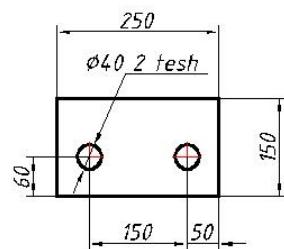
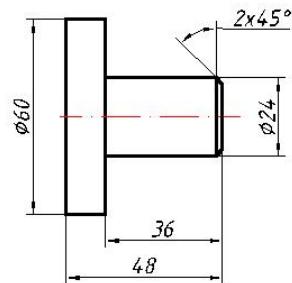
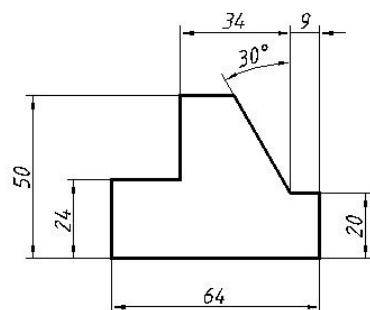
M 4:1



XV

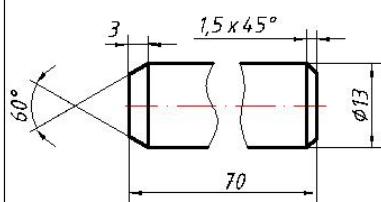
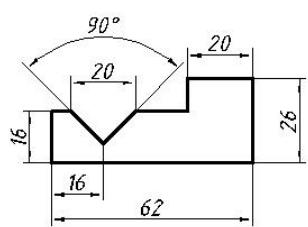
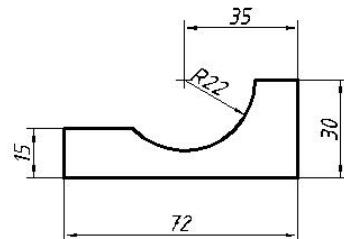
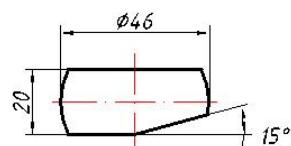
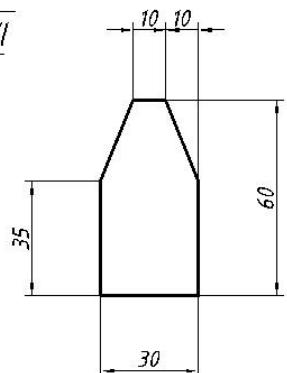


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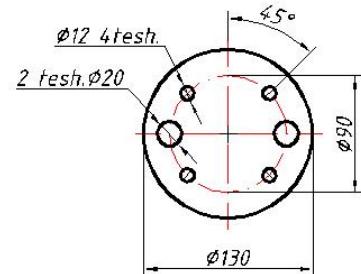


M 1:5

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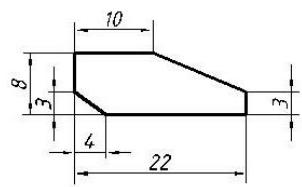


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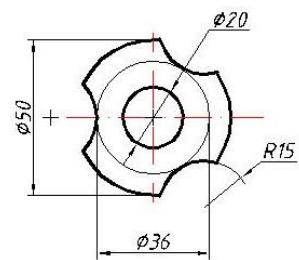


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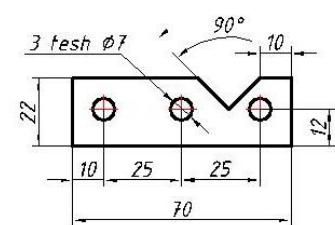
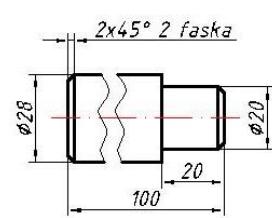
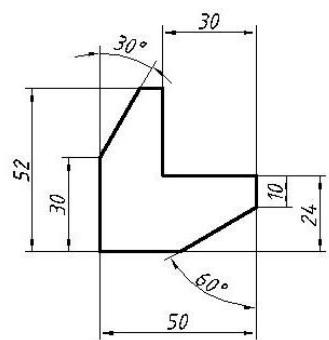
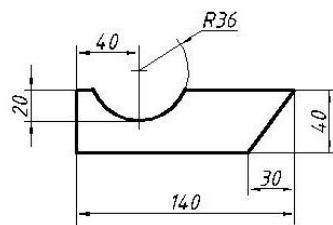
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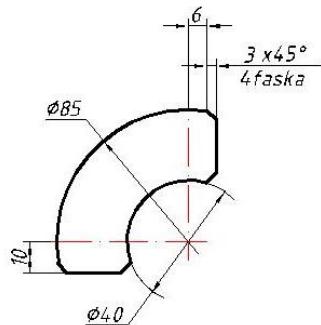
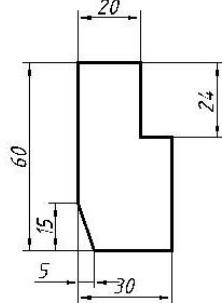
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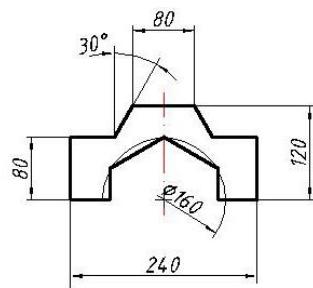
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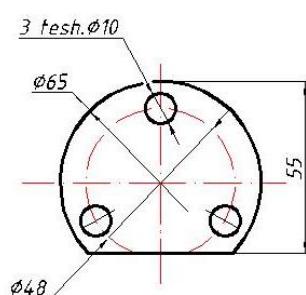
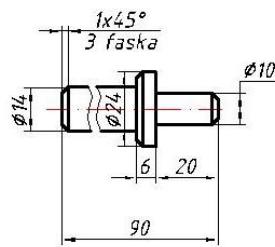
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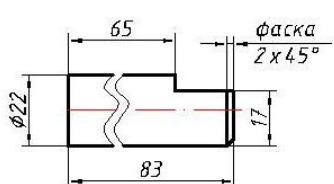
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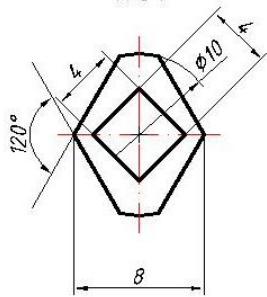
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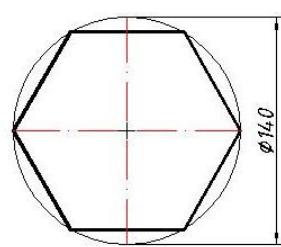
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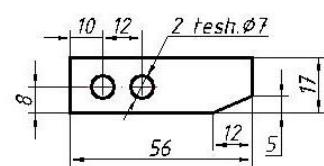
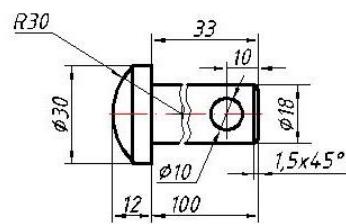
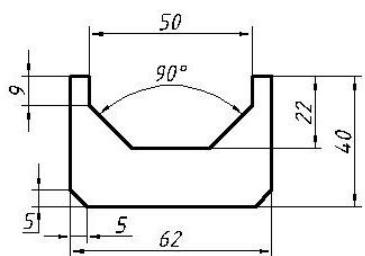
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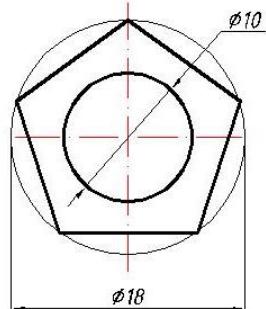
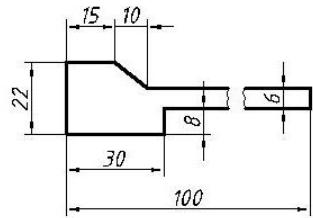
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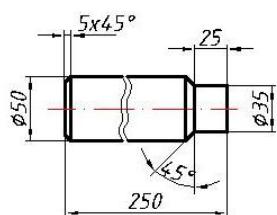
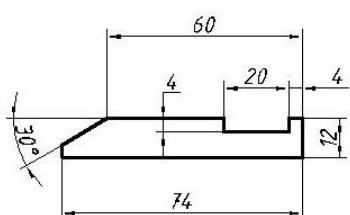
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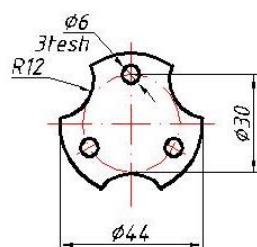
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M 4:1



M 1:2,5



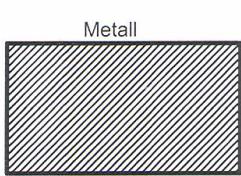
2-MASHQ

MATERIALLARNI

GRAFIK RAVISHDA

BELGILASH

**MAVZUSI
BO‘YICHA MASHQLAR
BAJARILISH
NAMUNASI**



Metall



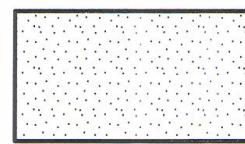
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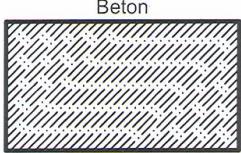
Temir beton



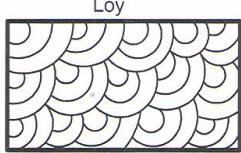
Yog'och (bo'yamasiga)



Qum



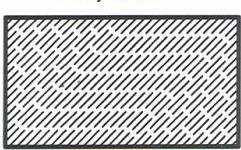
Beton



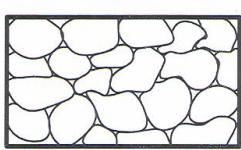
Loy



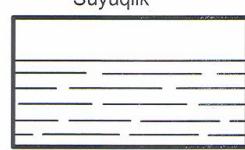
Saffof materiallar



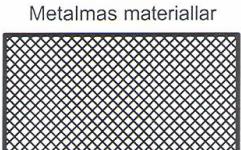
Tabiiy tosh



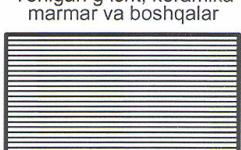
Xarsang tosh



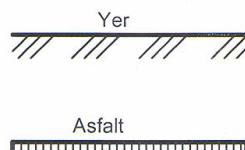
Suyuqlik



Metalmas materiallar



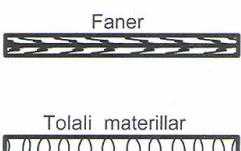
Terilgan g'isht, keramika
marmar va boshqalar



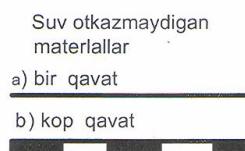
Yer



DVP, DSP va boshqalar



Faner



Asfalt

Uzg	Varaq	Xujjat	Imzo	Sana
Chizdi:		Soliyeva M		
Tekshirdi		Urishev A		

materiallarni grafik ravishda belgilanishi

Litera Massa Masshab

Varaq Varaqlar

"ChG va MG" kafedrasи

GTS 1/5

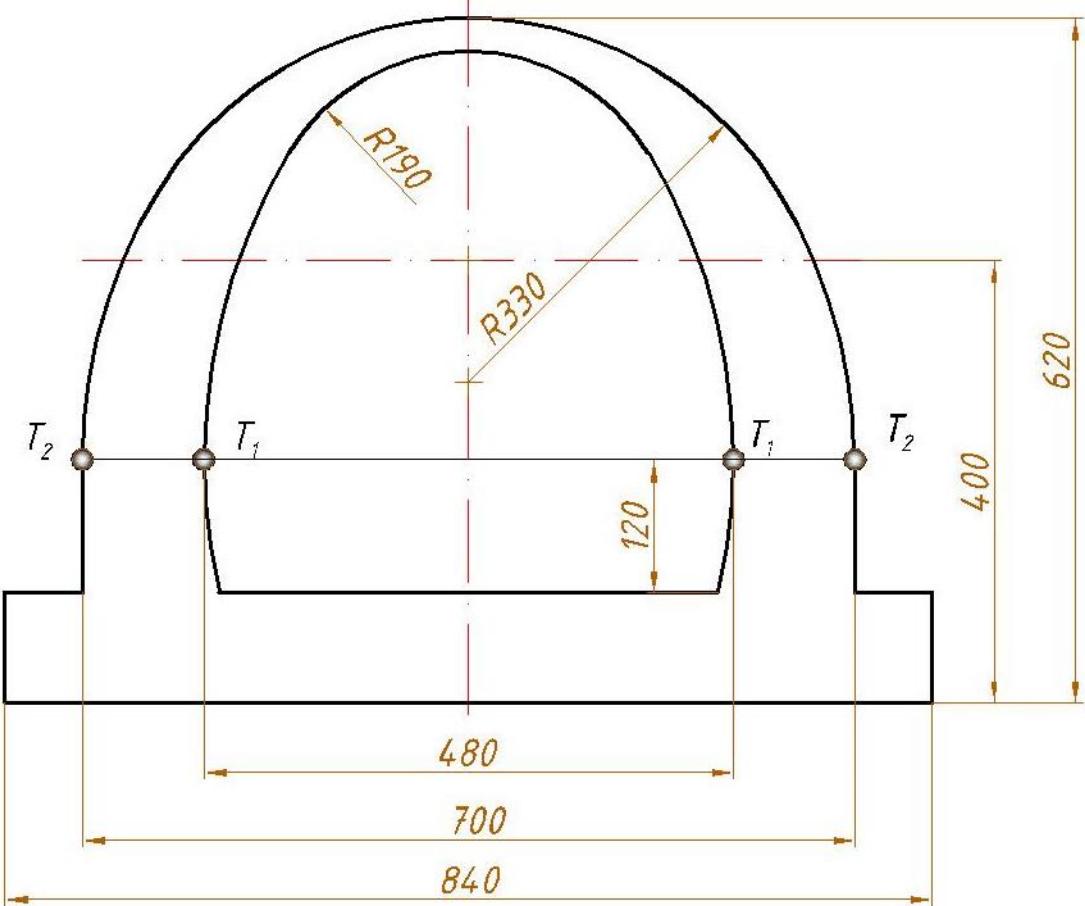
3-MASHQ

TUTASHMA

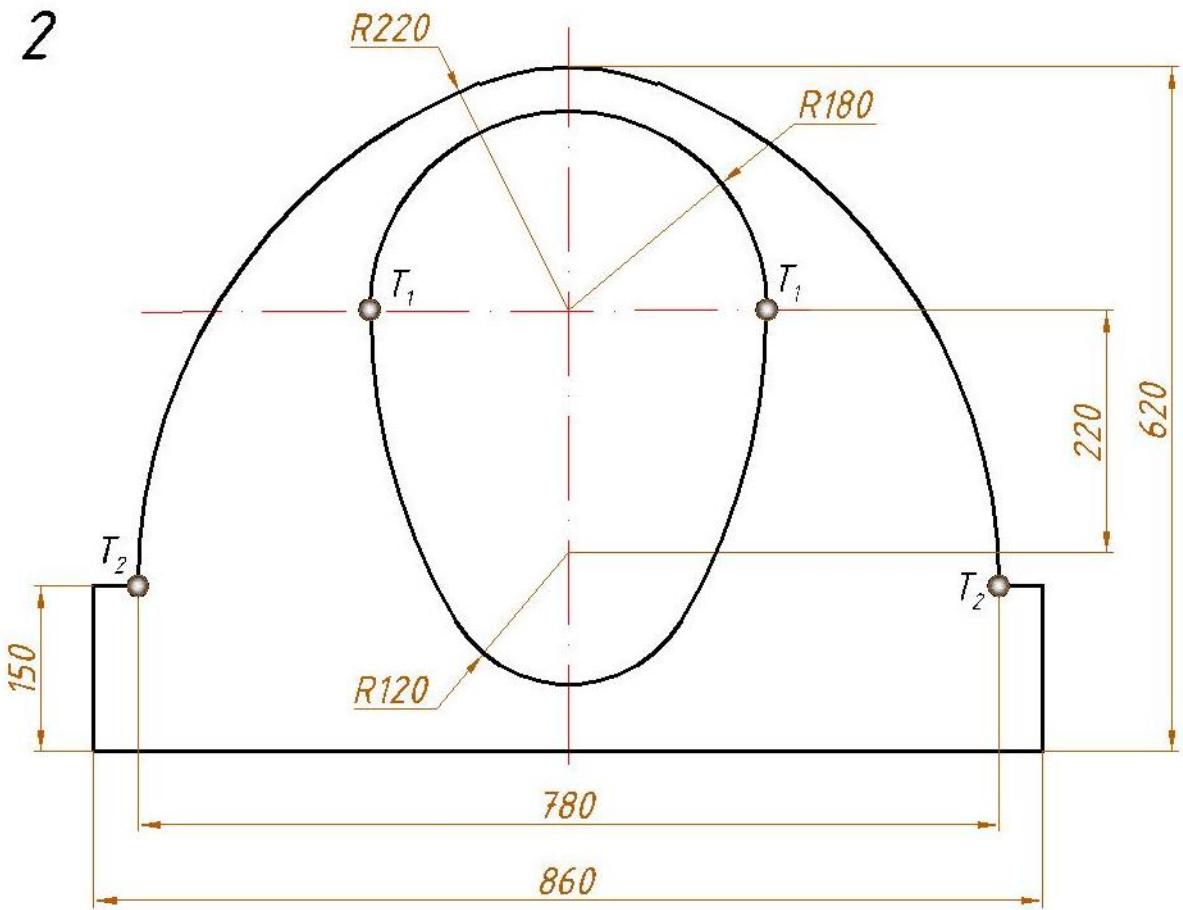
MAVZUSIGA DOIR

VARIANTLAR

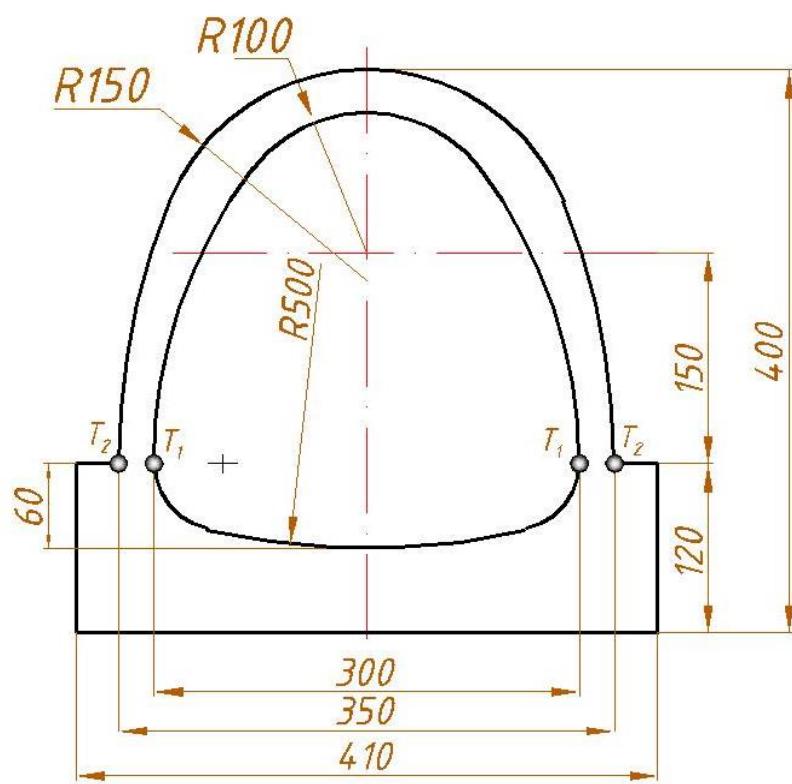
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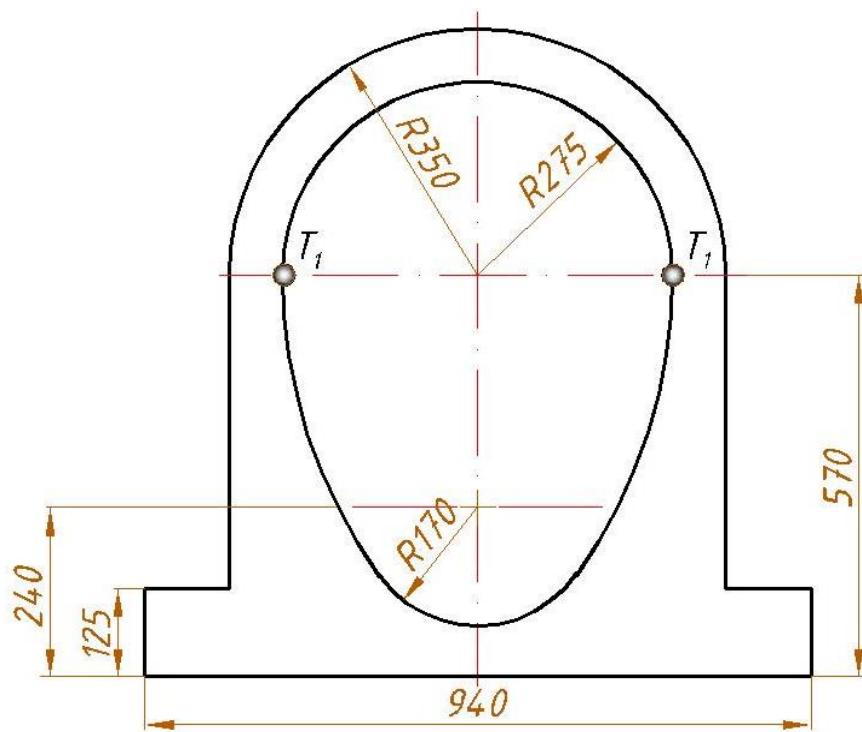
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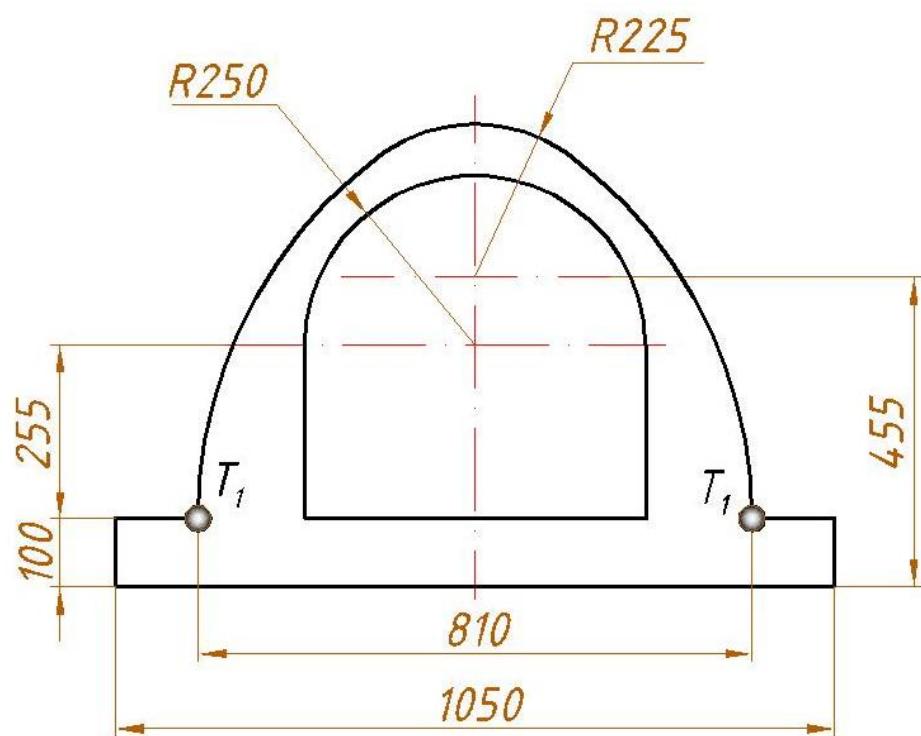
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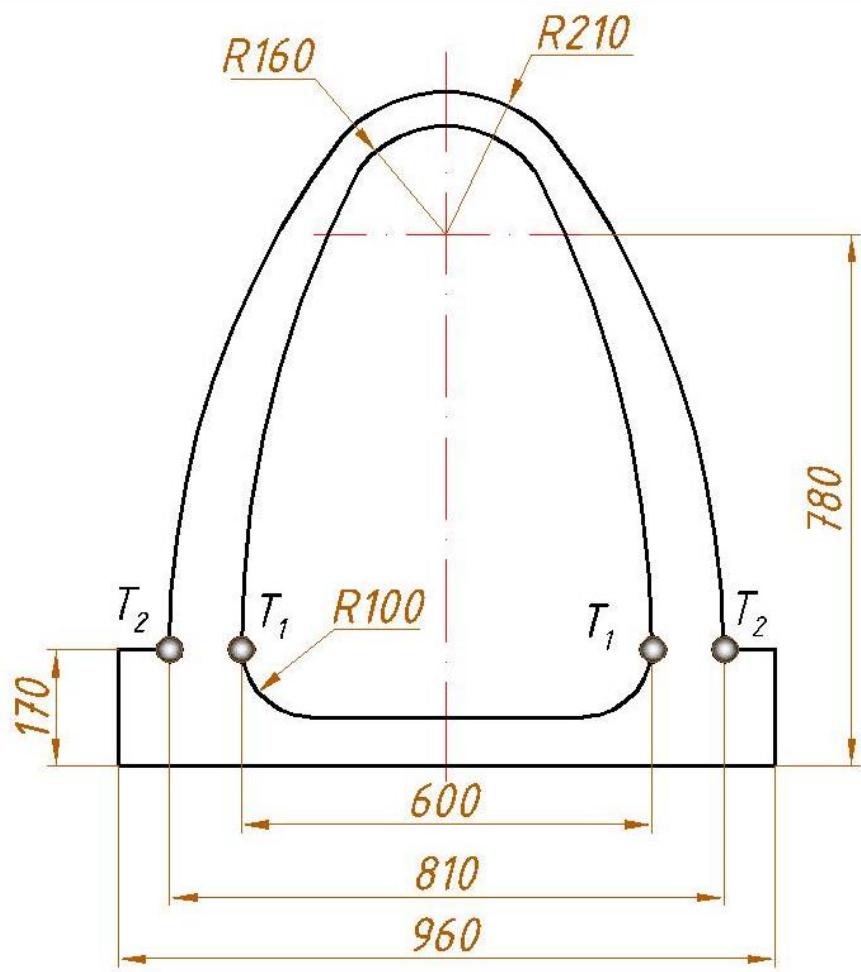
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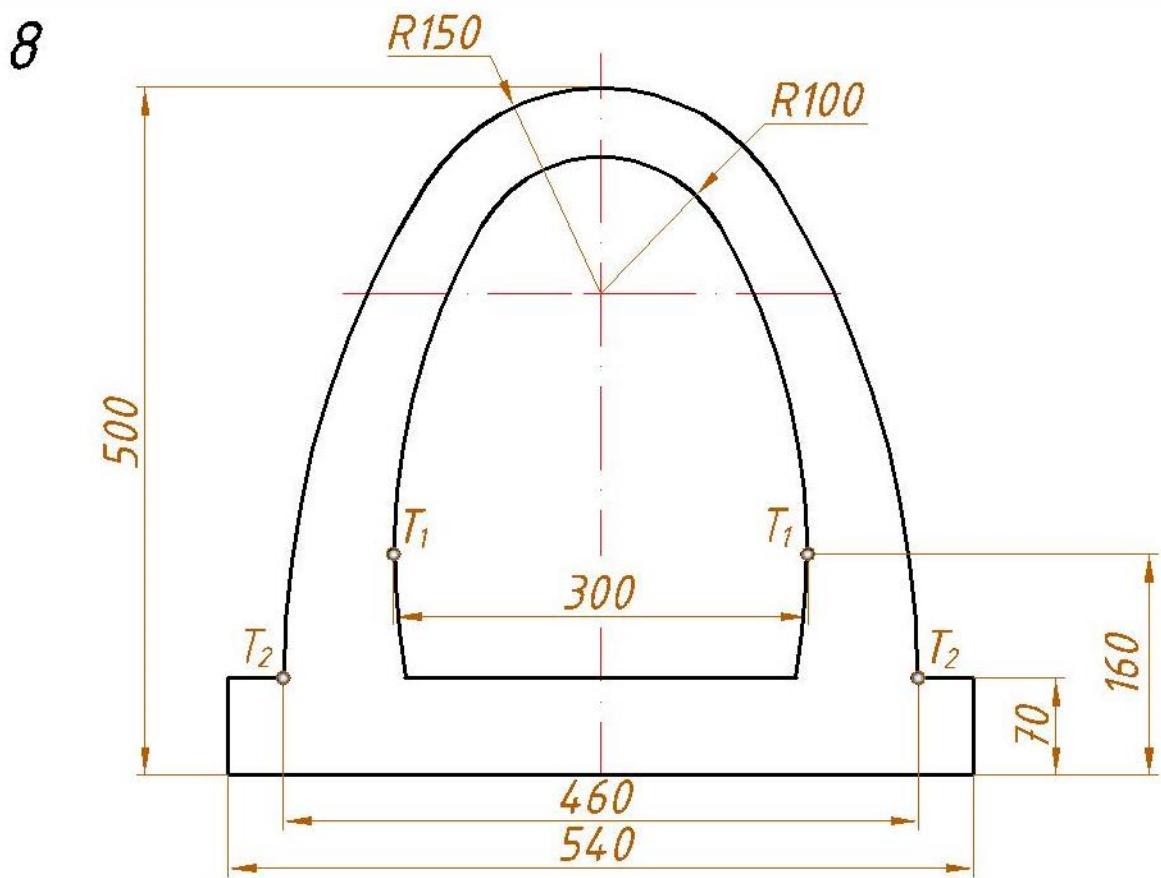
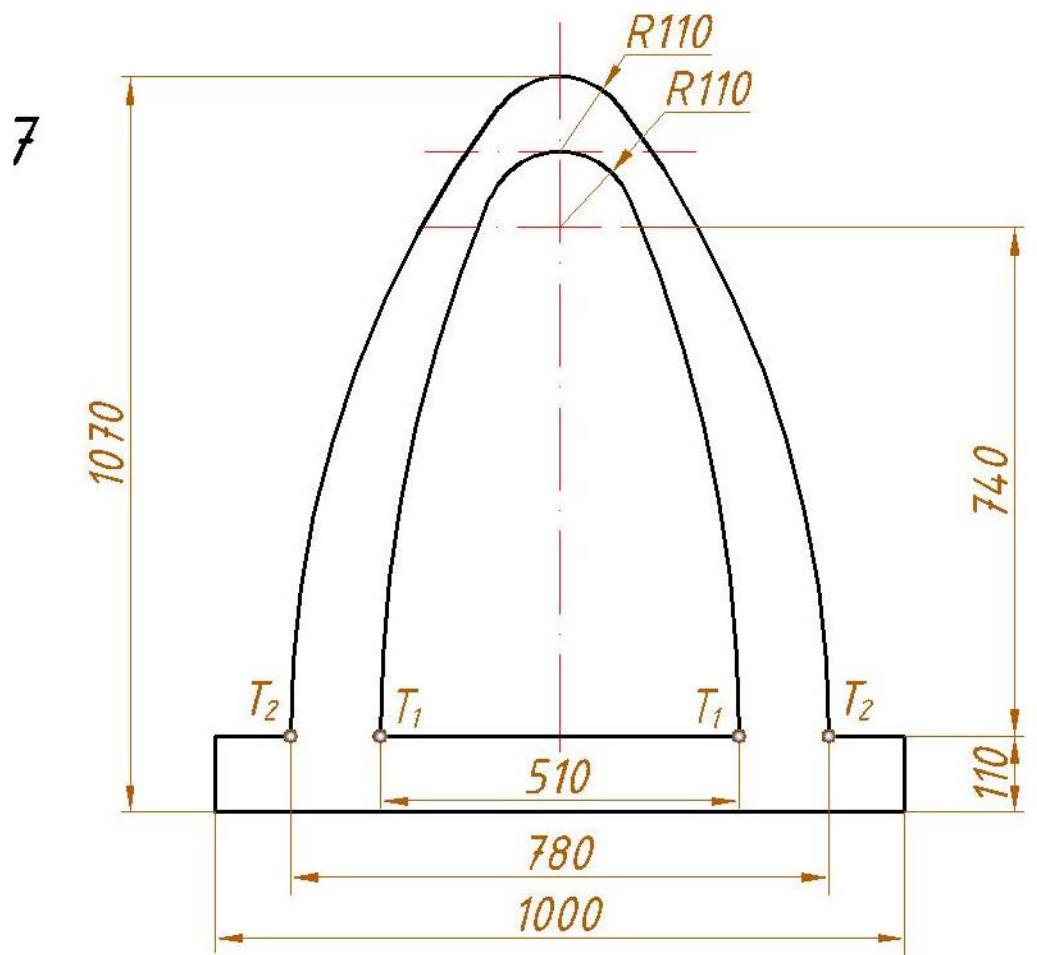


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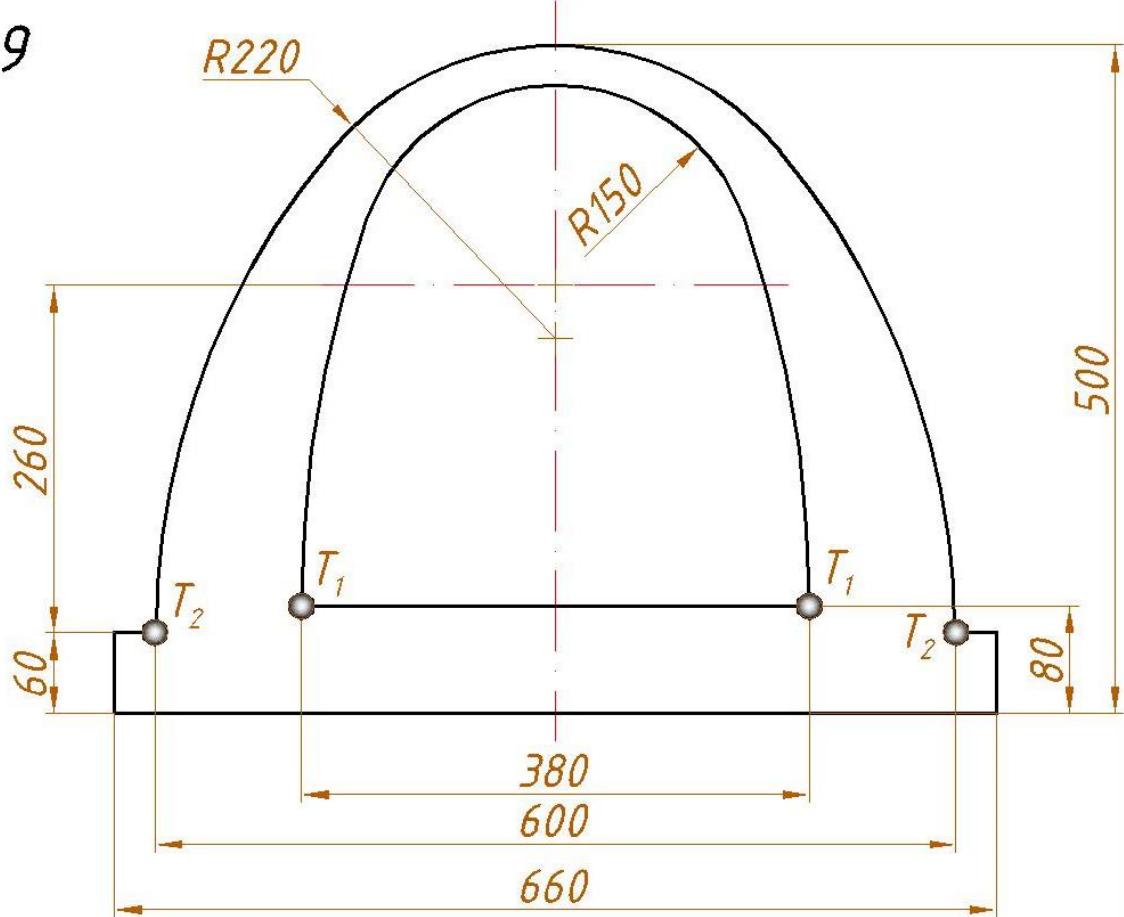


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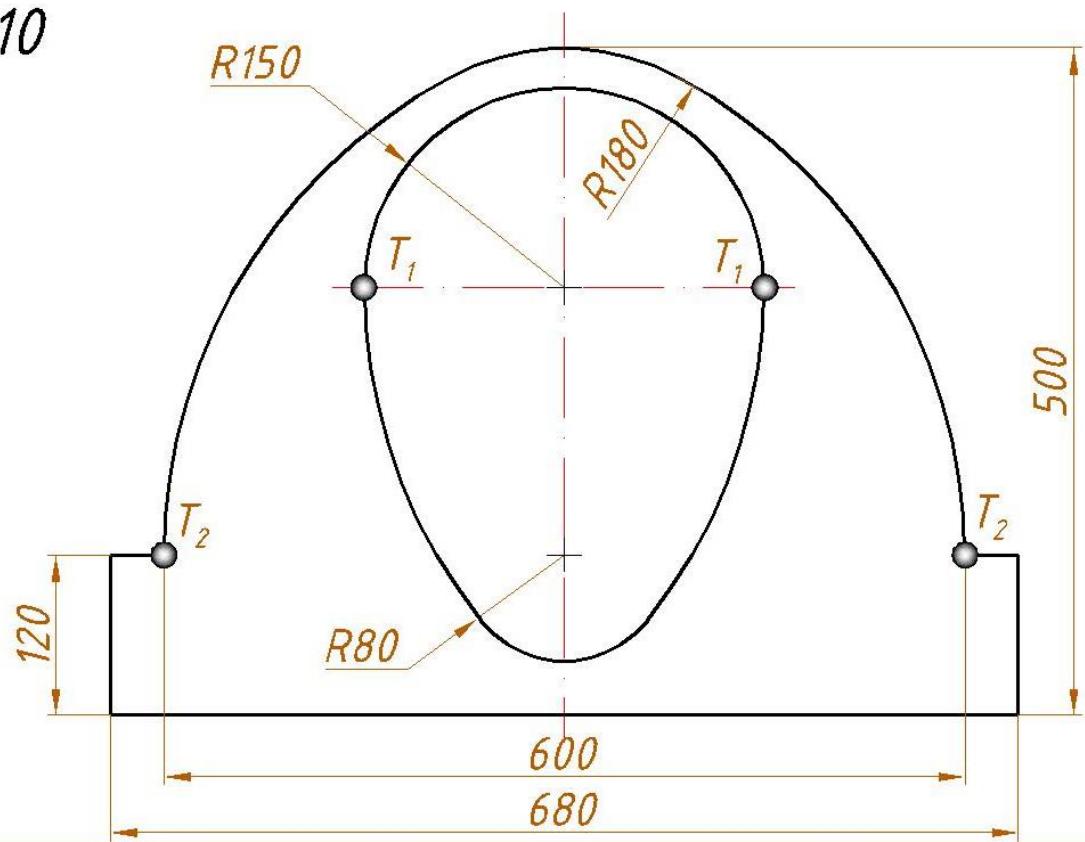




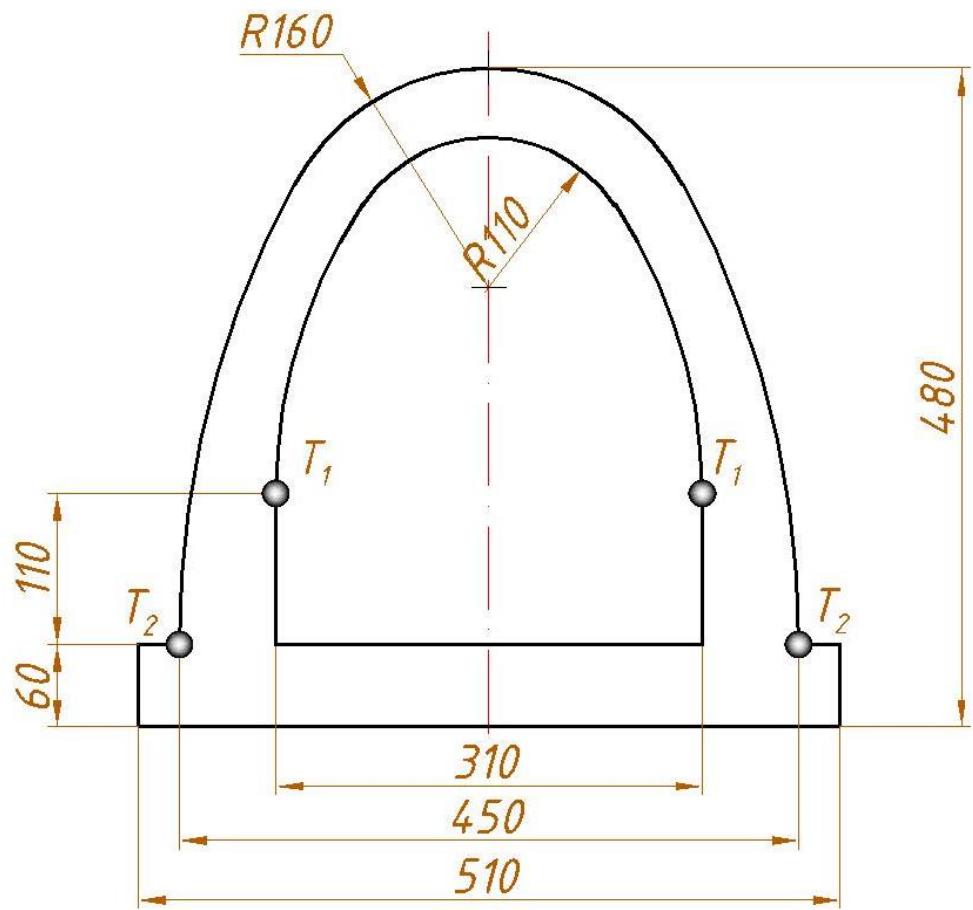
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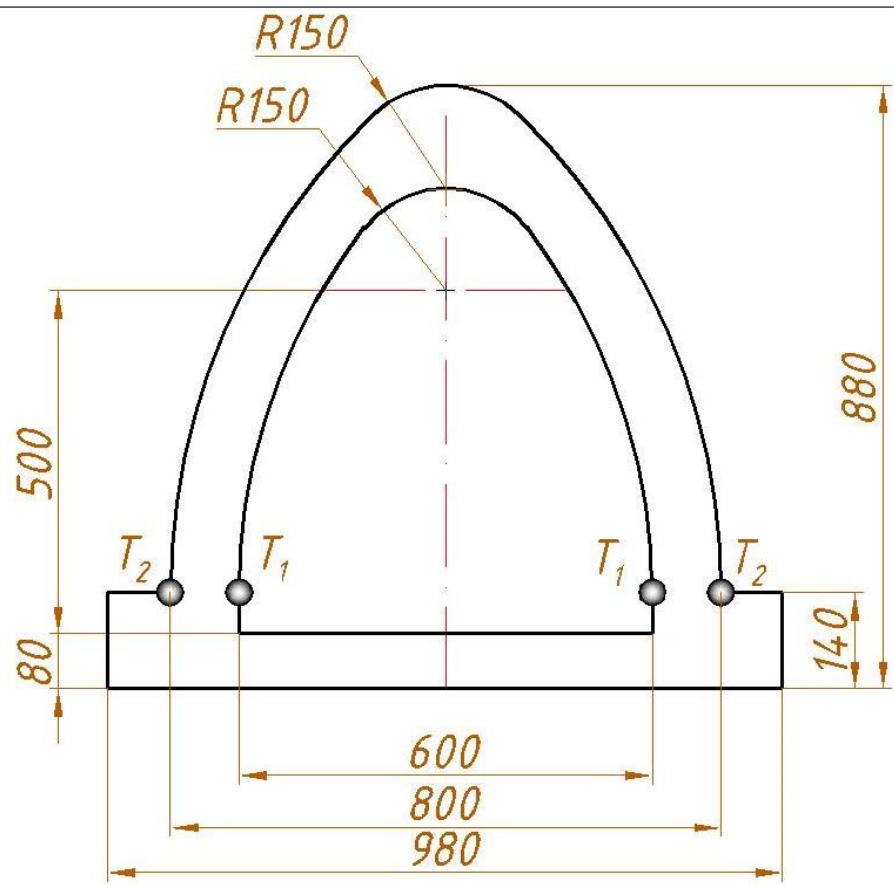
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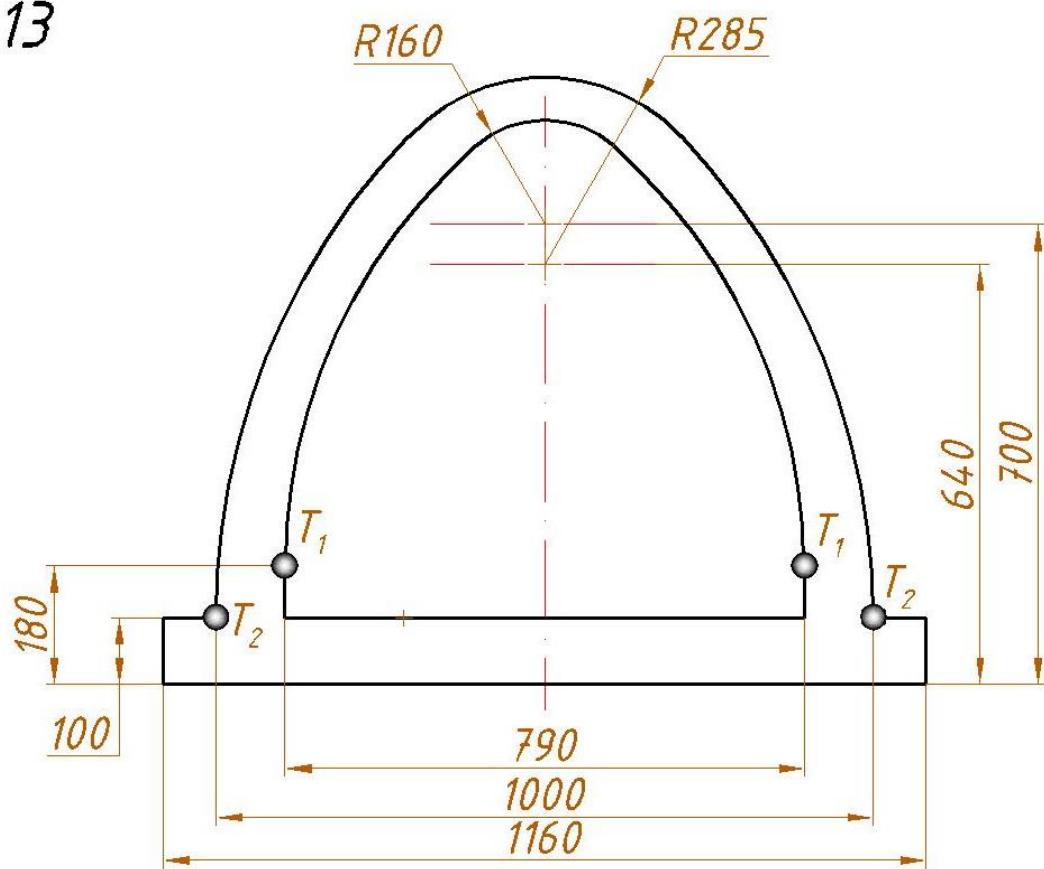
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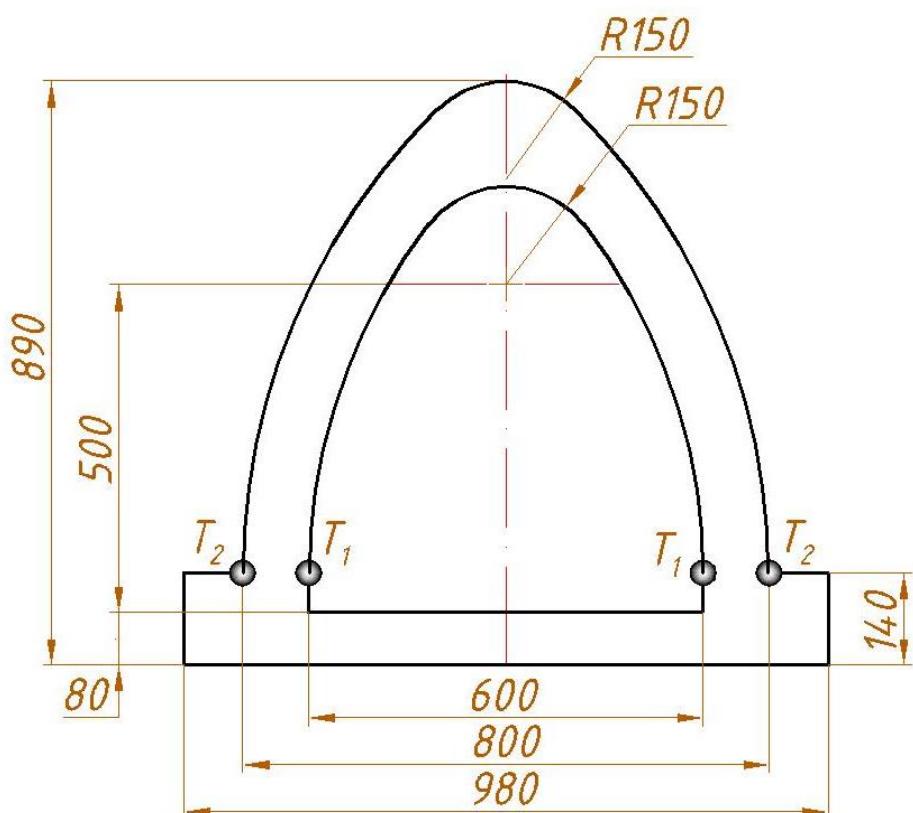
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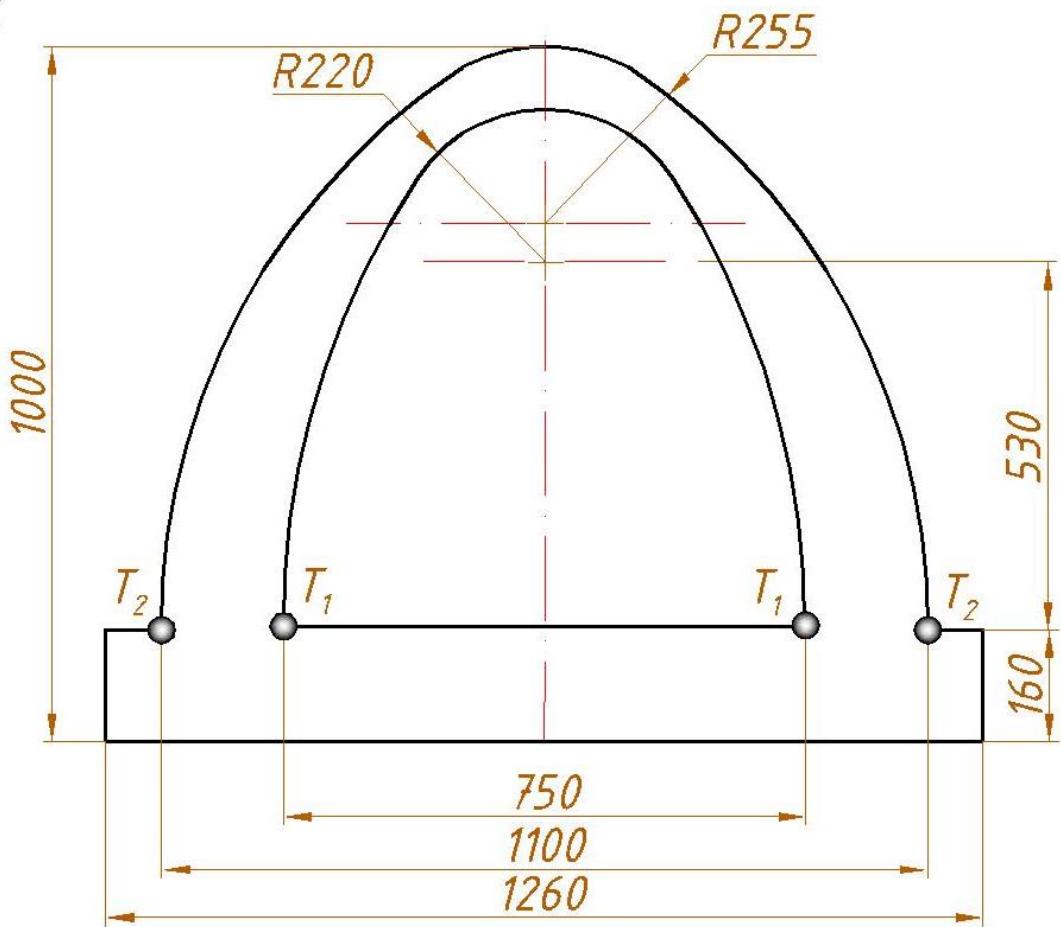
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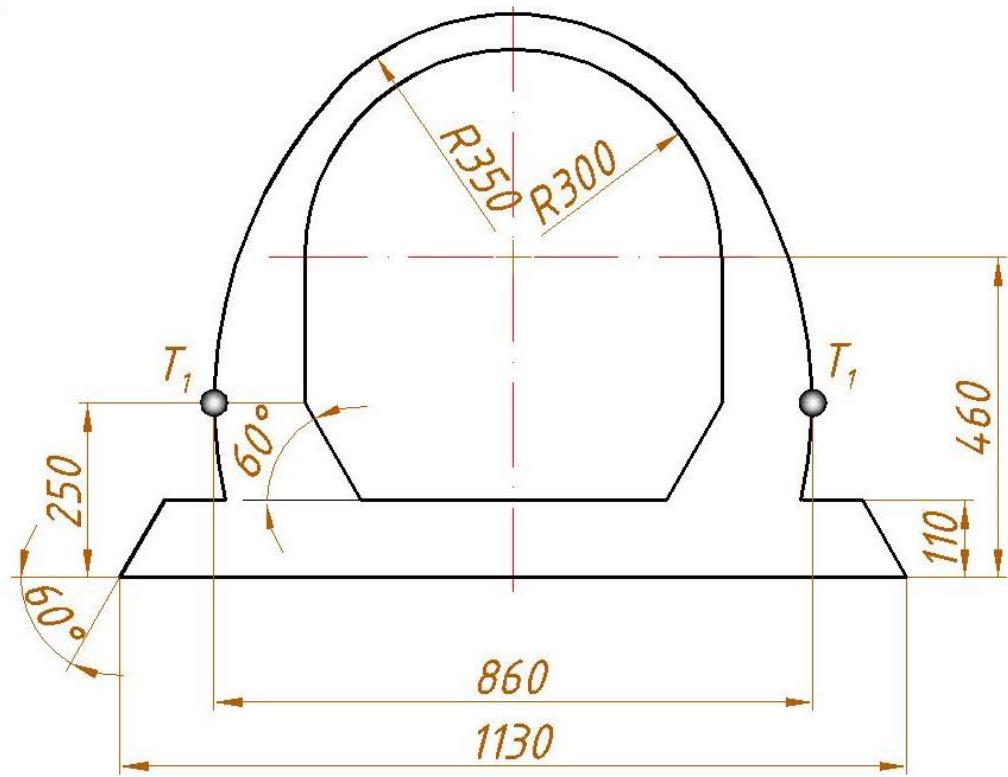
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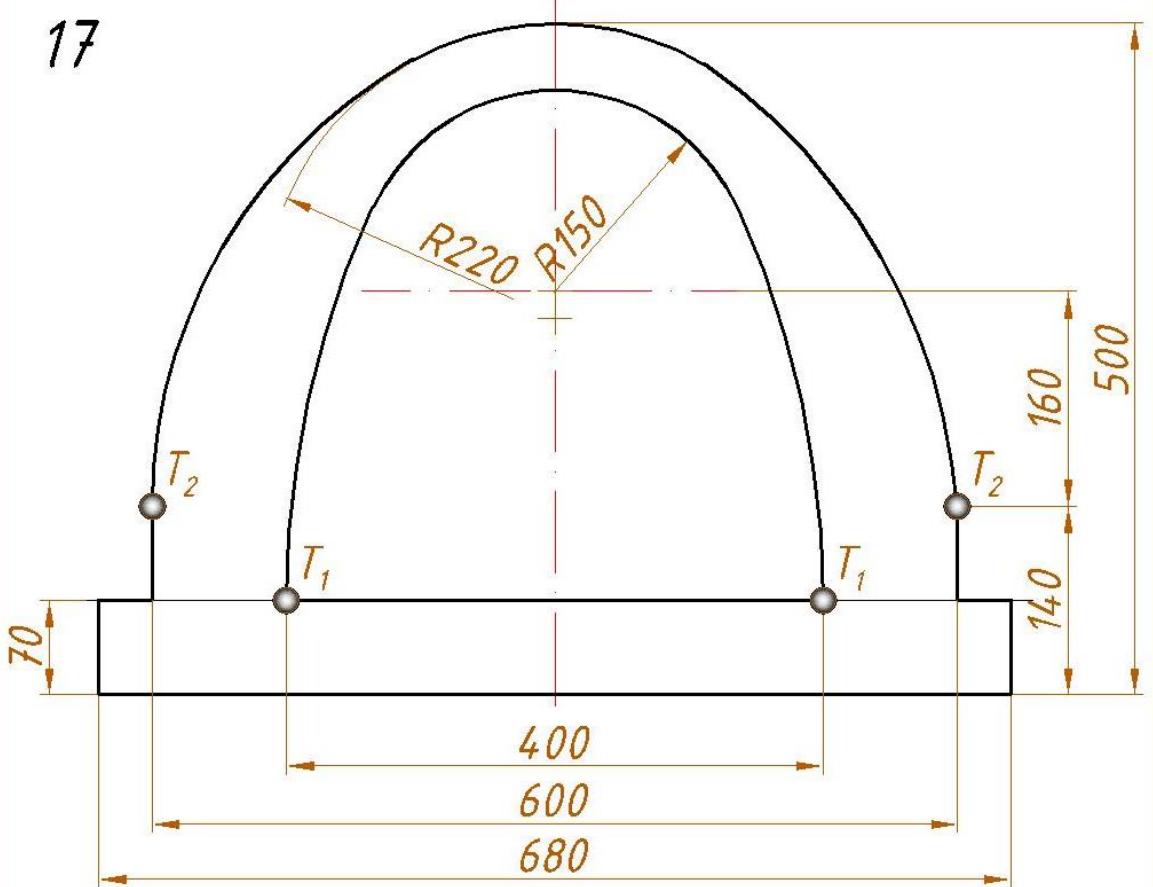
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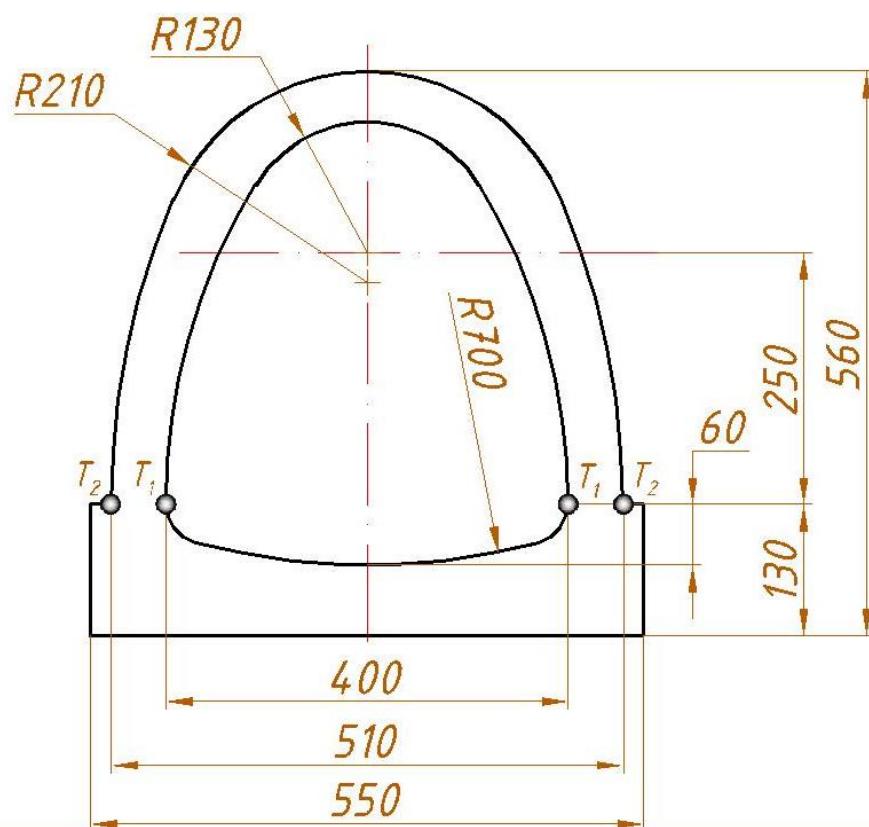
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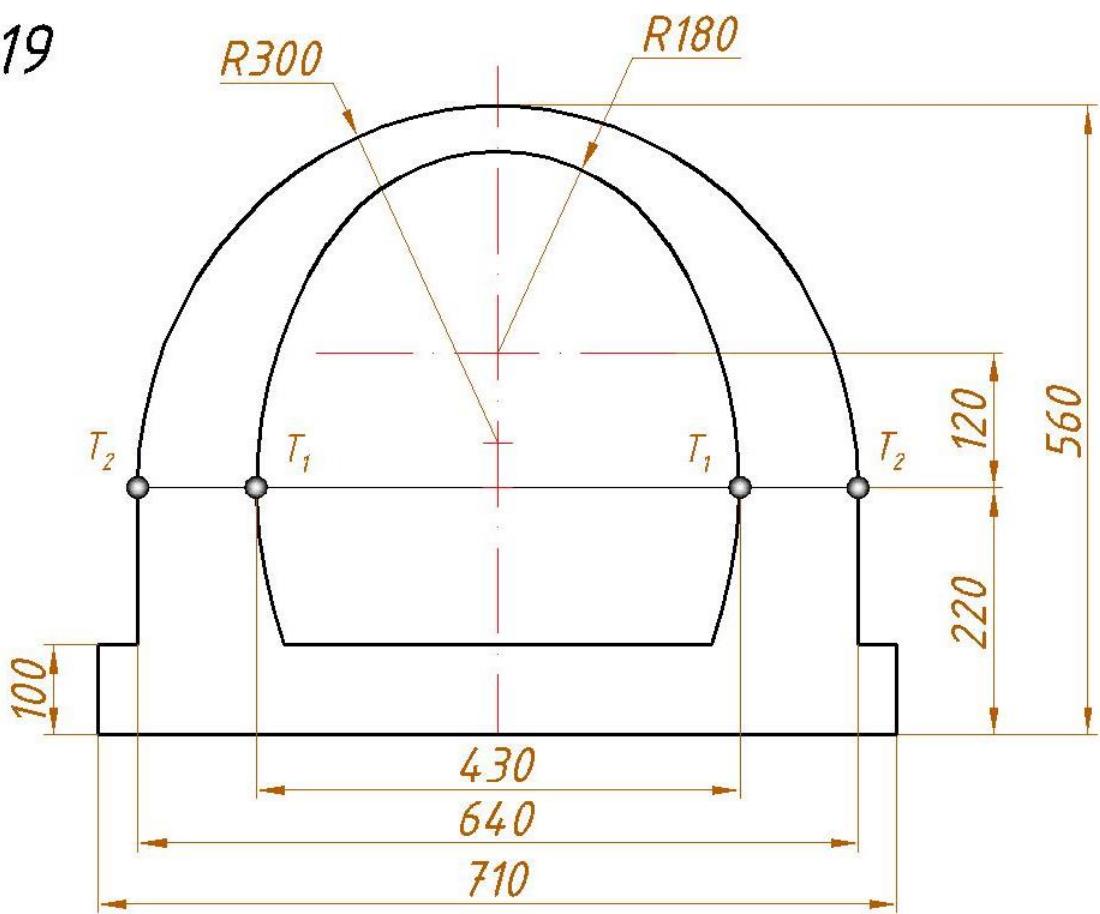
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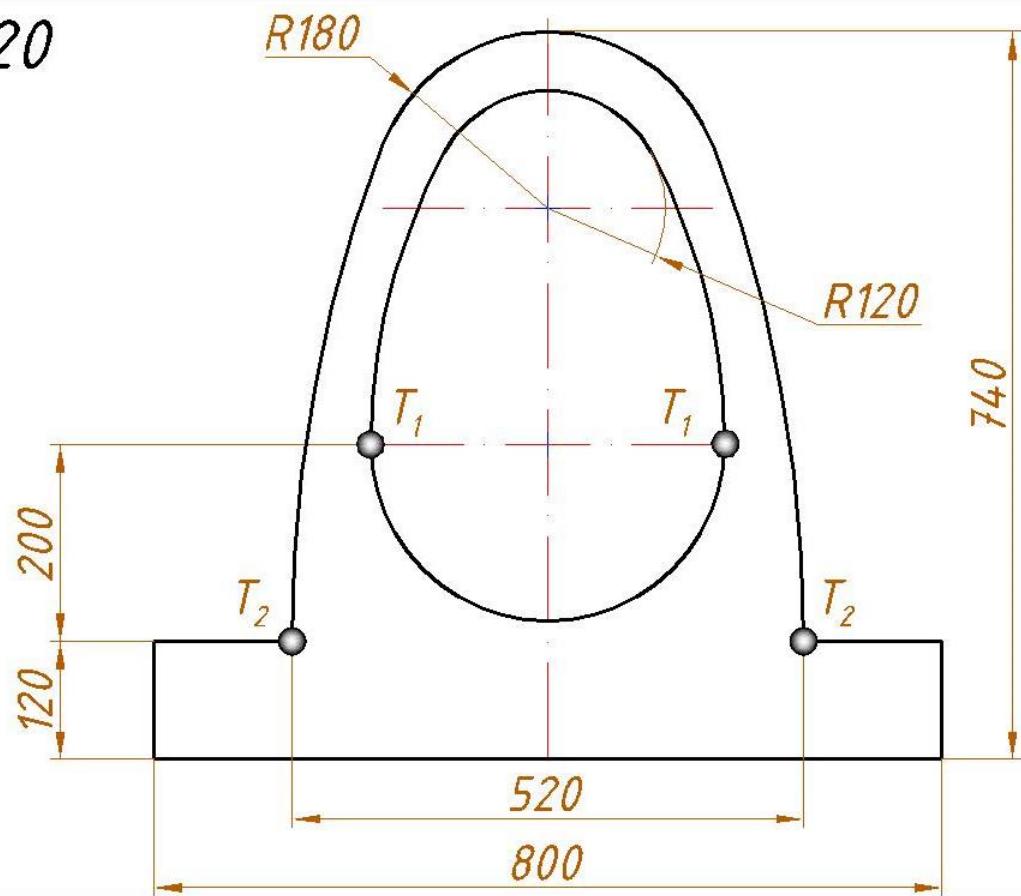
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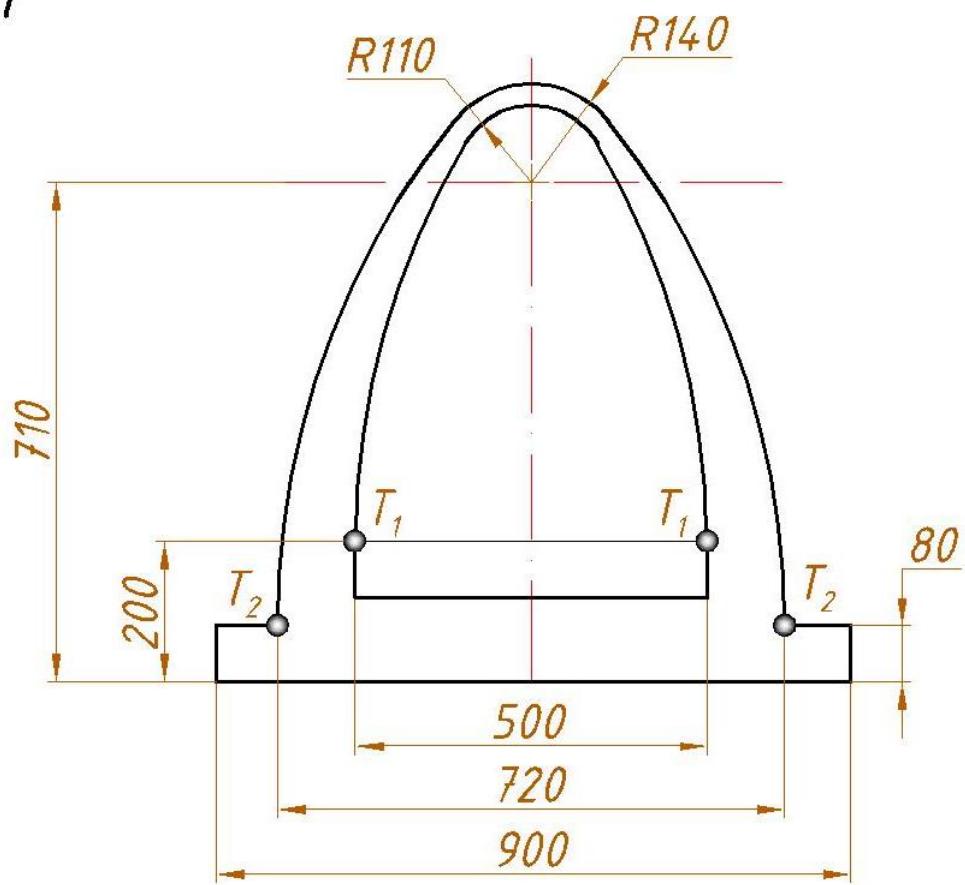
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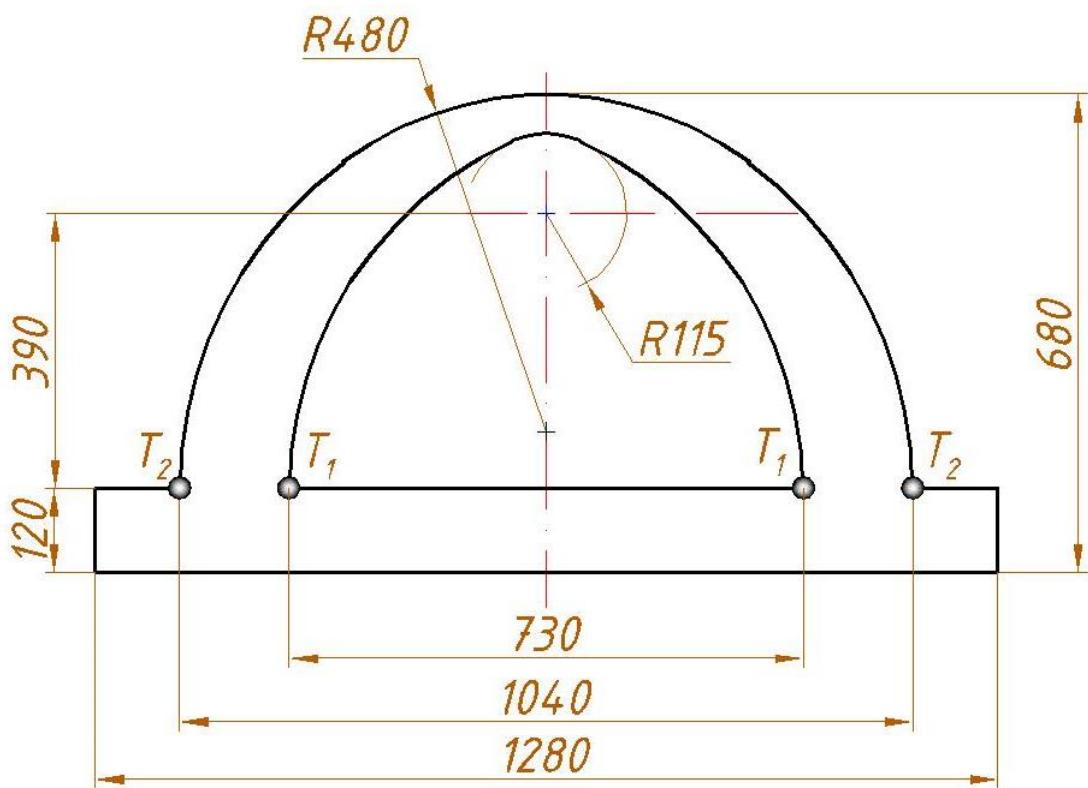
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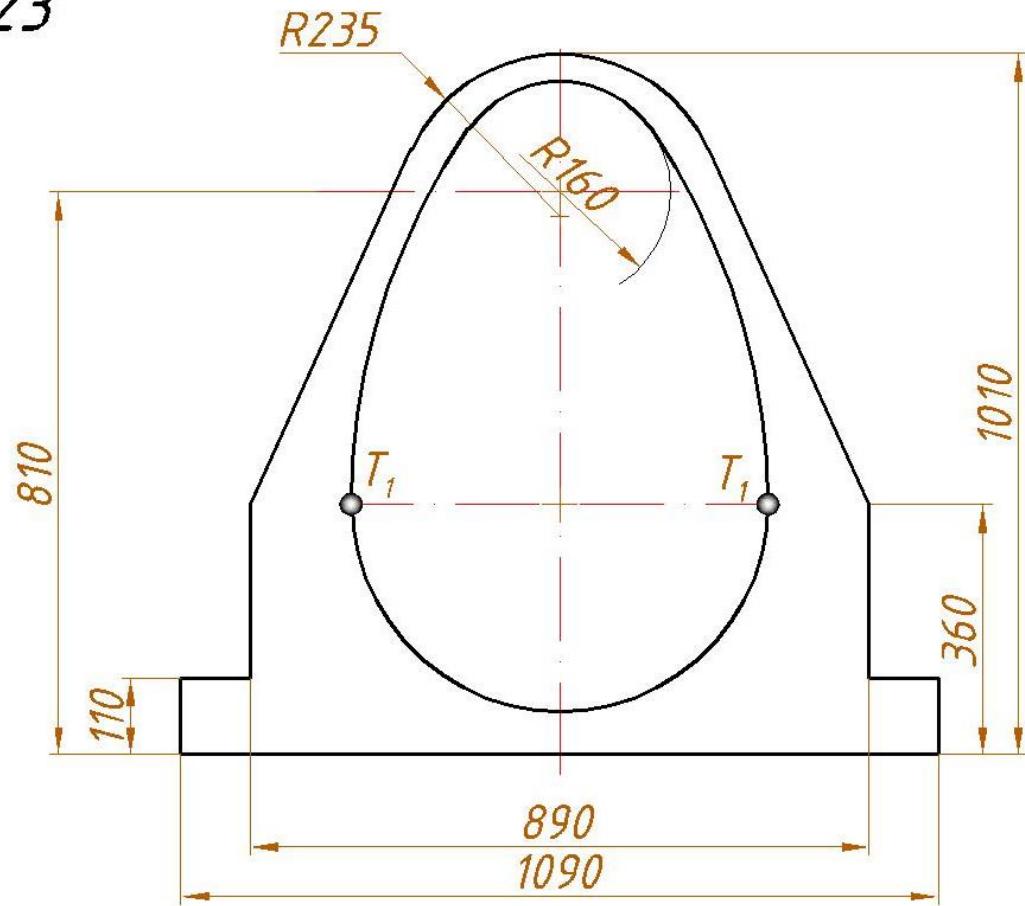
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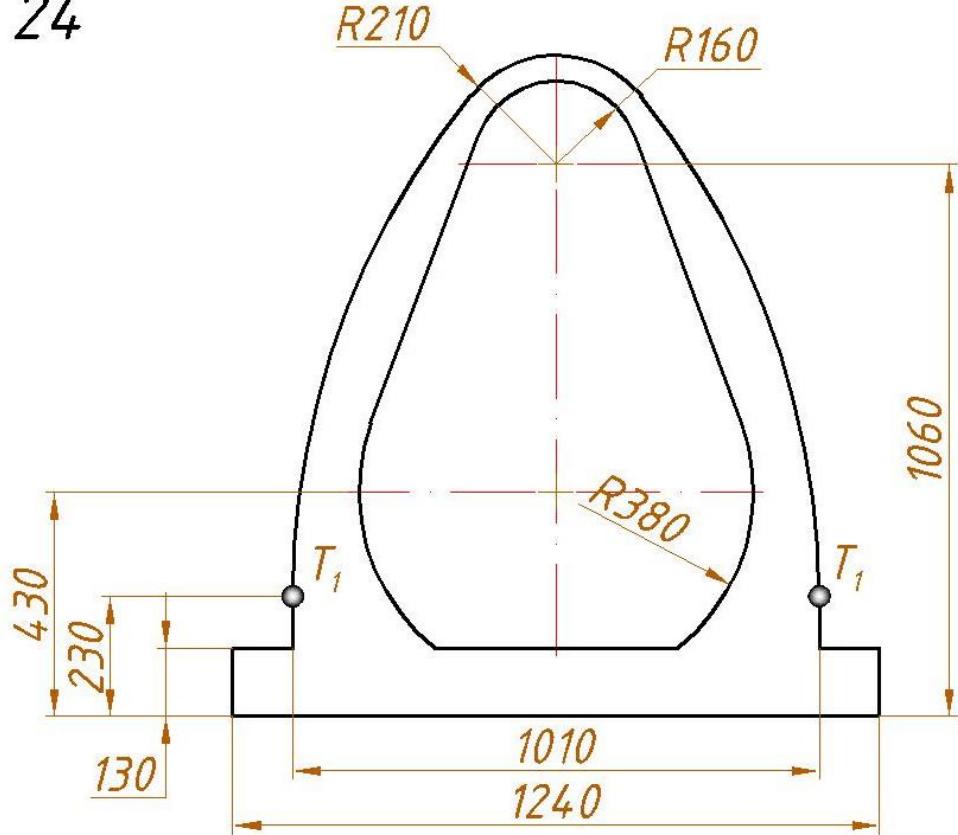
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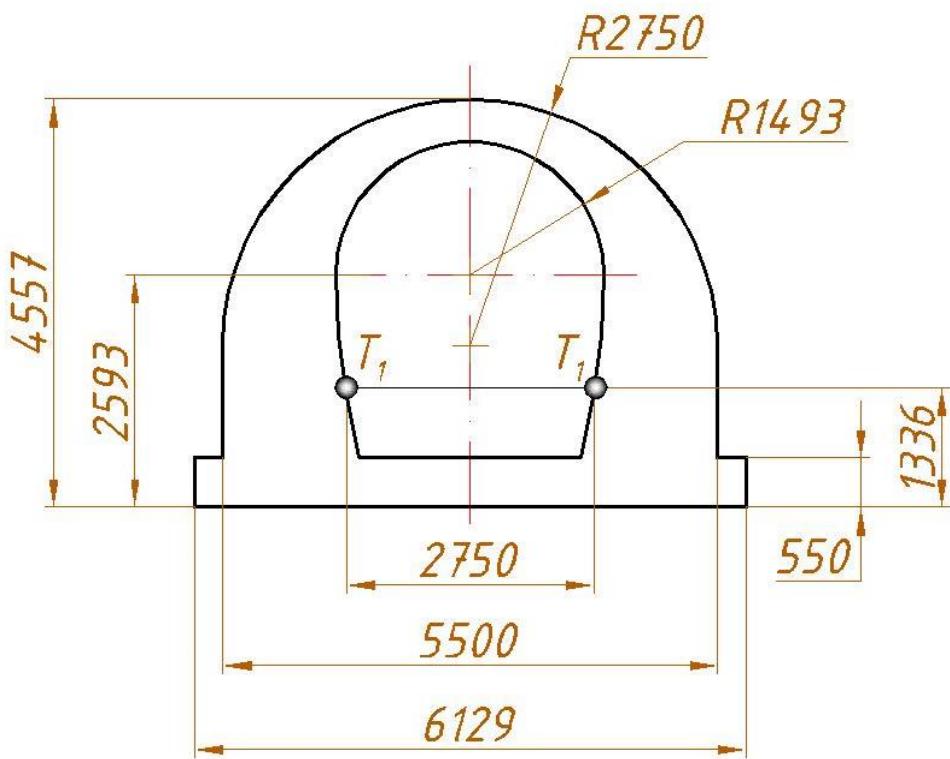
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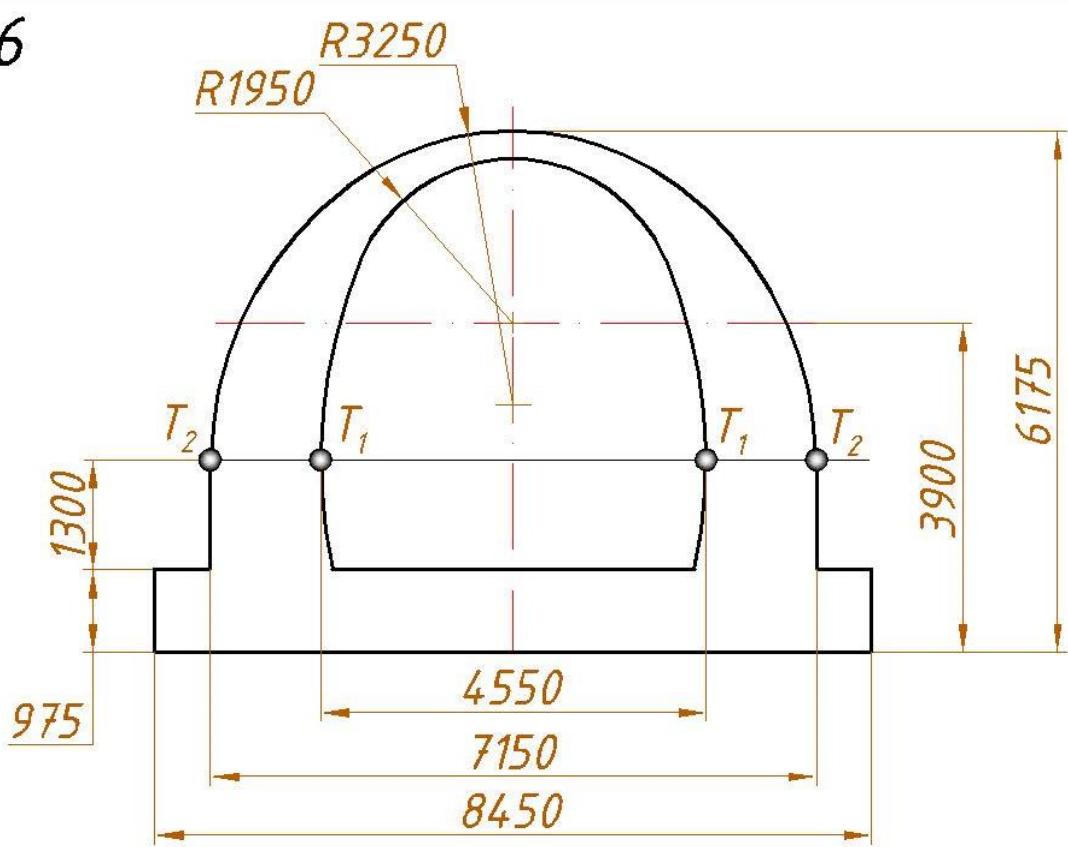
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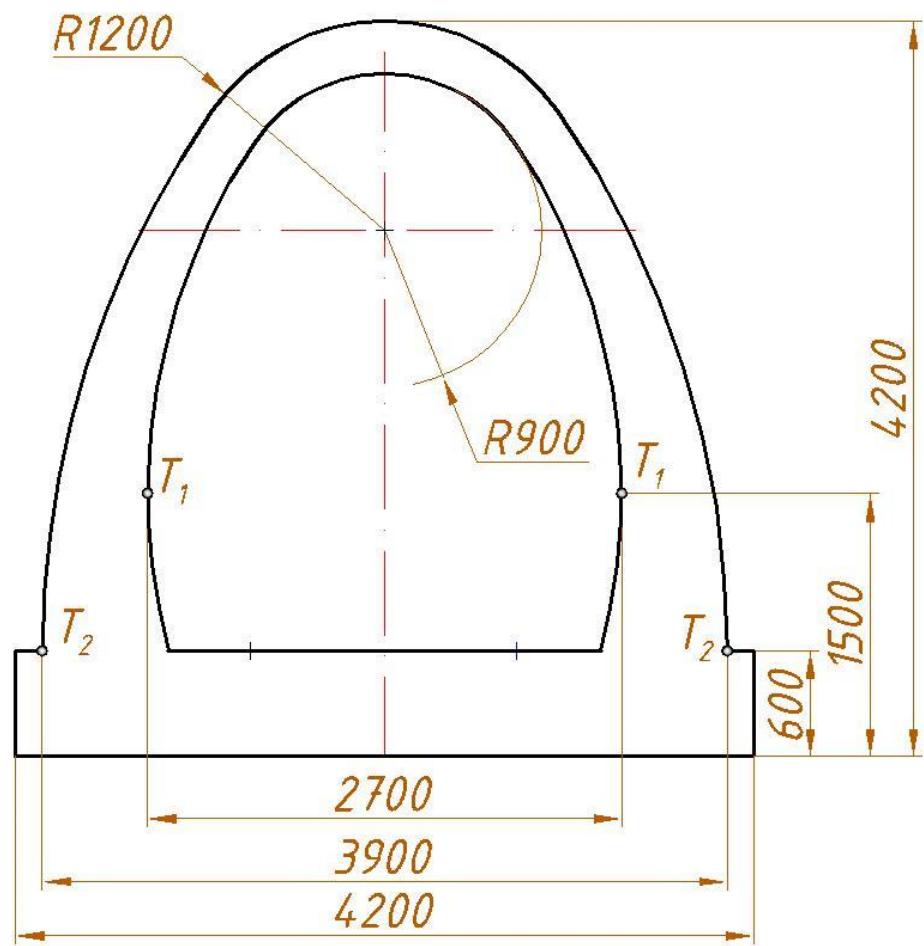
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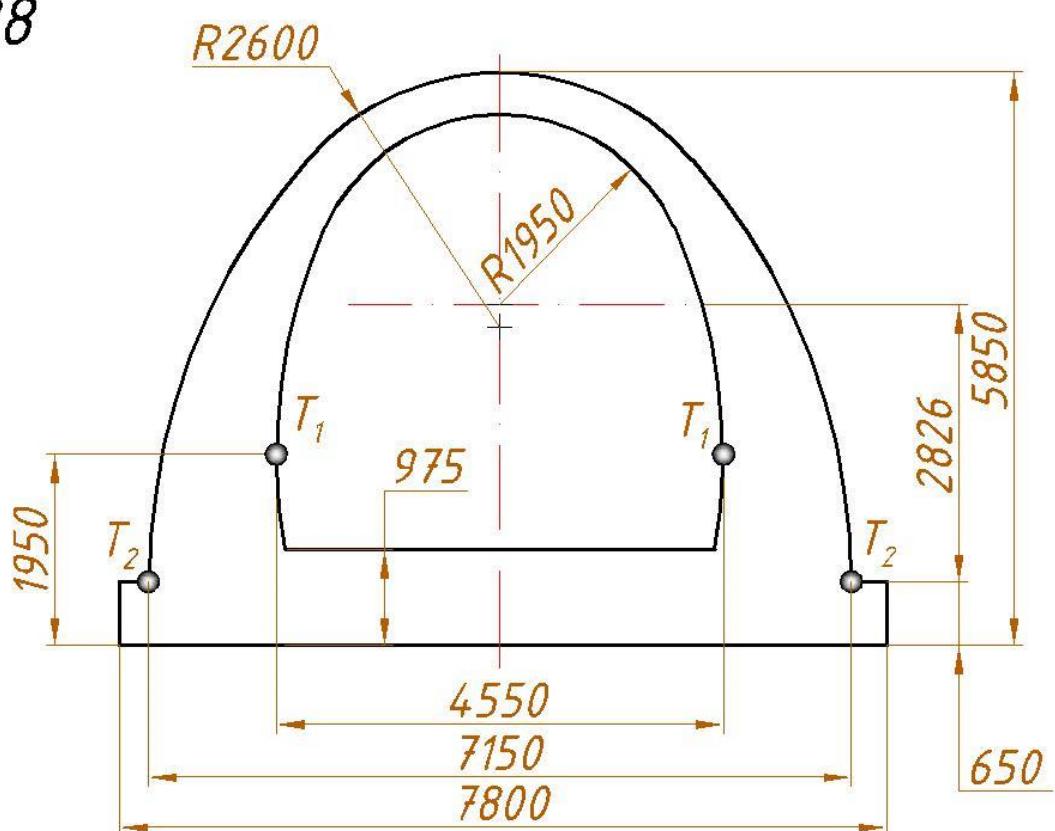
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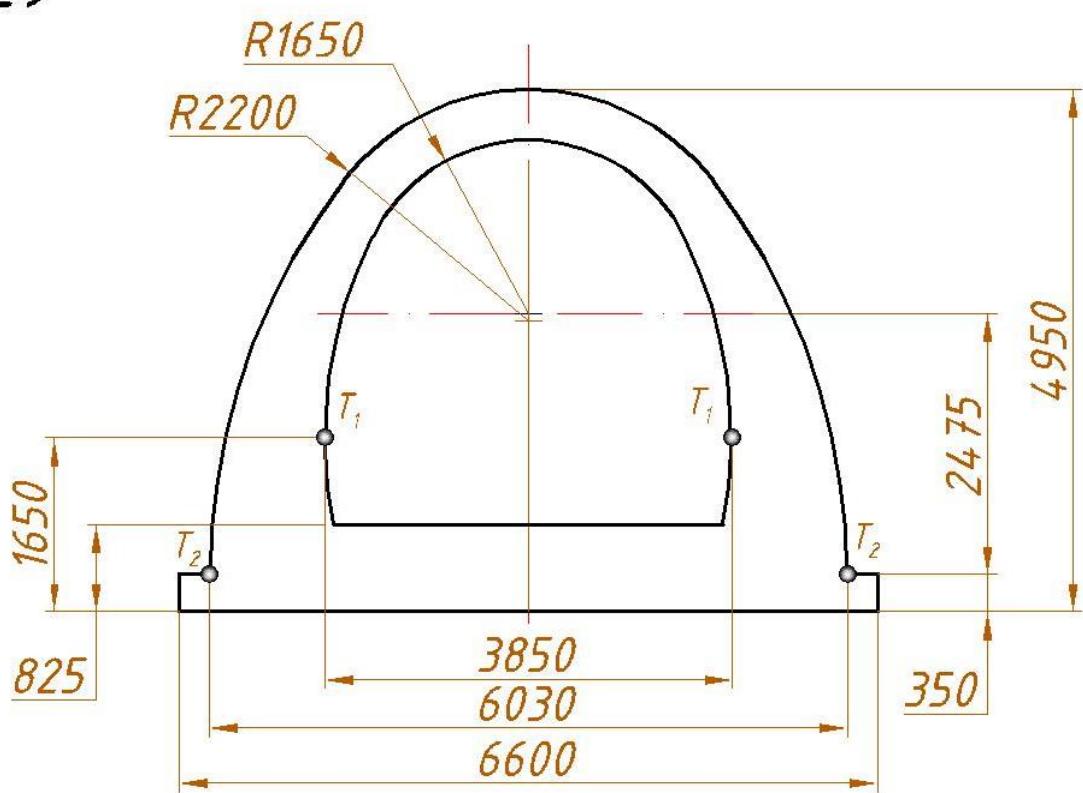
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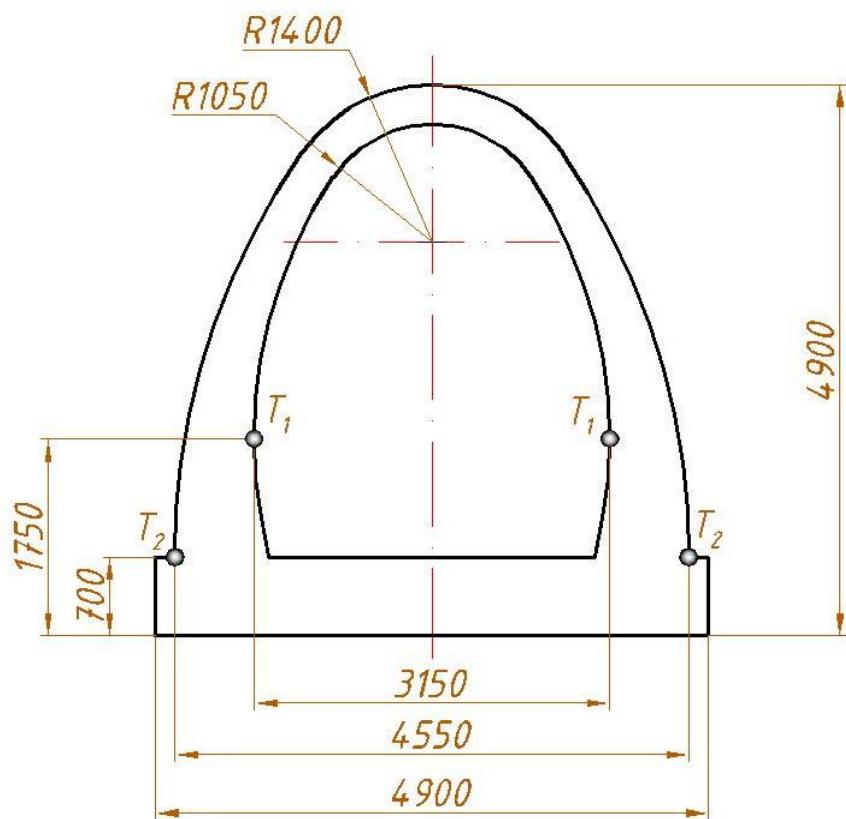
28



29



30



4-5-MASHQLAR

TO‘G‘RI CHIZIQ VA

TEKISLIK ANALIZI

MAVZUSIGA DOIR

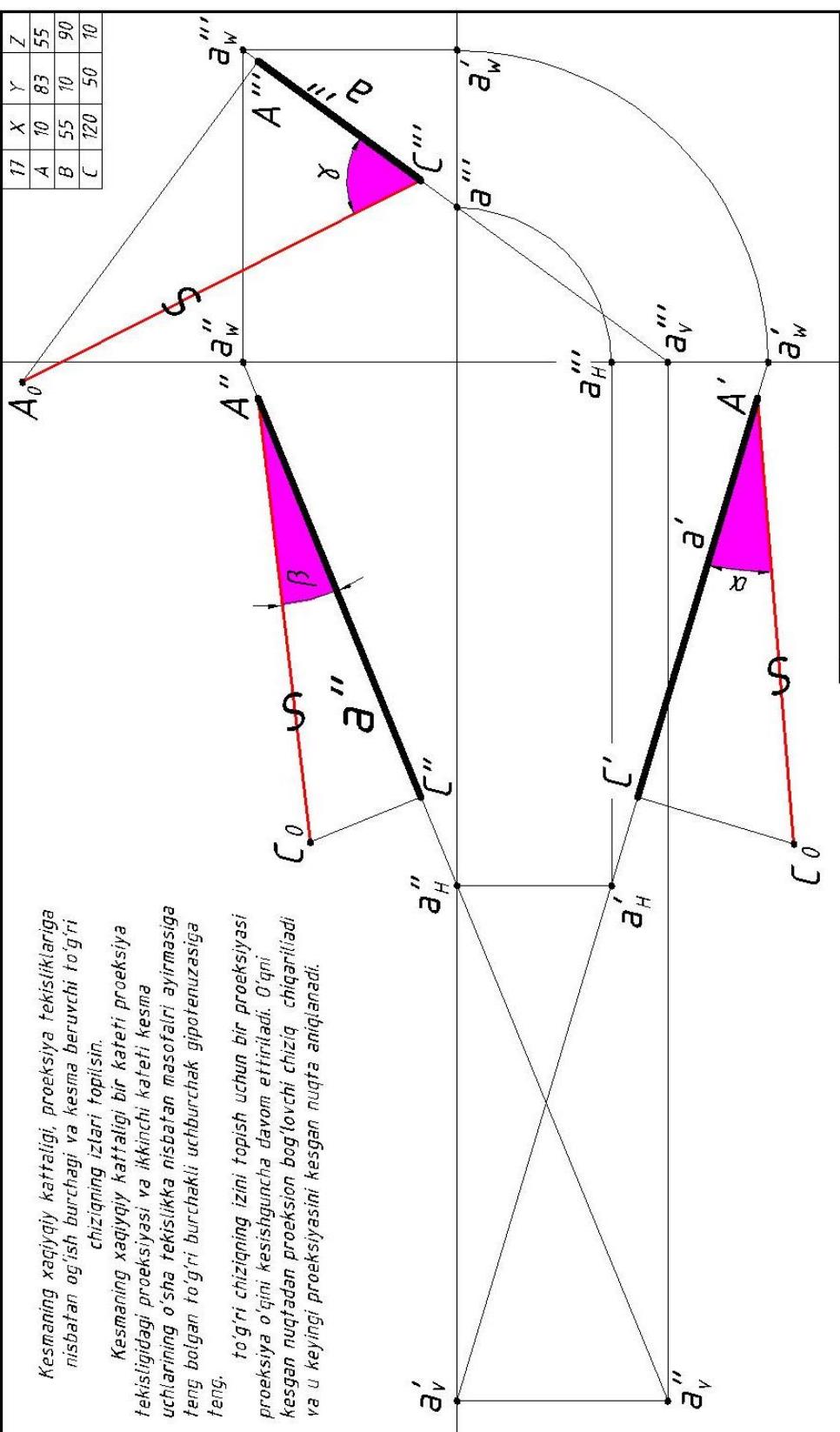
VARIANTLAR

№	Mavzu: 4) To‘g‘ri chiziq analizi 5) Tekislik analizi								
	A			B			C		
	X	Y	Z	X	Y	Z	X	Y	Z
1	105	40	10	70	10	85	15	60	55
2	0	100	30	100	50	10	60	0	100
3	135	50	20	20	85	60	80	5	105
4	0	80	70	60	10	120	140	25	10
5	10	85	70	125	50	15	65	15	110
6	20	50	15	65	90	105	120	5	60
7	130	45	10	45	10	55	95	0	95
8	125	20	80	65	95	135	30	60	30
9	120	30	20	60	5	115	5	85	60
10	25	40	25	80	90	115	135	10	80
11	120	65	10	70	10	100	20	85	55
12	120	5	70	60	95	115	25	30	15
13	25	70	50	115	50	5	75	5	75
14	100	45	10	60	15	85	15	70	60
15	100	35	15	50	5	80	0	75	40
16	110	10	40	50	90	90	10	45	15
17	20	90	60	75	15	105	125	50	30
18	10	35	10	60	75	95	115	5	55
19	100	40	10	60	10	85	10	70	55
20	70	0	90	105	50	10	20	80	55
21	25	35	120	85	95	15	100	15	55
22	40	0	100	100	40	0	10	90	10
23	50	95	0	10	85	70	125	0	15
24	50	90	95	10	45	15	110	10	45
25	60	50	115	110	40	15	10	0	75
26	10	40	15	40	80	100	110	10	60
27	60	10	95	10	80	60	110	50	15
28	115	15	55	45	75	95	10	35	5
29	60	70	80	115	10	45	15	25	10
30	100	40	5	70	5	90	10	60	65

Kesmaning xaqiyqy kattaligi, proeksiya tekisiliklariiga nisbatan og'ish burchagi va kesma beruvchi to'g'ri chizigining iztari topilsin.

Kesmaning xaqiyqy kattaligi bir katefi proeksiya tekisligidagi proeksiyasini va ikkinchi katefi kesma uchtlarining o'sha tekislikka nisbatan masofalari ayirmasiga teng bolgan to'g'ri burchakli uchburchak gipotenuzasiga teng.

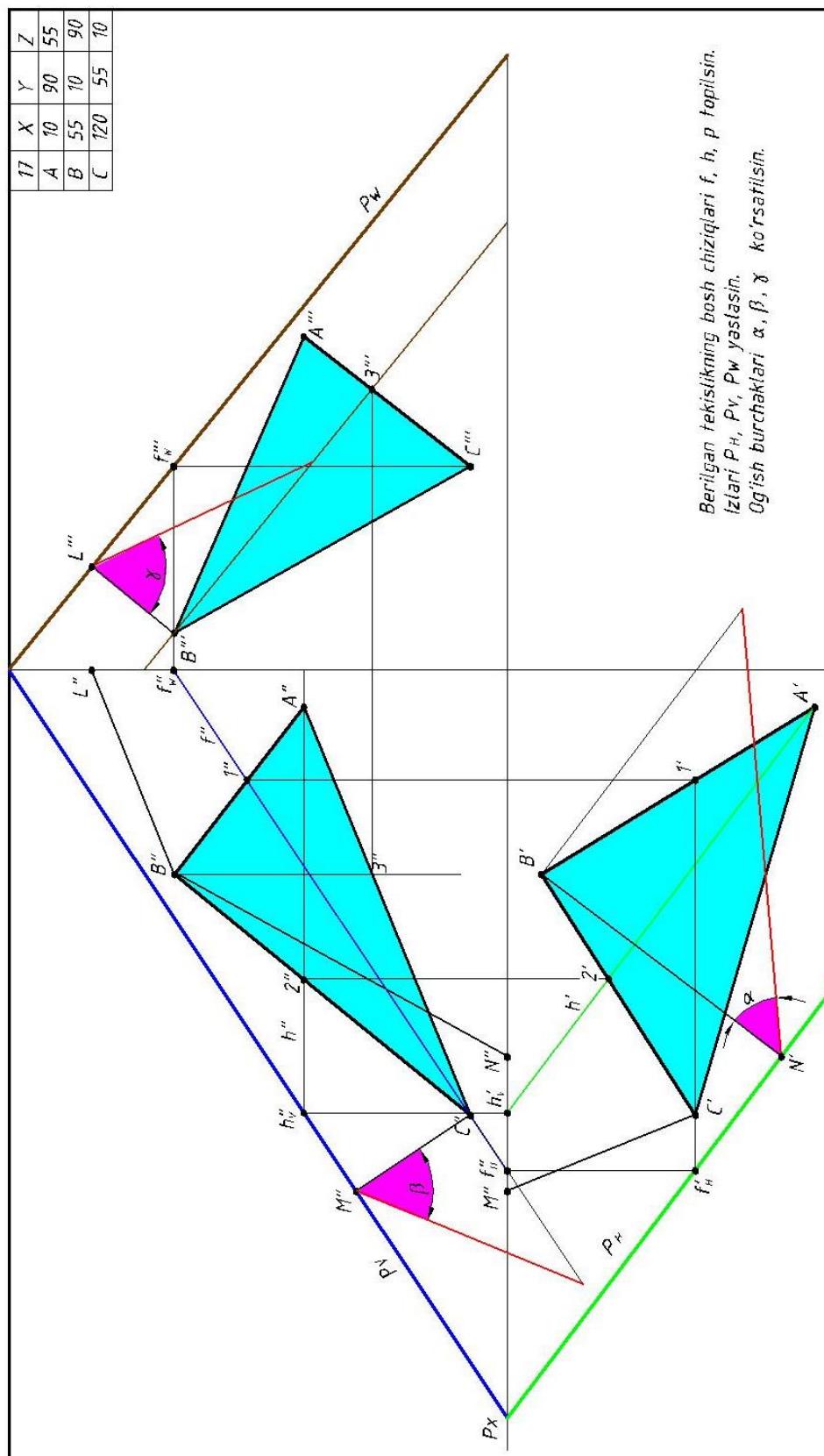
To'g'ri chizigining izini topish uchun bir proeksiysi proeksiya o'sini kesishiguncha davom ettiladi. O'qni kesgan nuqtadan proeksiyon bog'louchi chiziq chiqariladi ya u keyingi proeksiyasini kesgan nuqta aniqlanadi.



ChG va MG 01.17.04

ChG Yerida	Xujjat	Imzo	Sano	Litsen	Massa	Mashrab
O'zgar Yerida	Ortibekir M.					
Eli'da:	Ortibekir M.					
Tekshiridi:	Urushev A.					

ChG va MG kafedrasasi	IGTIQ va UF 1-3



Tekislik bosh chiziqlarining ikkita proeksiyasi o'qilarga parallel yoki perpendikulyar bo'ladi.
Tekislikning eng katta og'ish chiziqi'ning izlariiga mos ravishda perpendikulyar bo'ladi.
Tekislikdagi nuqtaning bir proeksiyasi tekislik izida bo'sish uning keyingi proeksiyasi proeksiyalar o'qida bo'tadi va aksin

Berilgan tekistikning bosh chiziqliri f , h , p tapilsin.
 Izlari P_H , P_V , P_W yasasin.
 Ogish burchaklari α , β , γ ko'rsatilsin.

6-MASHQ

KO'RINISHLAR,

IZOMETRIYA

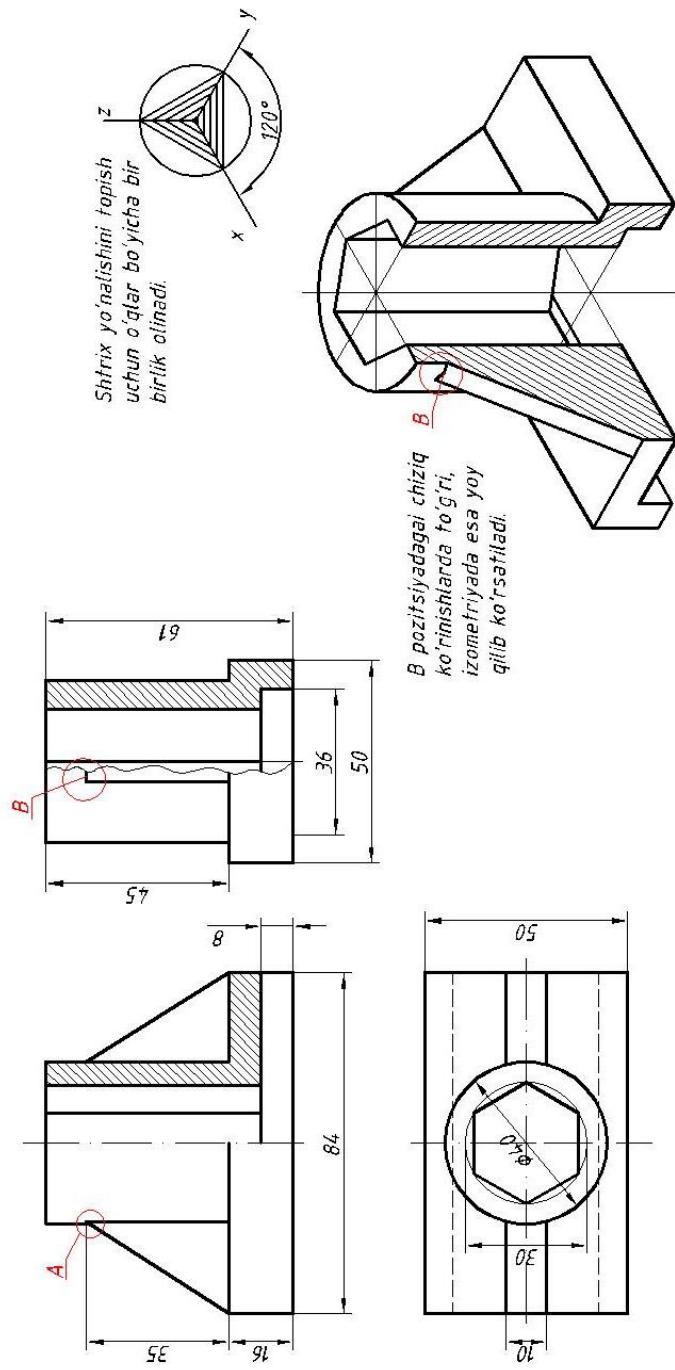
VA

ODDIY QIRQIM

MAVZUSIGA DOIR

VARIANTLAR

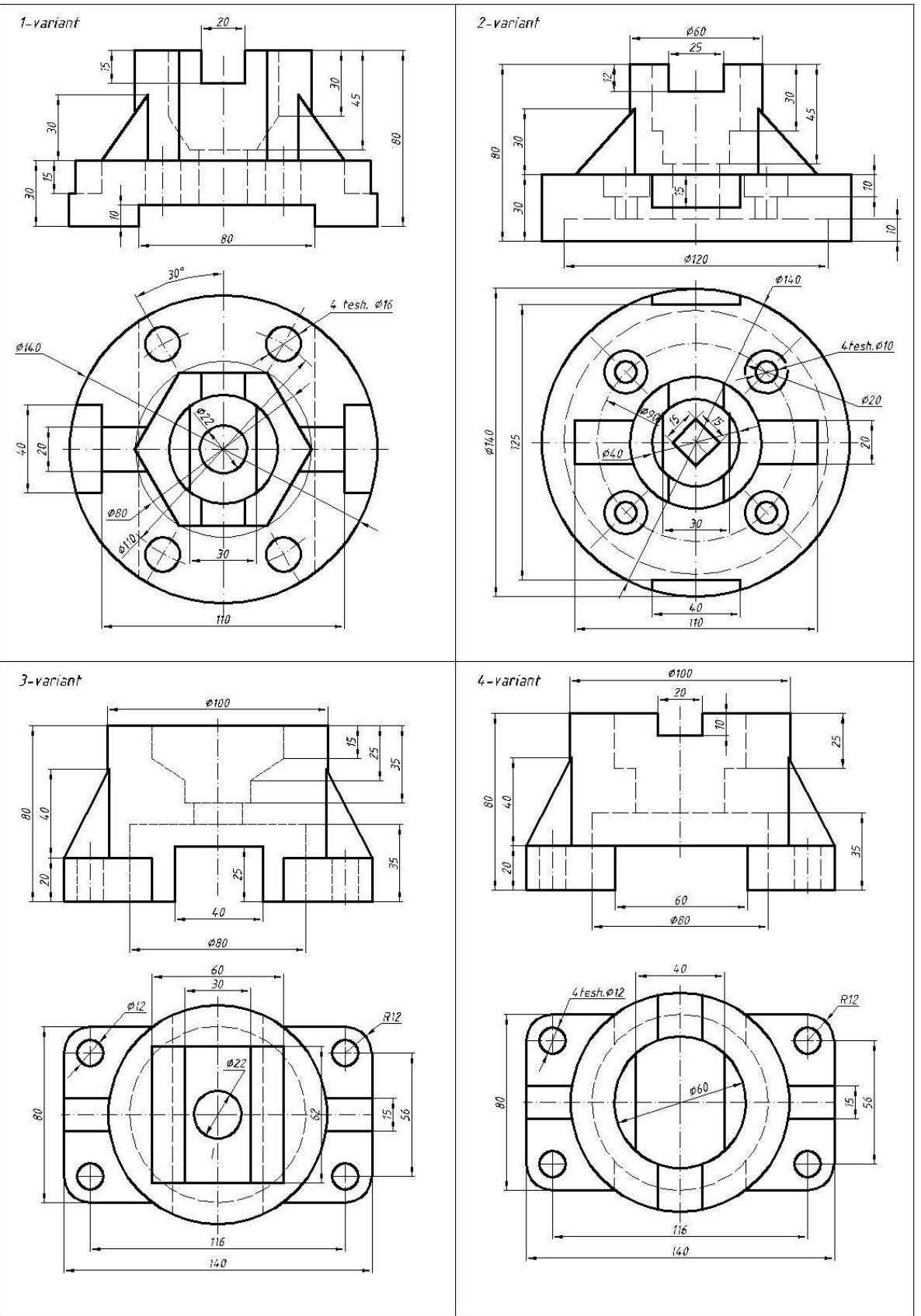
Berilgan ikki ko'rinishiga asosan uchinchisi topilsin. Kerakli qirqim berilsin. Chorak qirqimli izometriyasi ba'arilsin



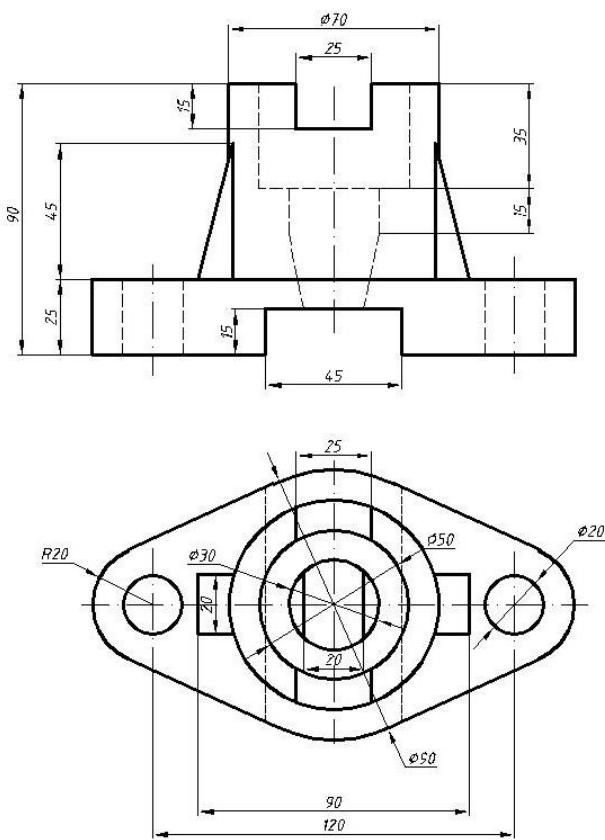
ChG va MG 02.17.01		Ko'rinishilar. Izometriya		ChG va MG kafedrasи	
Ureza	Massa	Ureza	Massa	Ureza	Massa

Vazifalar: 4
Tengsler: 4
Vazifalar: 8
Tengsler: 8

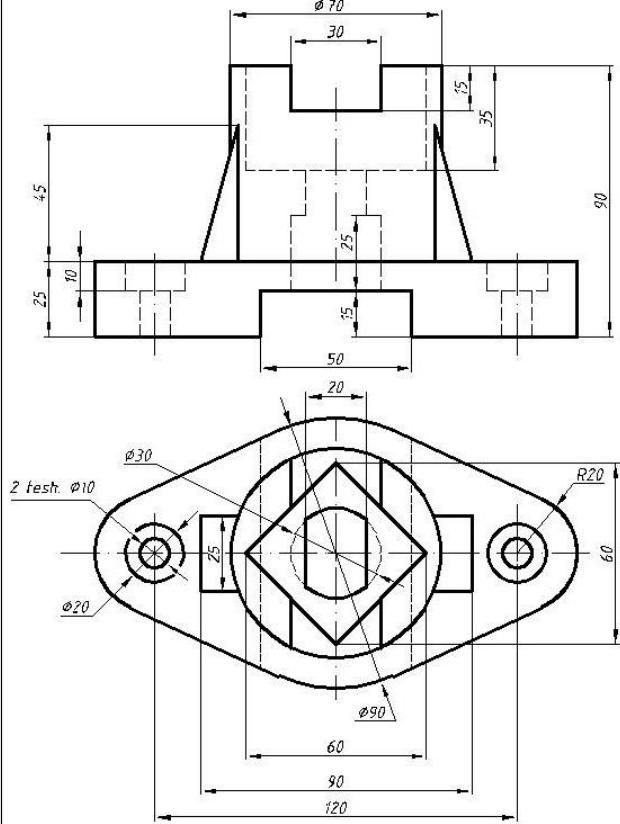
ChG va MG kafedrasи



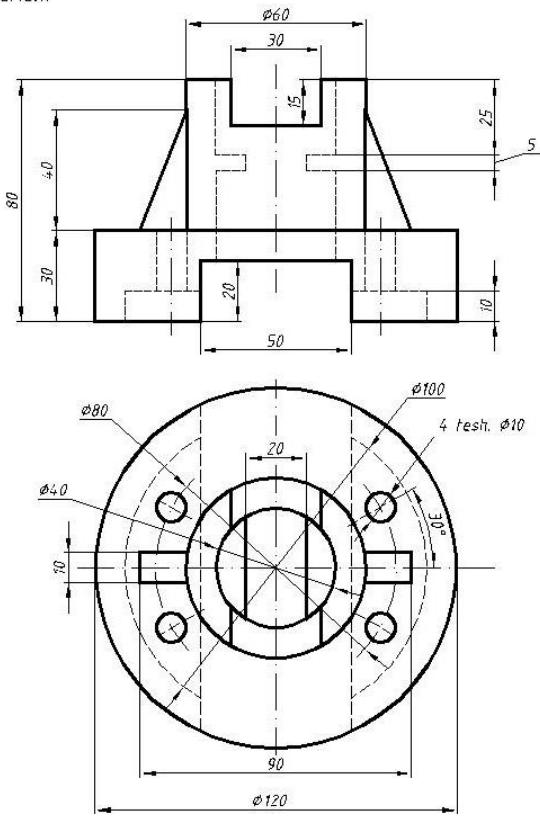
5-variant



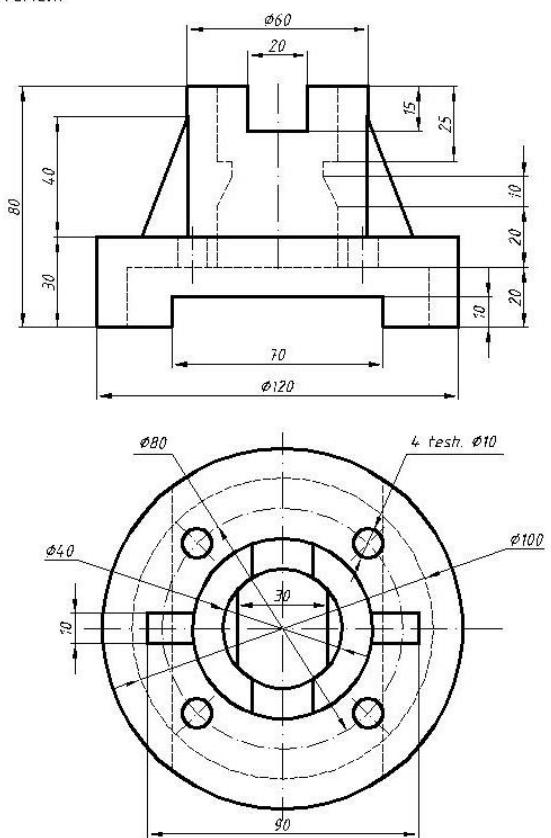
6-variant



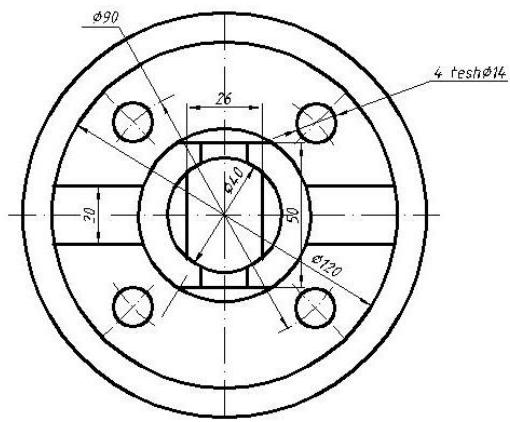
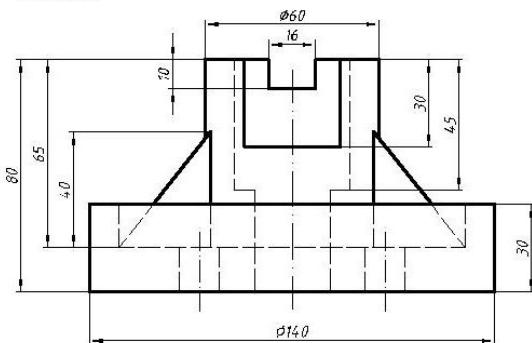
7-variant



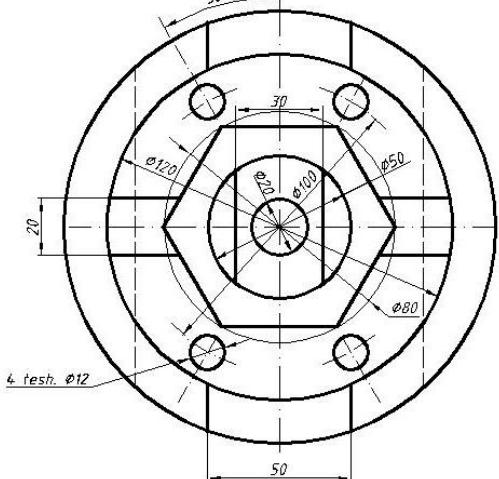
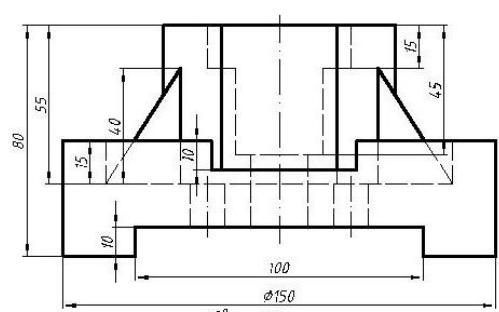
8-variant



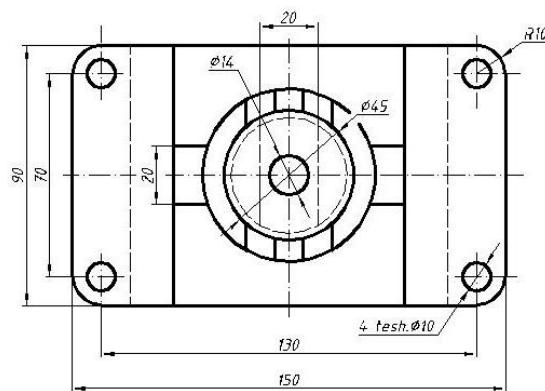
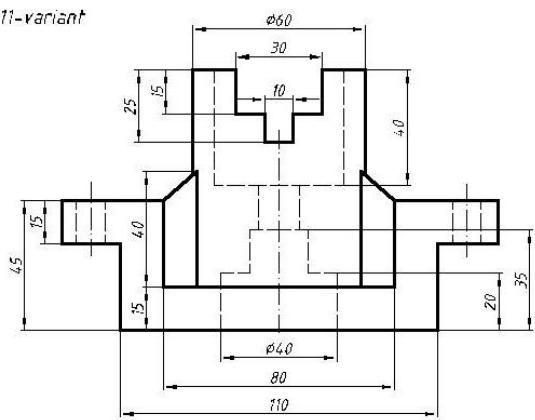
9-variant



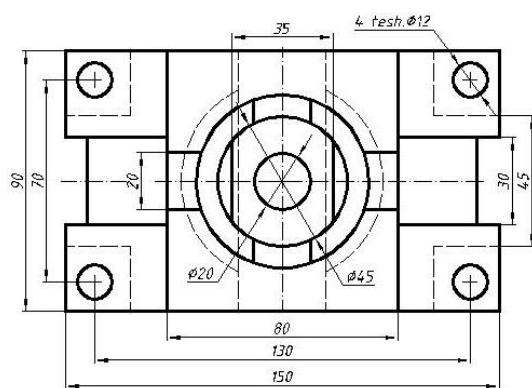
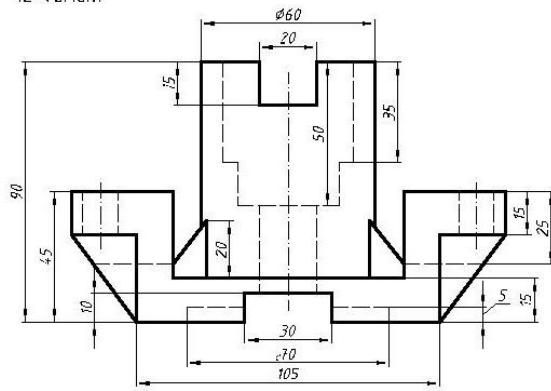
10-variant



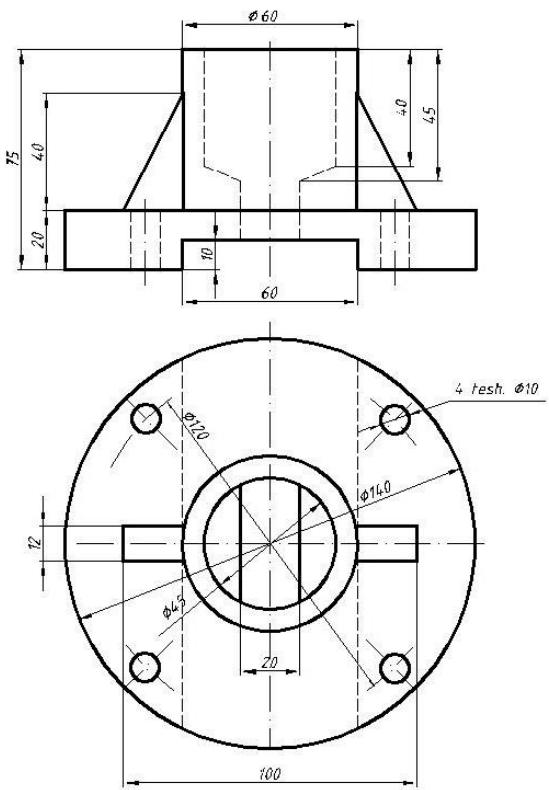
11-variant



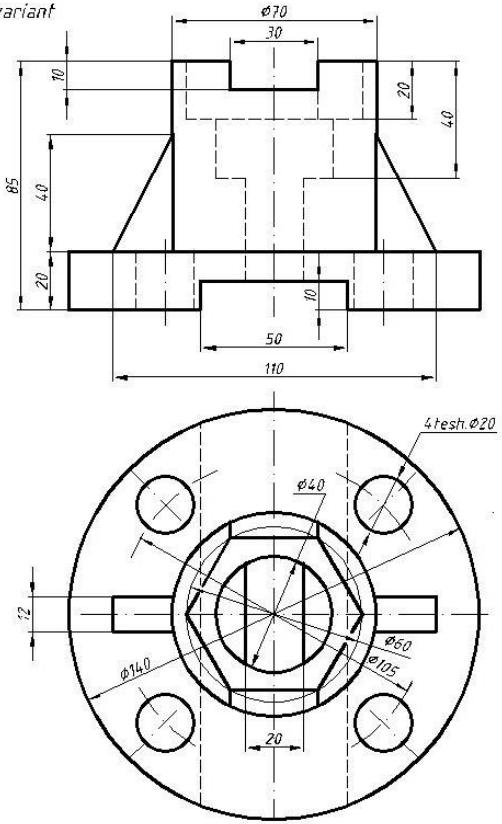
12-variant



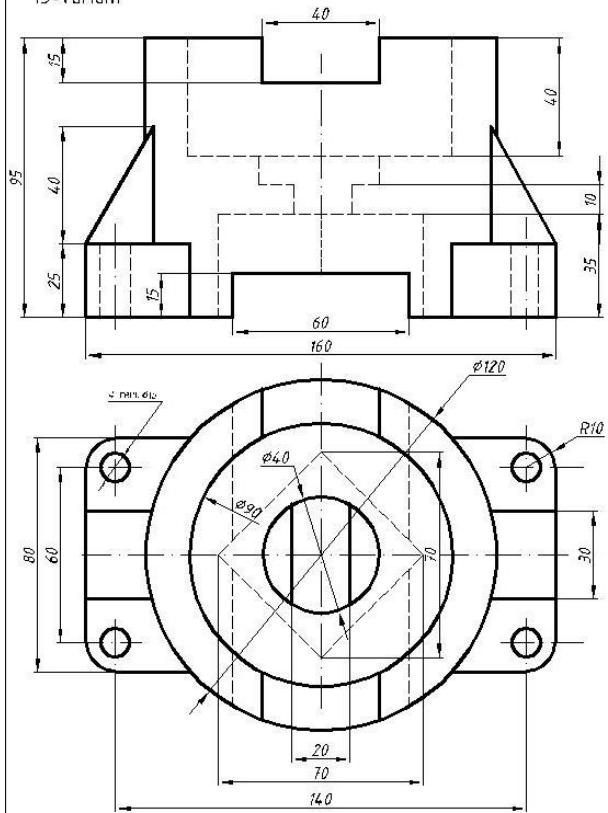
13-variant



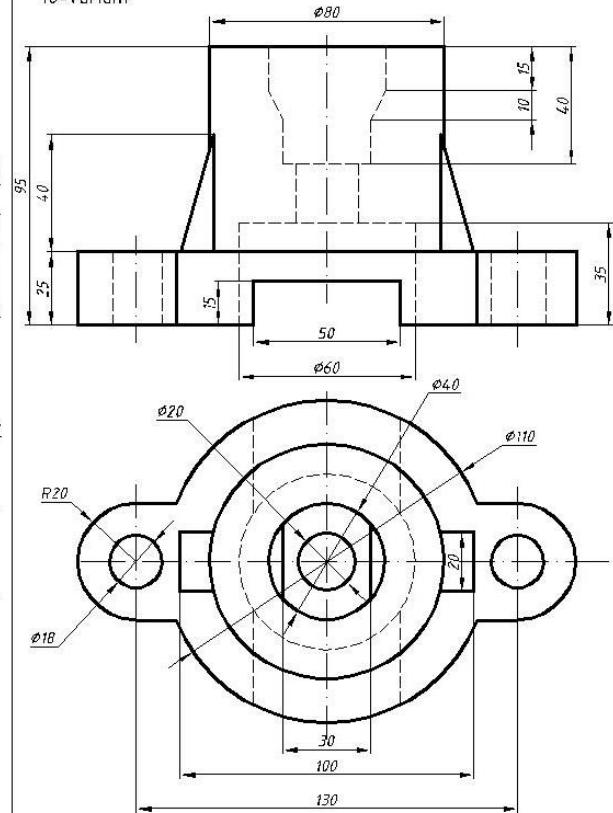
14-variant



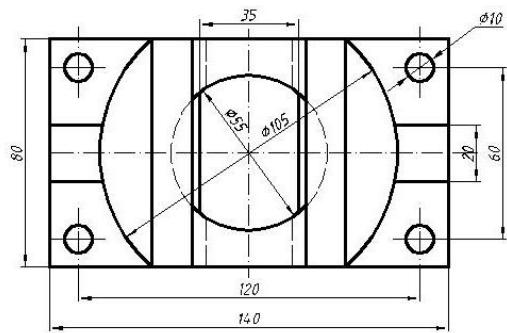
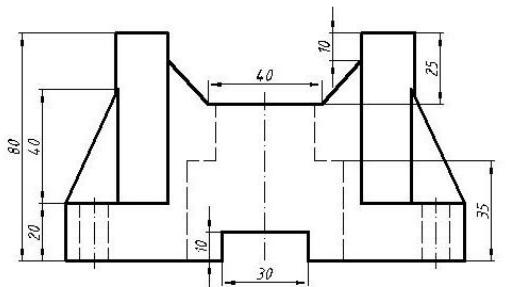
15-variant



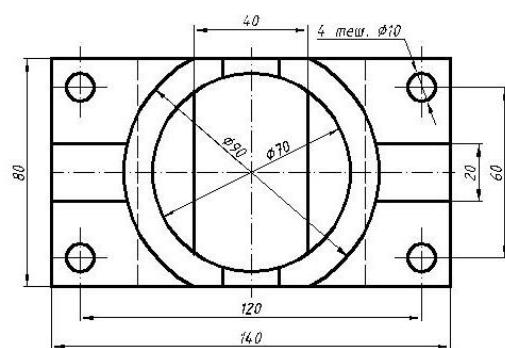
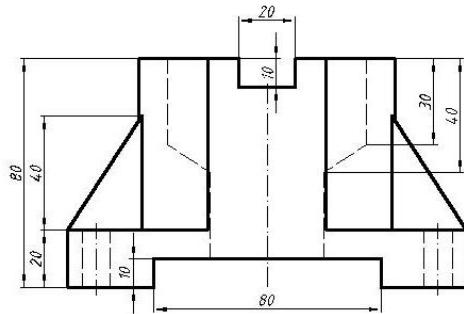
16-variant



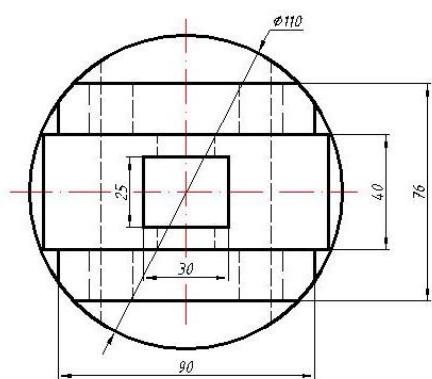
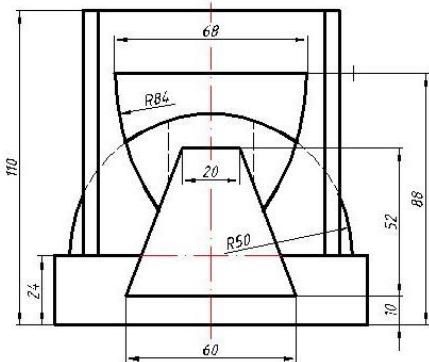
17-variant



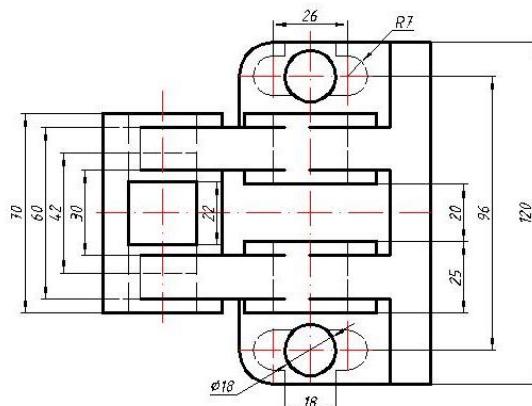
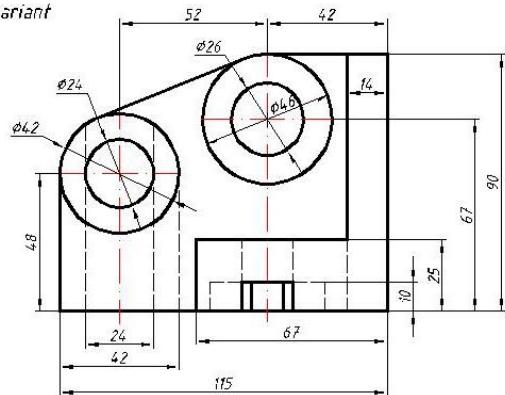
18-variant



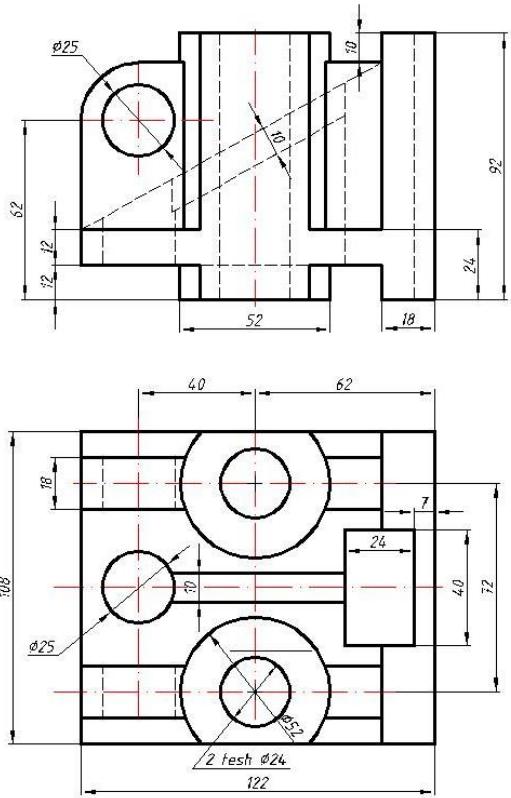
19-variant



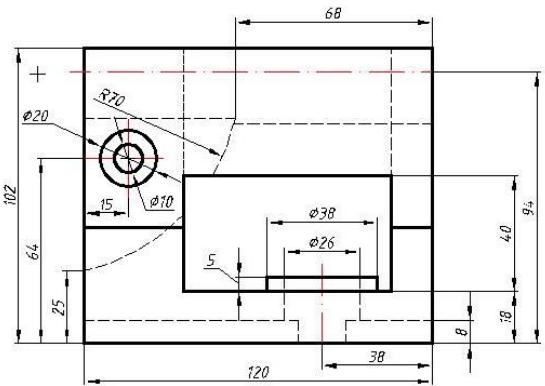
20-variant



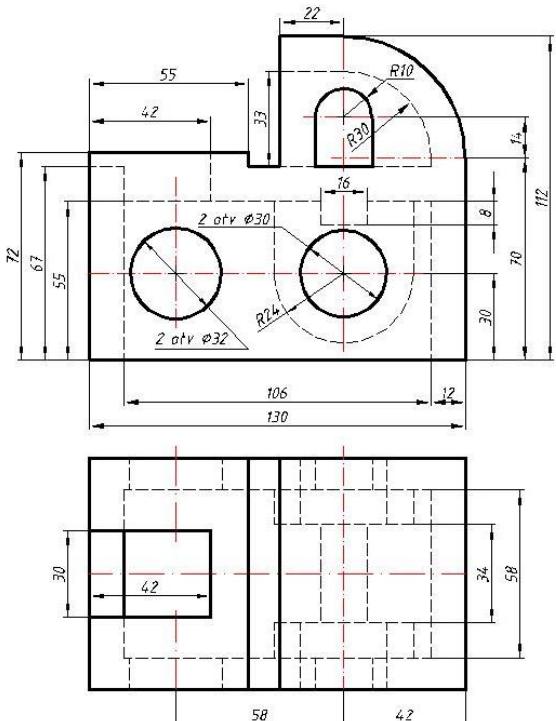
21-variant



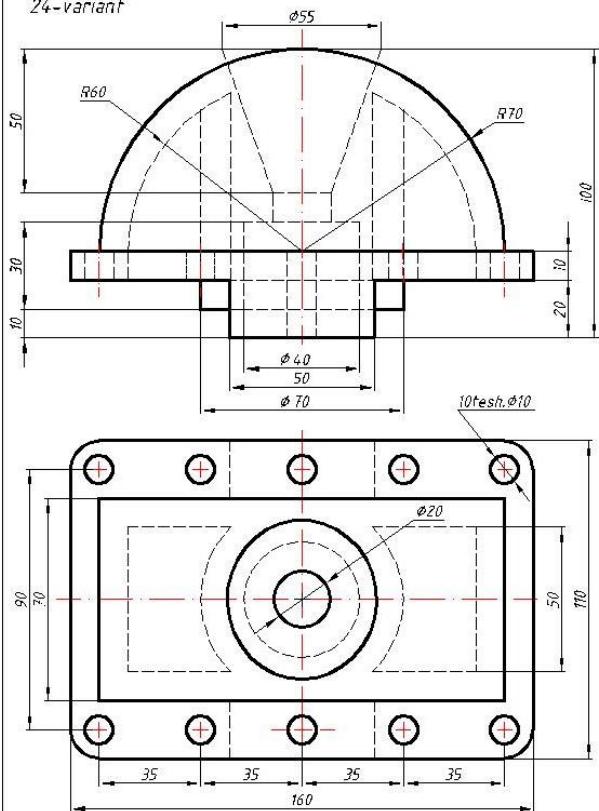
22-variant



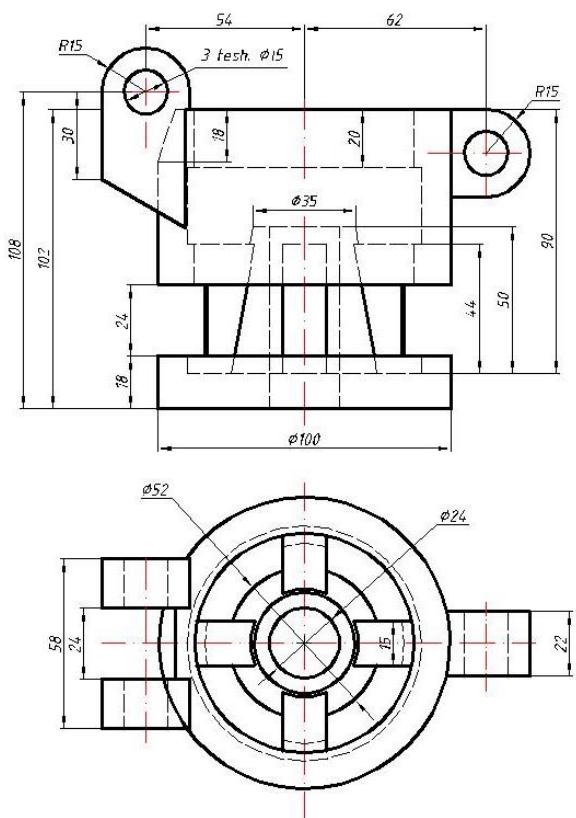
23-variant



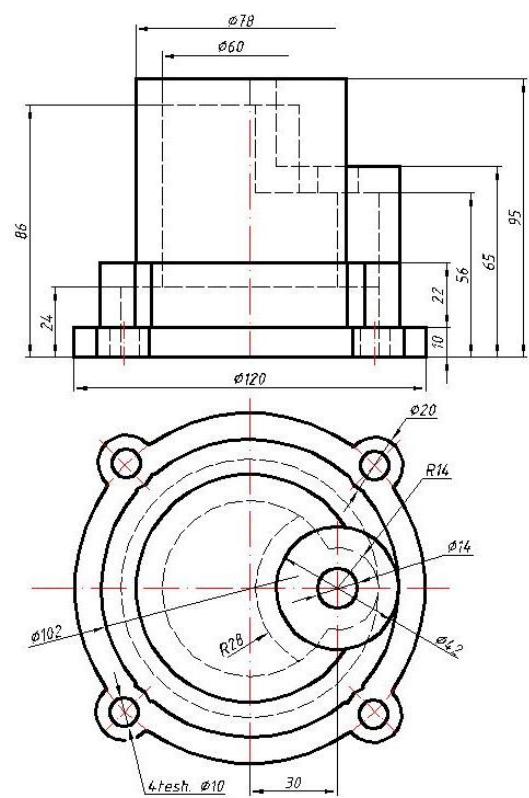
24-variant



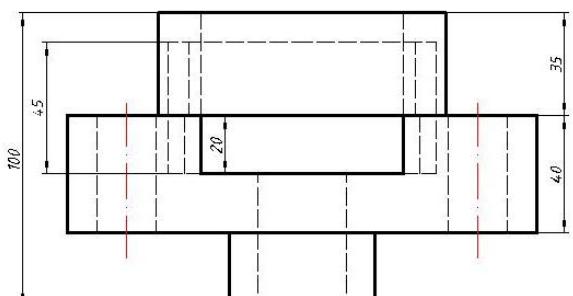
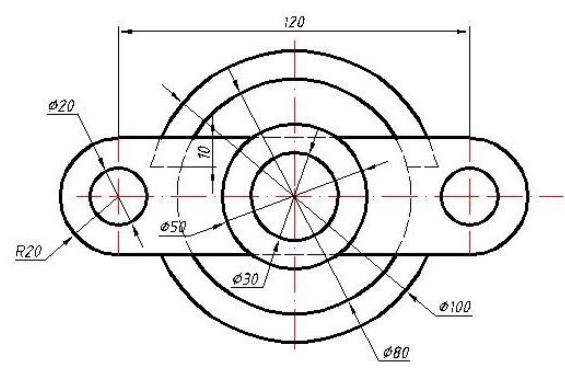
25-variant



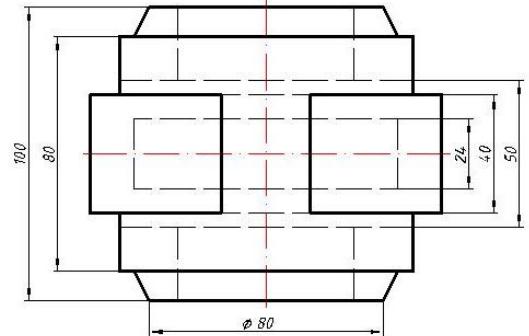
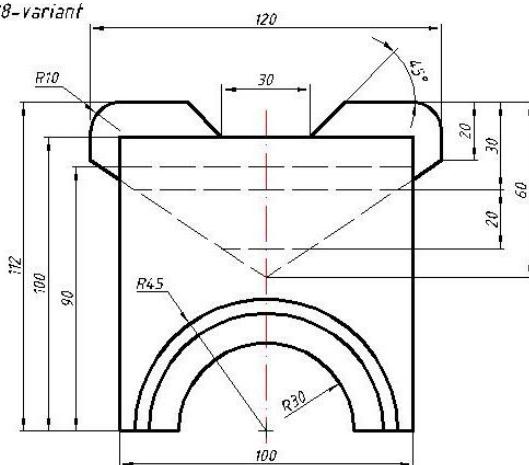
26-variant



27-variant



28-variant



7-MASHQ

**PROEKSIYA
TEKISLIKARINI
ALMASHTIRISH
USULI BILAN
PIRAMIDA
BALANDLIGI VA
ASOSINING
XAQIQIY
KATTALIGINI ANIQLASH**

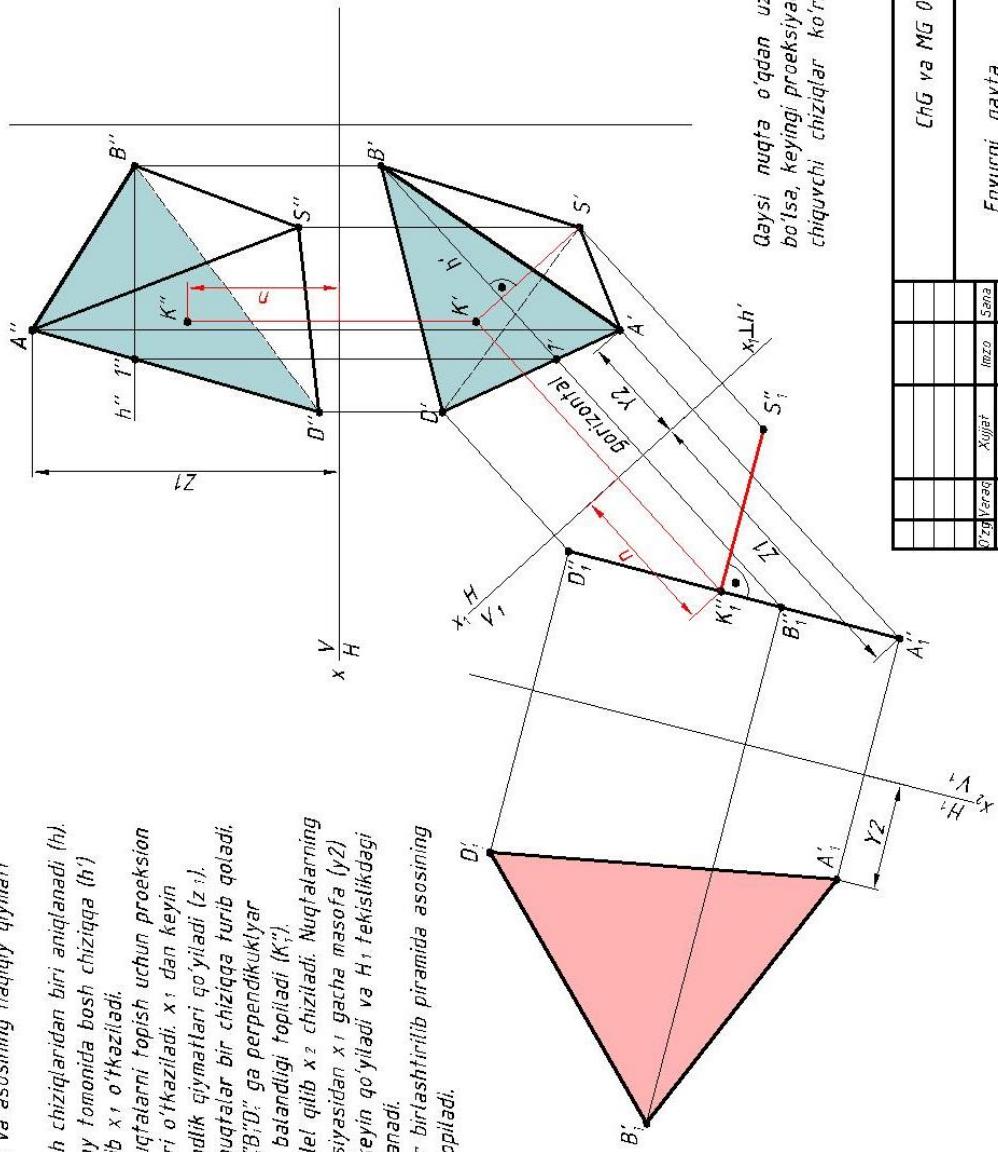
MAVZUSIGA DOIR

VARIANTLAR

№	Mavzu: Proeksiya tekisliklarini almashtirish usuli bilan Piramida balandligi va asosi yuzasining xaqiqiy kattaligini aniqlash.											
	S			A			B			D		
	X	Y	Z	X	Y	Z	X	Y	Z	X	Y	Z
1	20	50	45	10	20	10	55	50	10	80	0	0
2	70	20	20	5	30	60	5	10	20	60	65	30
3	65	15	20	40	25	60	0	5	20	60	60	25
4	75	65	50	40	5	55	0	50	10	65	25	0
5	80	65	50	45	5	55	5	45	10	70	20	0
6	20	45	50	10	10	20	55	10	50	80	60	0
7	70	20	20	45	60	30	5	20	10	60	30	65
8	65	20	15	40	60	25	0	20	5	60	25	60
9	75	50	65	40	55	5	0	20	50	65	0	25
10	80	50	65	45	55	5	5	10	45	70	0	20
11	30	80	25	100	20	0	50	0	80	120	80	50
12	50	0	80	110	20	0	100	80	70	30	90	20
13	75	65	50	45	5	65	5	45	15	70	20	0
14	20	40	50	10	10	20	55	65	50	80	20	0
15	75	25	25	50	65	35	5	45	15	60	55	10
16	65	25	0	40	60	25	0	25	5	60	20	65
17	30	75	70	15	10	25	30	40	5	80	35	40
18	80	55	50	10	45	30	30	80	60	55	0	10
19	75	15	20	45	60	40	10	35	50	20	0	0
20	100	30	70	15	45	30	75	0	25	35	10	55
21	20	50	45	10	20	10	55	50	10	80	0	0
22	70	20	20	5	30	60	5	10	20	60	65	30
23	65	15	20	40	25	60	0	5	20	60	60	25
24	75	65	50	40	5	55	0	50	10	65	25	0
25	80	65	50	45	5	55	5	45	10	70	20	0
26	20	45	50	10	10	20	55	10	50	80	60	0
27	70	20	20	45	60	30	5	20	10	60	30	65
28	65	20	15	40	60	25	0	20	5	60	25	60
29	75	50	65	40	55	5	0	20	50	65	0	25
30	80	50	65	45	55	5	5	10	45	70	0	20

*Proeksiya təkistiklərini almashdırış usulü bilən
pir amida bələndliyi və əsosının haqiqiy qiyamı
anıqlansın.*

1. Tekislikning bosh chiziqlaridan biri aniqlanadi (h_1)
 2. Formahning qulay fomoniida bosh chiziqa (h_1) perpendikulyar qilib x_1 o'tkaziladi.
 3. vi tekislikda nuqtalarni topish uchun proeksiyon bo'g'anish chiziqlari o'tkaziladi. x_1 dan kevin nuqtalarning balandlik qiymatlari qo'yiladi (z₁): Natijasida $A_1B_1C_1D_1$ nuqtalar bir chiziqqa turib qoladi.
 4. 5th nuqtadan $A_1B_1D_1$ ga perpendikulyar tushirilib piramida batandigi topiladi (K_1).
 5. $A_1B_1D_1$ ga parallel qilib x_2 chiziлади. Nuqtalarning horizontal proyeksiyasidan x_1 gacha masofa (y₂) o'lchanib x_2 dan kevin qo'yiladi va H_1 tekislikdagi proyeksiyaani aniqlanadi.
 6. $A_1B_1D_1$ nuqtalar birtashtinilib piramida asosining haqiqiy kattaligi topiladi.



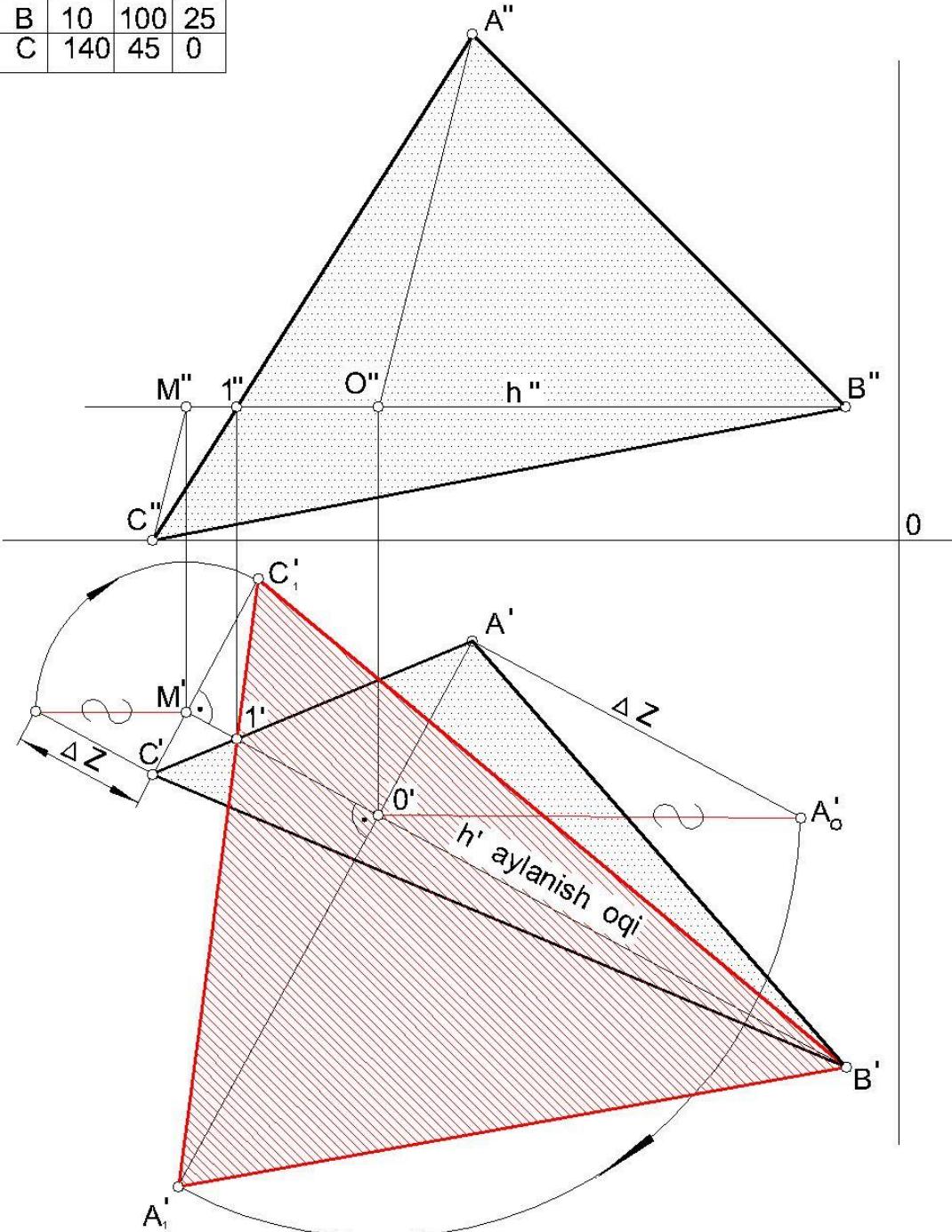
	X	Y	Z
11	50	68	75
A	10	10	50
B	70	25	5
D	25	60	10
S			

8-MASHQ

**TEKISLIKNING BOSH
CHIZIQLARIDAN
BIRI ATROFIDA
AYLANTIRISH
USULI BILAN
UNING
XAQIQIY
KATTALIGINI ANIQLASH**

**MAVZUSIGA DOIR
VARIANTLAR**

	X	Y	Z
A	80	20	95
B	10	100	25
C	140	45	0



Uzaq Viseq	X _{st}	Imzo	Seri	Lise	Viseq	Viseq 1:1
Ortaq	D-nesoyeva					
Istehk	D-nesoyeva, A					

Aylantirish usuli

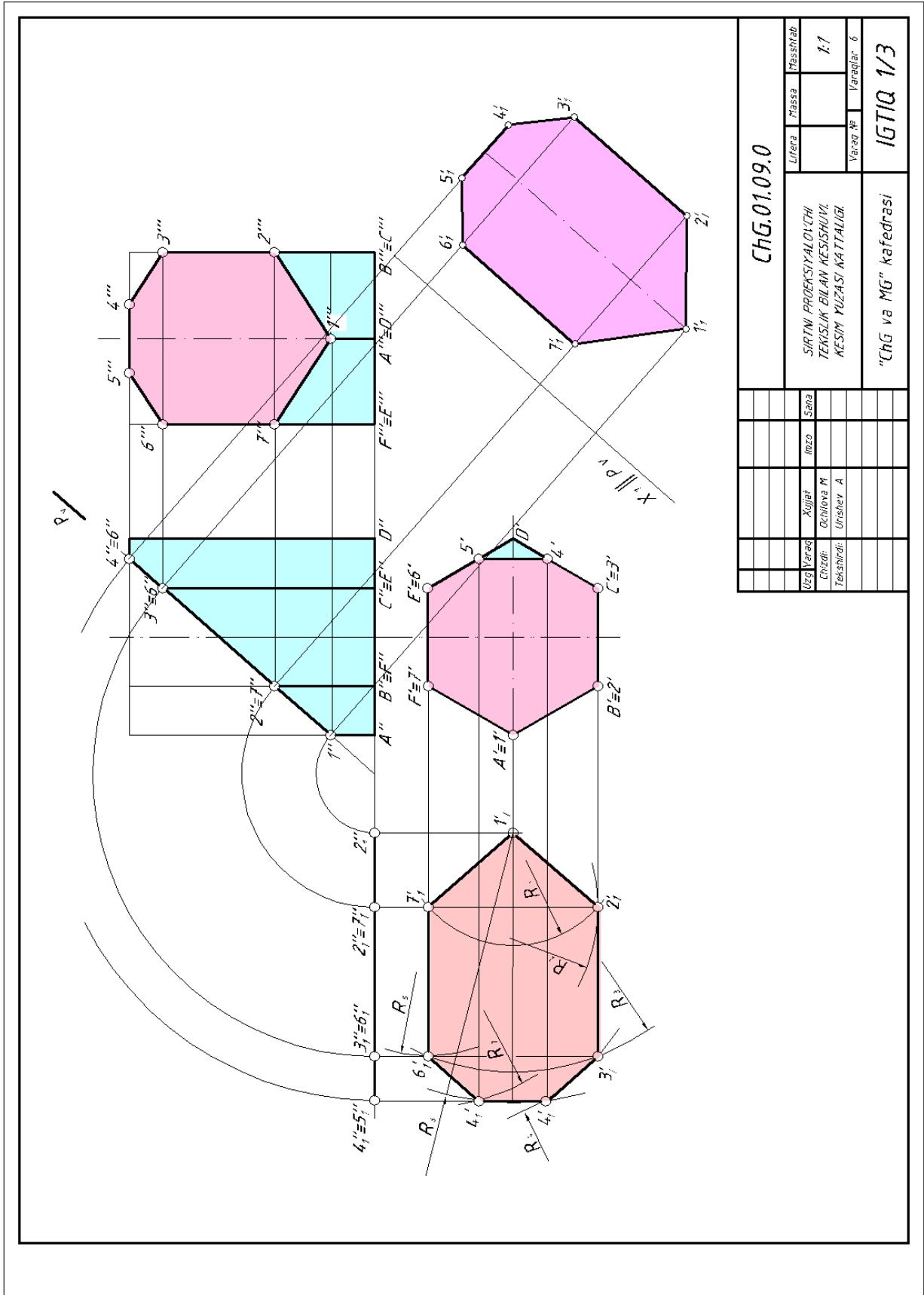
"ChG va MG" kafedrası IGTIQ va UF 101

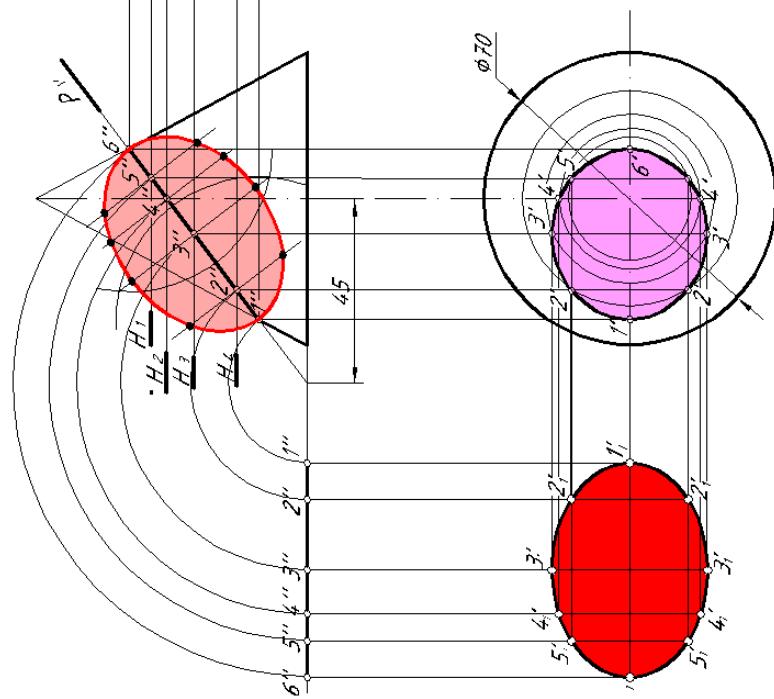
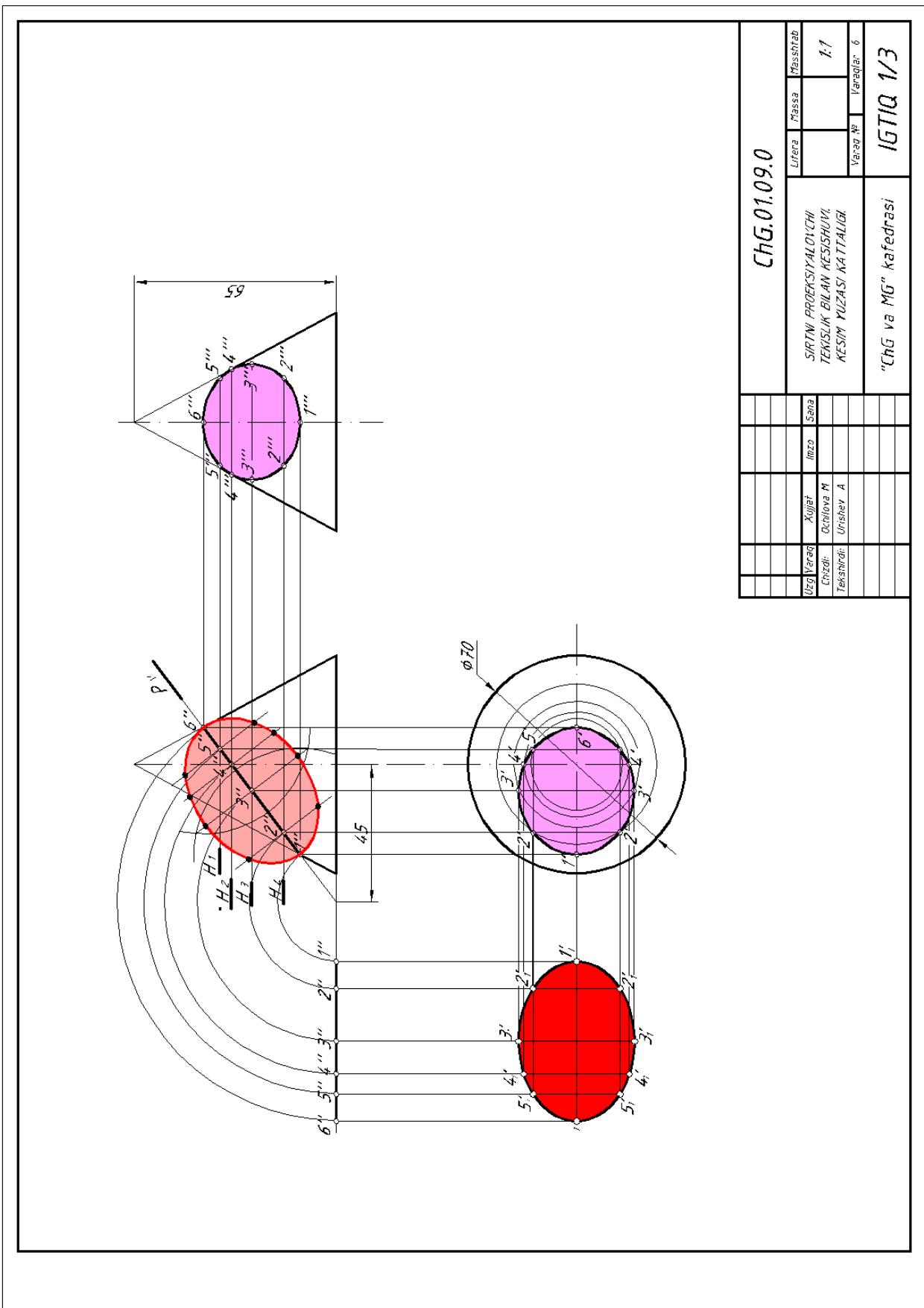
№	Mavzu: AYLANTIRISH USULI BILAN UCHBURCHAKNING XAQIQIY KATTALIGINI ANIQLASH								
	A			B			C		
	X	Y	Z	X	Y	Z	X	Y	Z
1	105	40	10	70	10	85	15	60	55
2	0	100	30	100	50	10	60	0	100
3	135	50	20	20	85	60	80	5	105
4	0	80	70	60	10	120	140	25	10
5	10	85	70	125	50	15	65	15	110
6	20	50	15	65	90	105	120	5	60
7	130	45	10	45	10	55	95	0	95
8	125	20	80	65	95	135	30	60	30
9	120	30	20	60	5	115	5	85	60
10	25	40	25	80	90	115	135	10	80
11	120	65	10	70	10	100	20	85	55
12	120	5	70	60	95	115	25	30	15
13	25	70	50	115	50	5	75	5	75
14	100	45	10	60	15	85	15	70	60
15	100	35	15	50	5	80	0	75	40
16	110	10	40	50	90	90	10	45	15
17	20	90	60	75	15	105	125	50	30
18	10	35	10	60	75	95	115	5	55
19	100	40	10	60	10	85	10	70	55
20	70	0	90	105	50	10	20	80	55
21	25	35	120	85	95	15	100	15	55
22	40	0	100	100	40	0	10	90	10
23	50	95	0	10	85	70	125	0	15
24	50	90	95	10	45	15	110	10	45
25	60	50	115	110	40	15	10	0	75
26	10	40	15	40	80	100	110	10	60
27	60	10	95	10	80	60	110	50	15
28	115	15	55	45	75	95	10	35	5
29	60	70	80	115	10	45	15	25	10
30	100	40	5	70	5	90	10	60	65

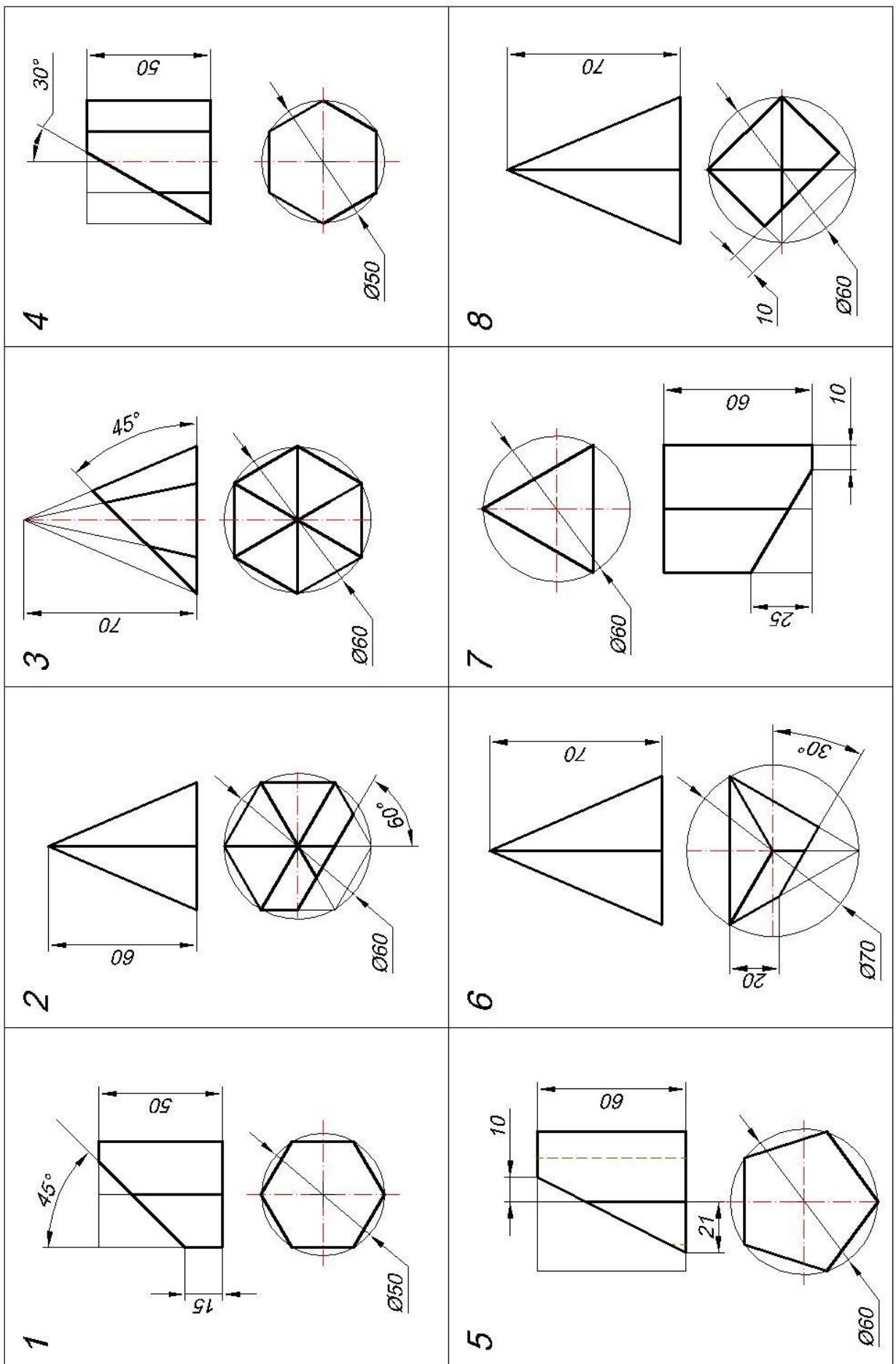
9-MASHQ

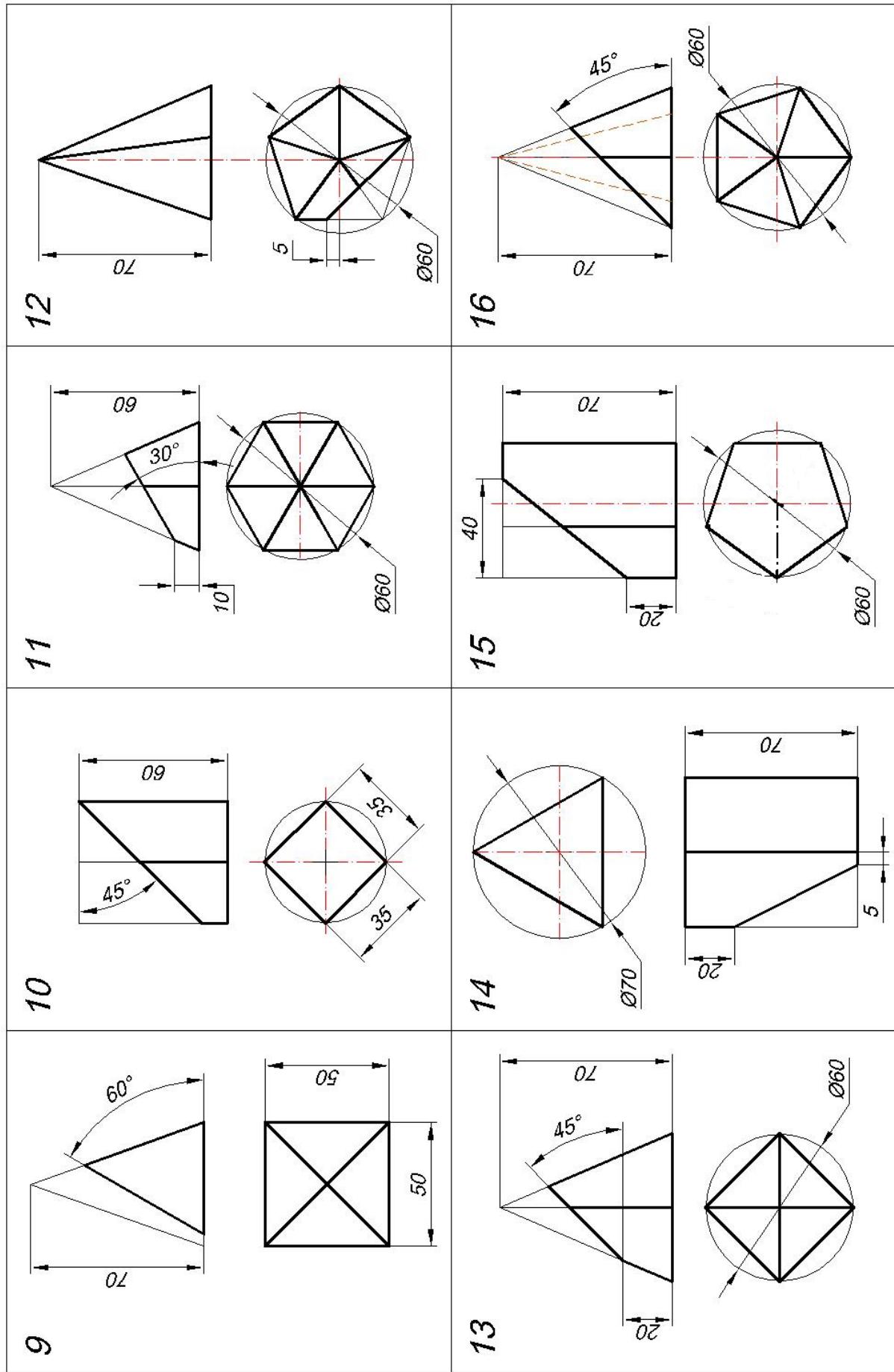
**SIRTLARNI
PROEKSIYALOVCHI TEKISLIK
BILAN KESISHUVI VA
KESIM YUZASINING
XAQIQIY KATTALIGINI
ANIQLASH**

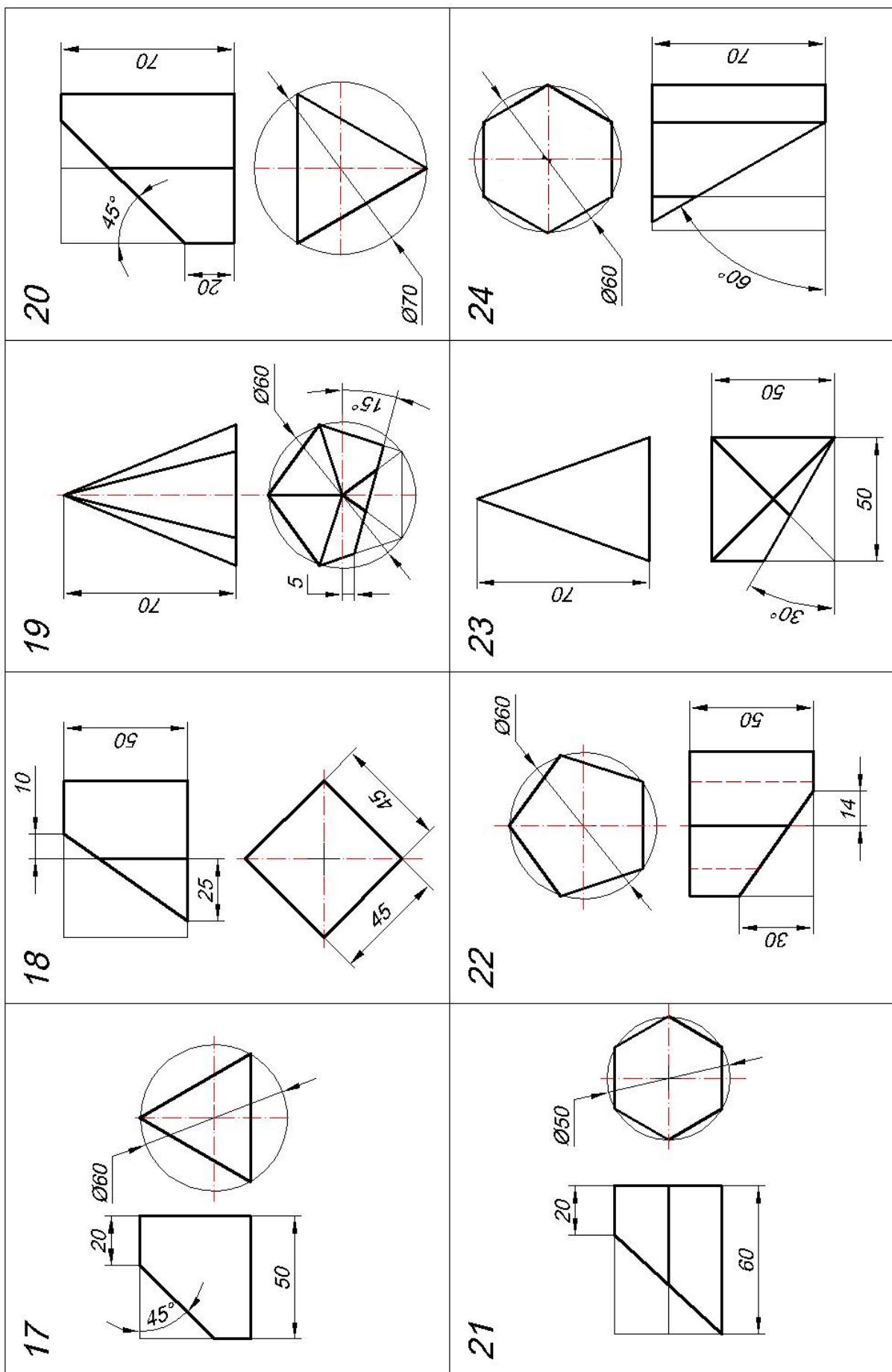
**MAVZUSIGA DOIR
VARIANTLAR**

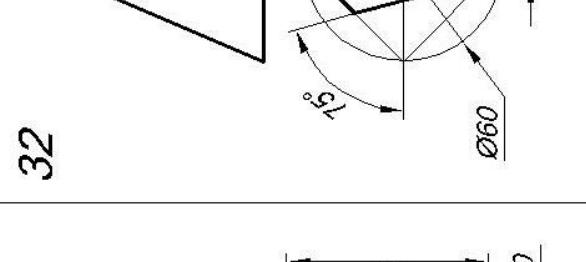
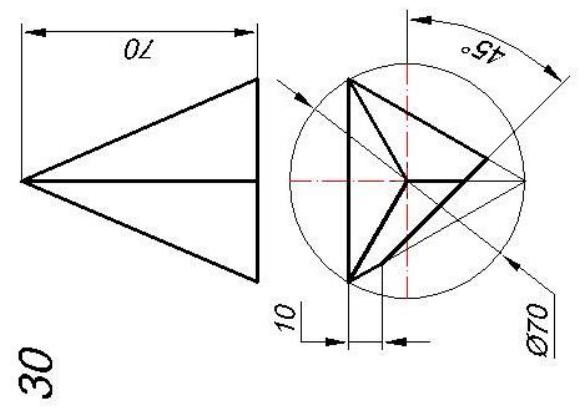
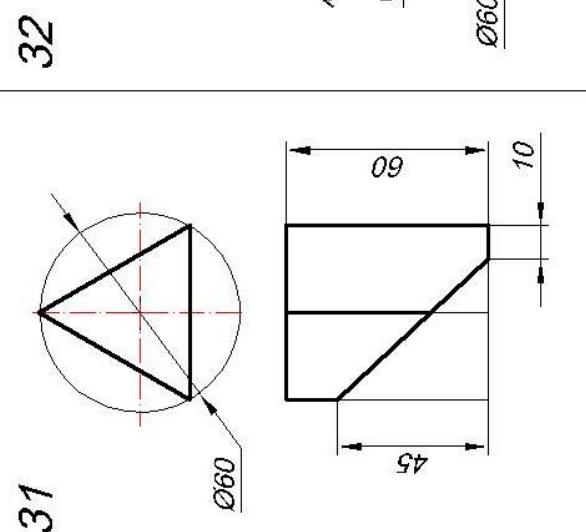
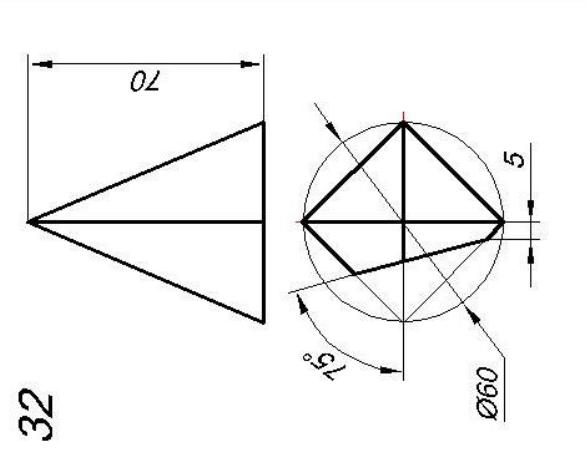
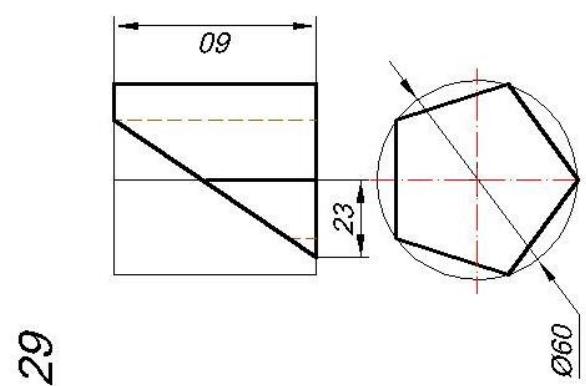
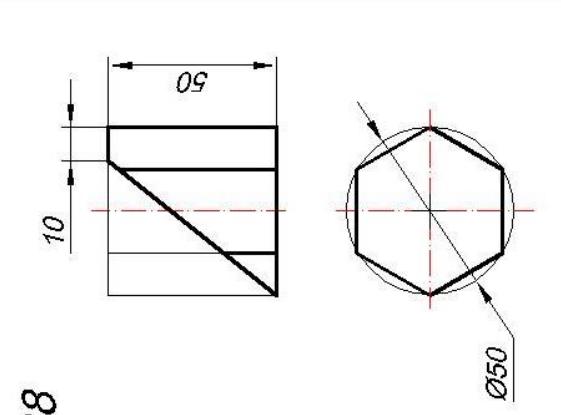
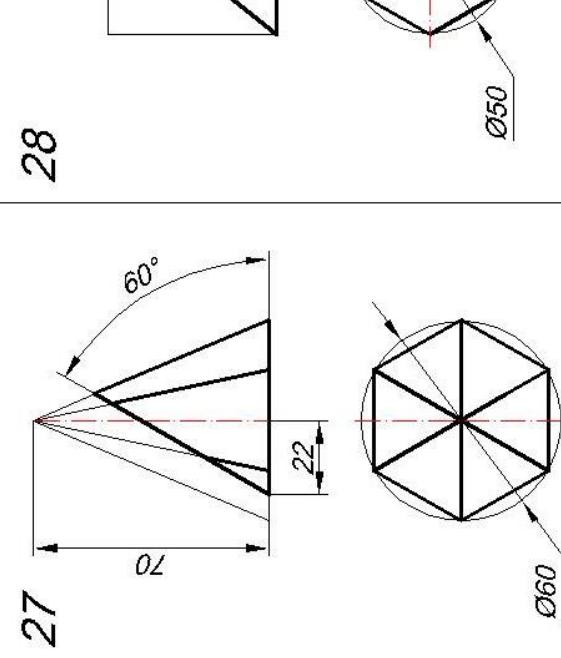
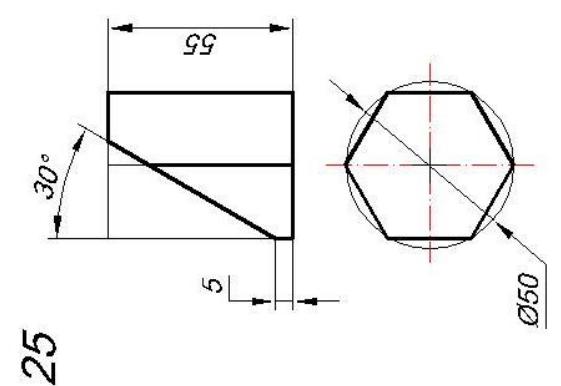












10-MASHQ

KO‘PYOQLIKLARDА

OCHIQ TESHIK

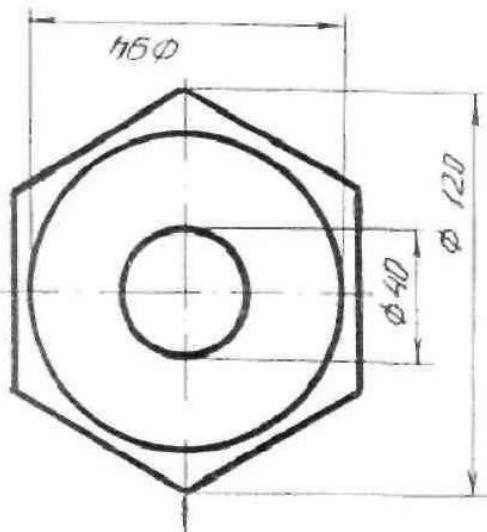
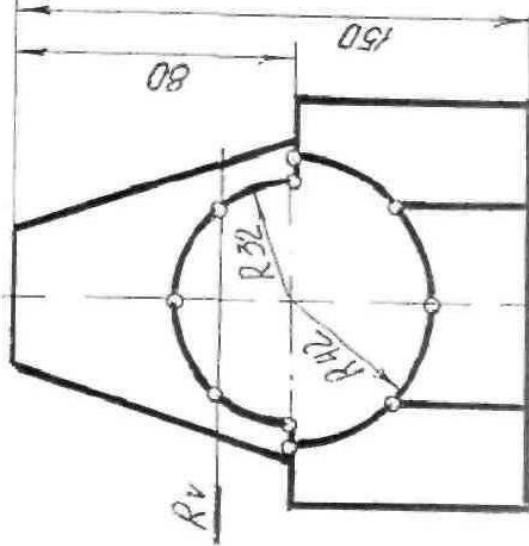
PROEKSIYALARINI

YASASH

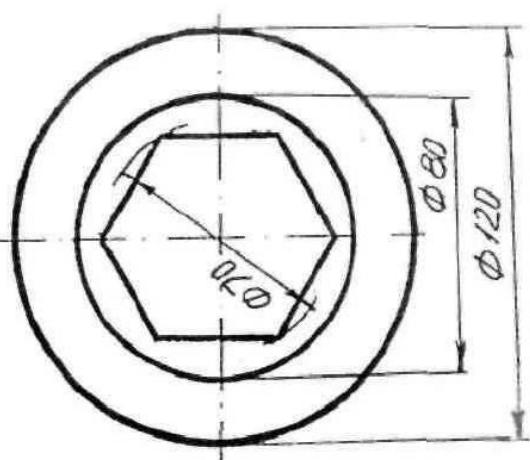
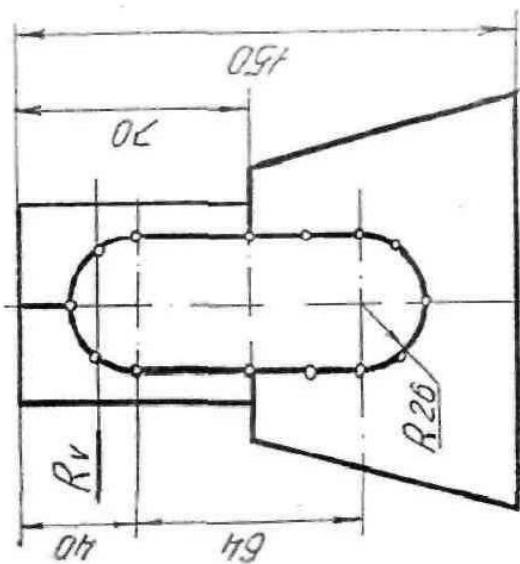
MAVZUSIGA DOIR

VARIANTLAR

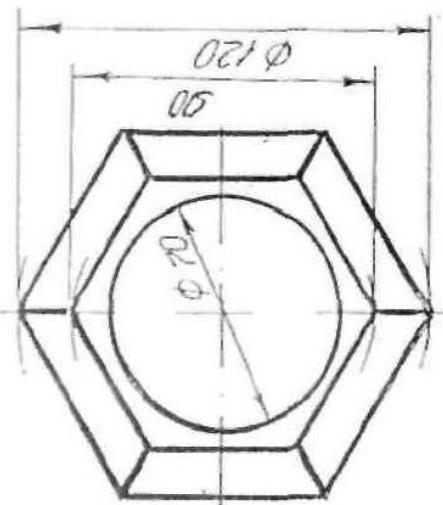
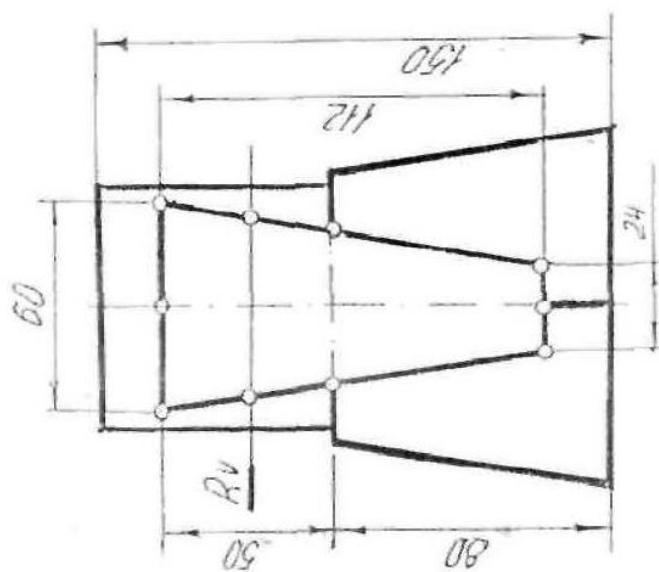
(2)



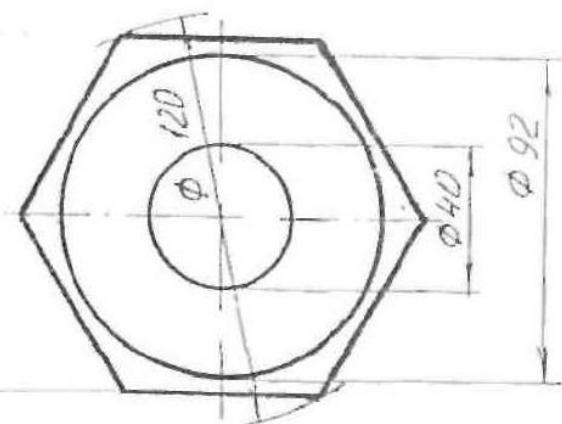
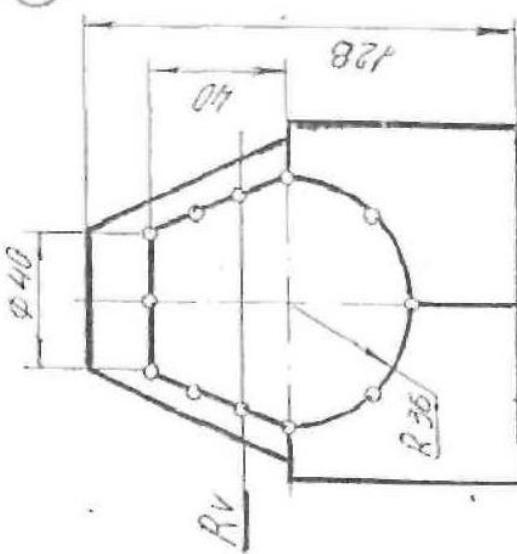
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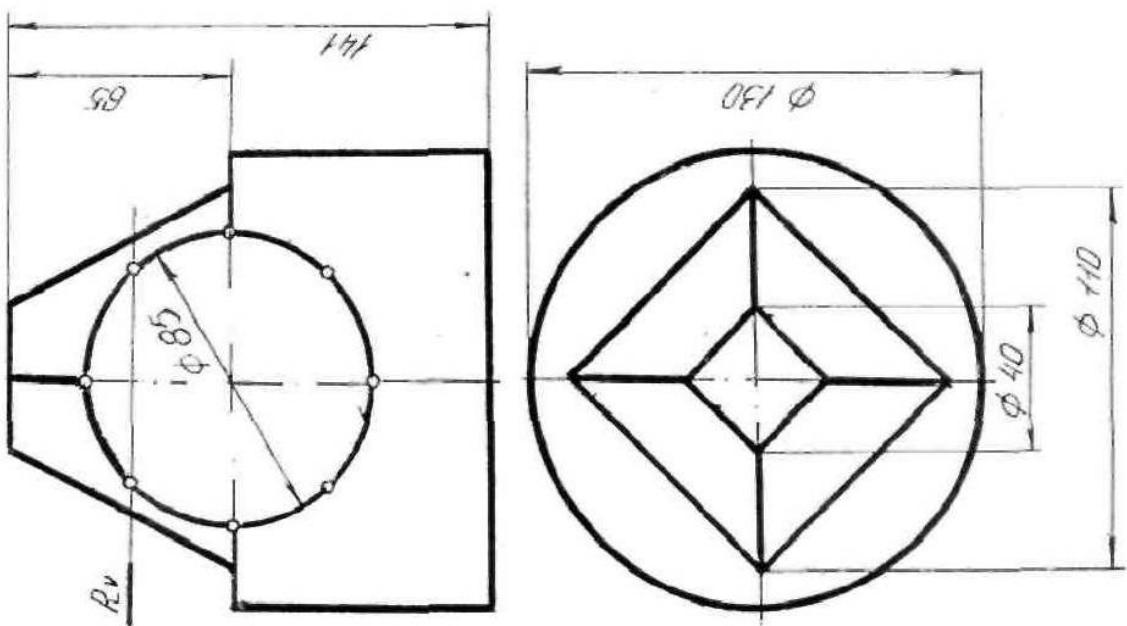
(4)



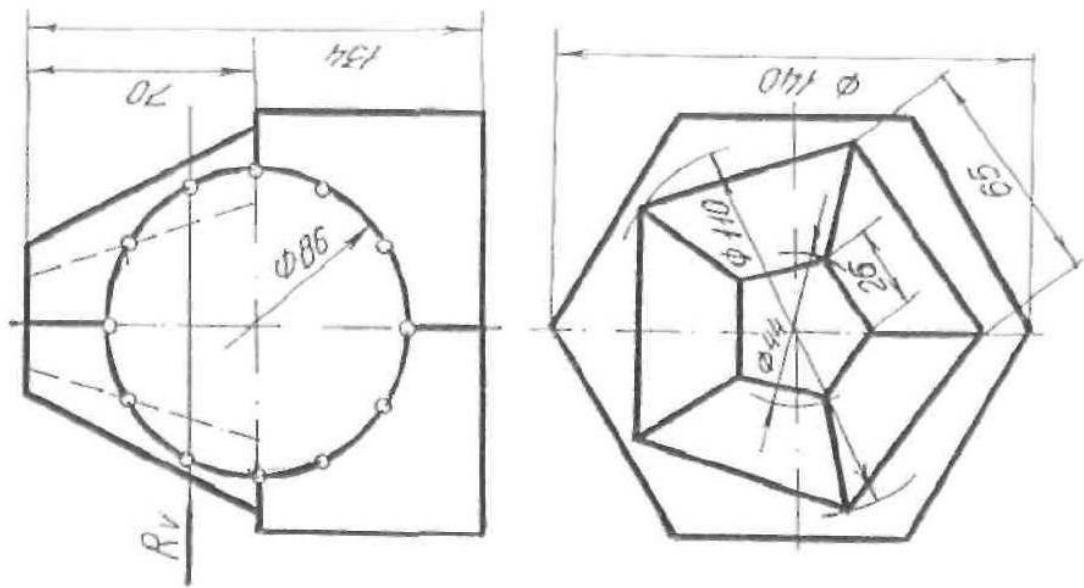
(5)



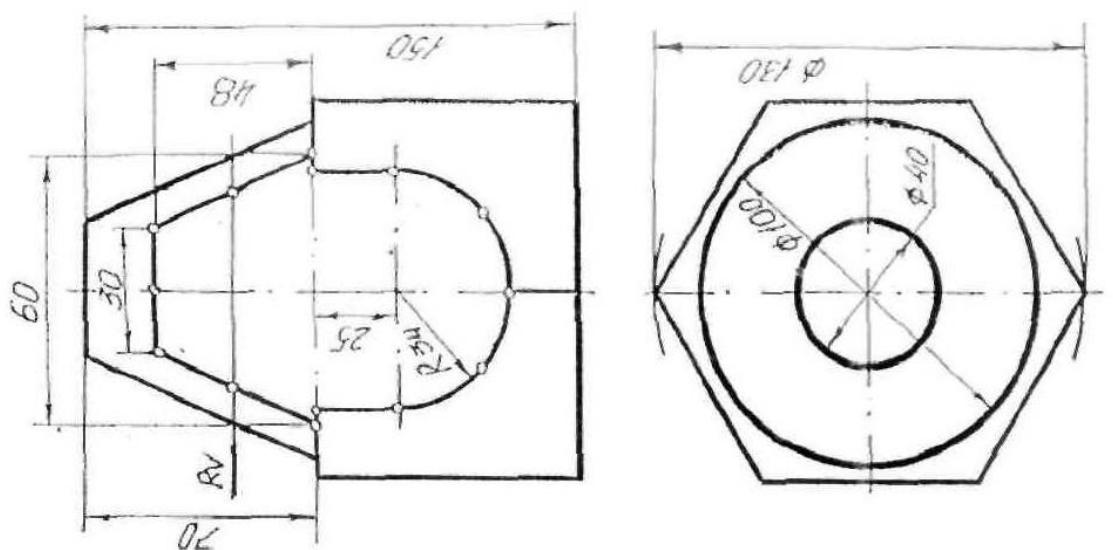
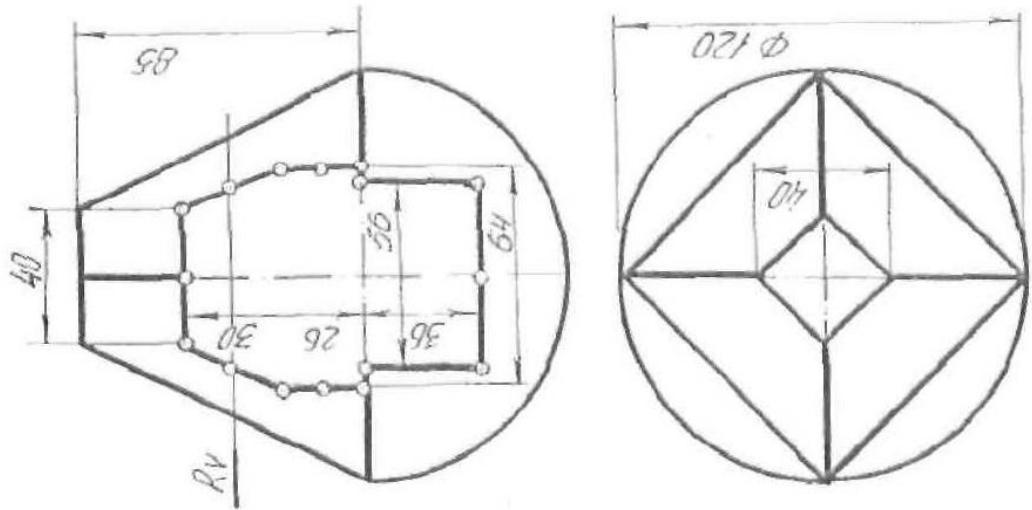
(6)



(5)

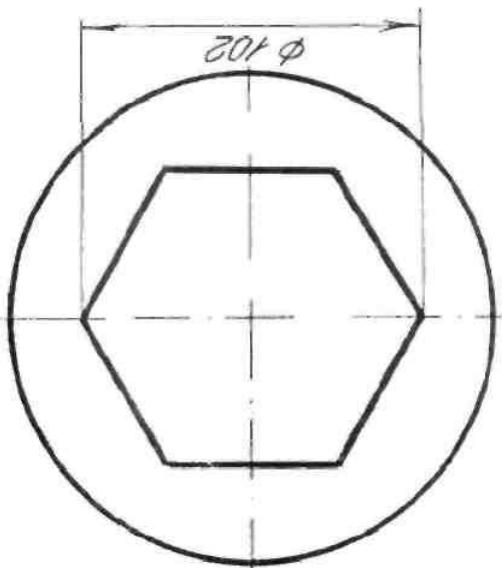
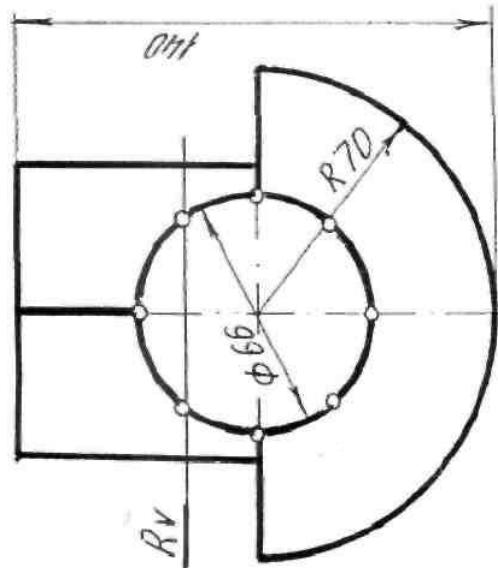


⑧

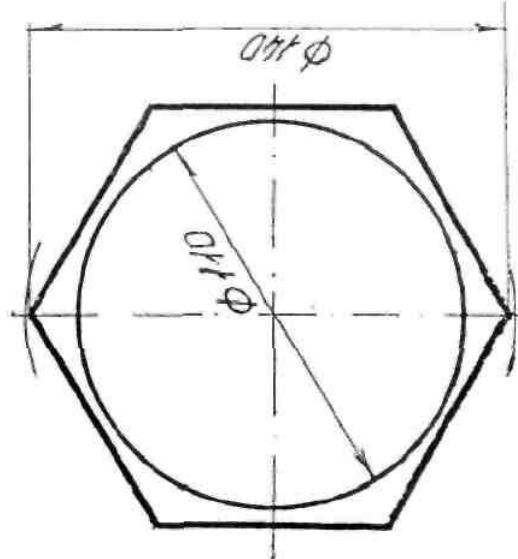
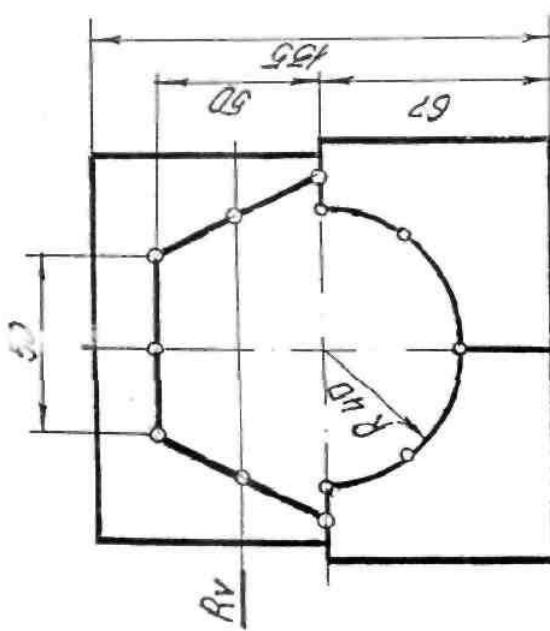


⑦

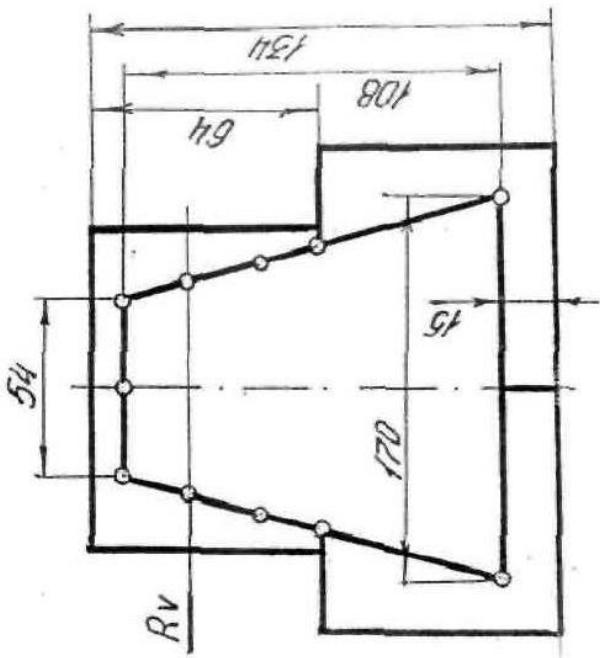
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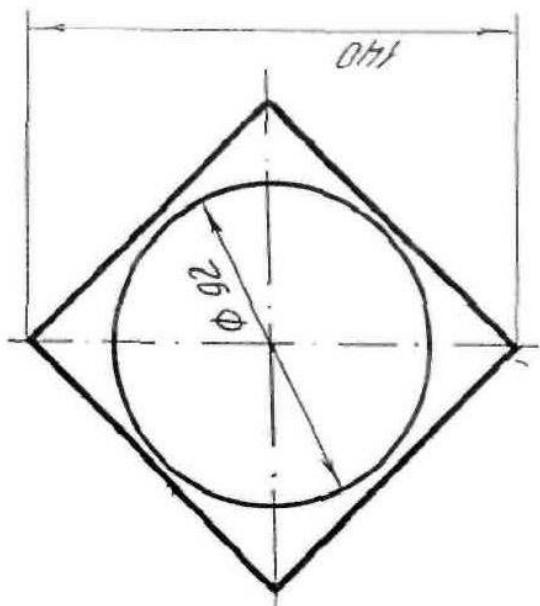
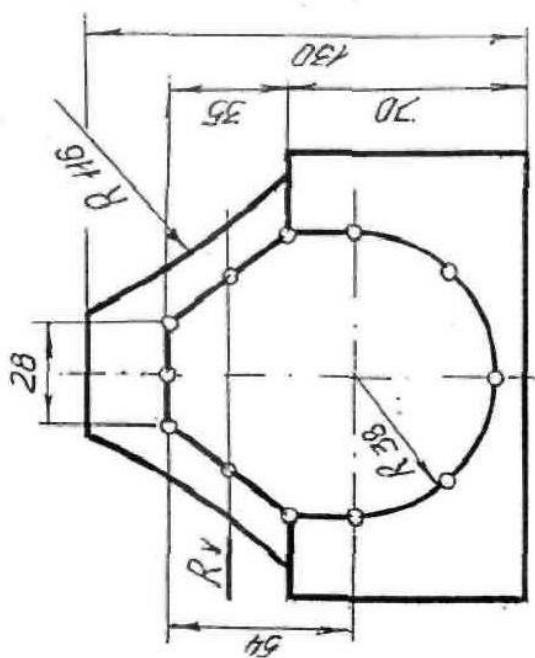
9



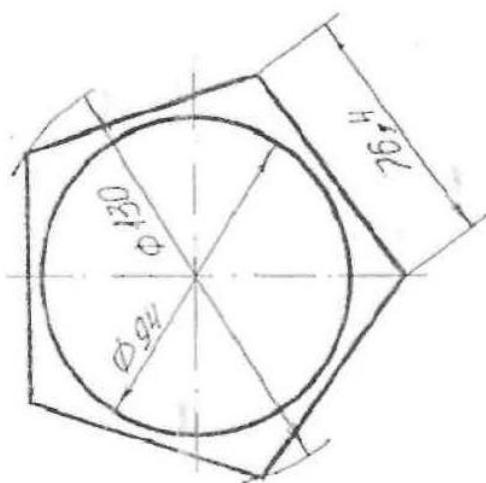
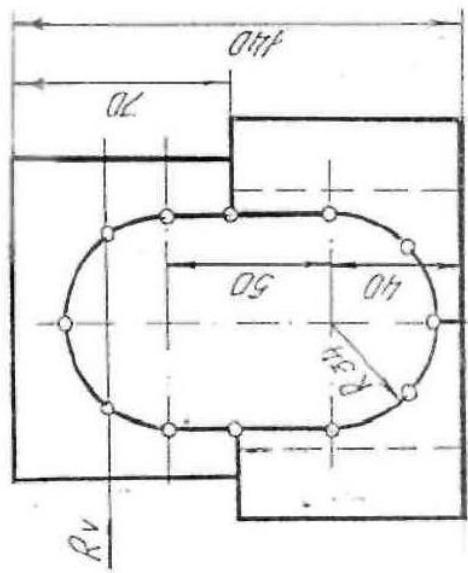
12



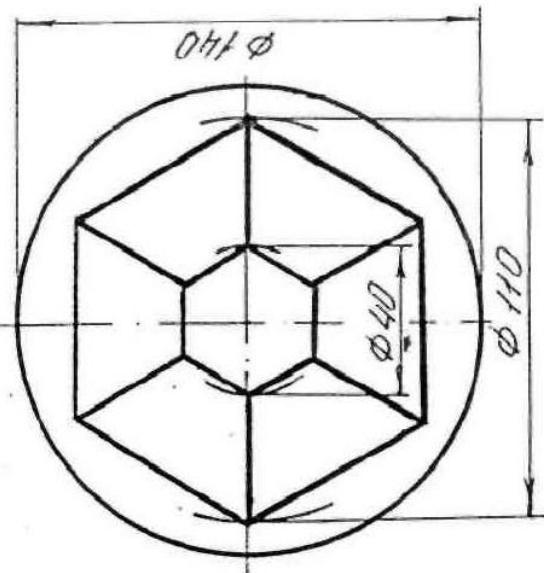
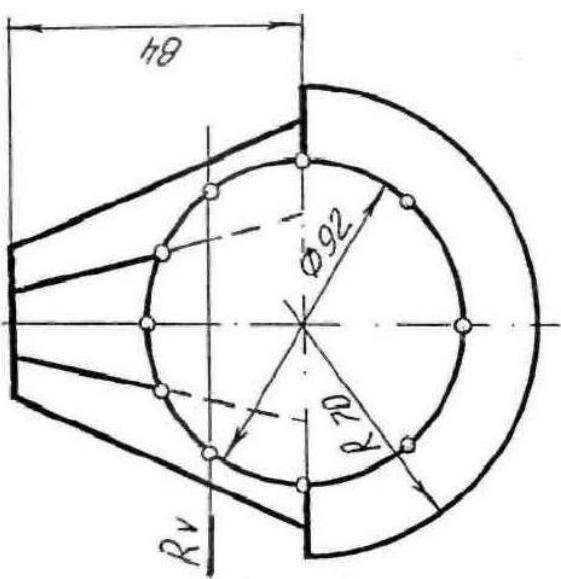
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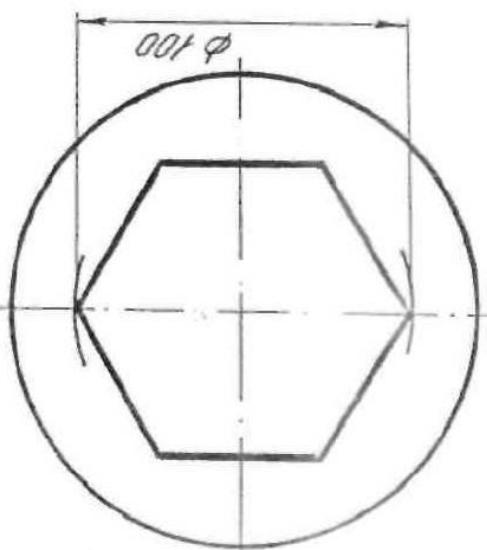
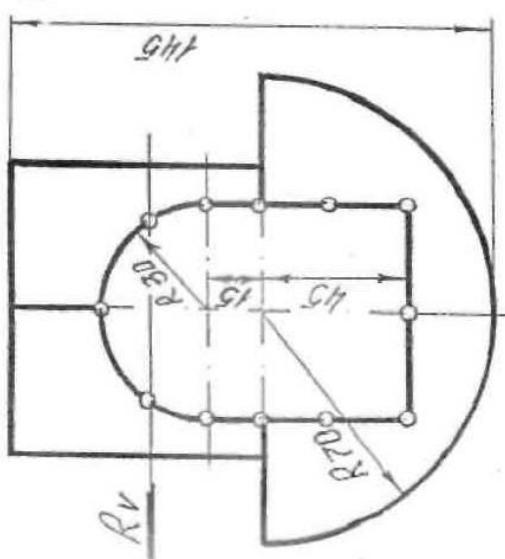
④



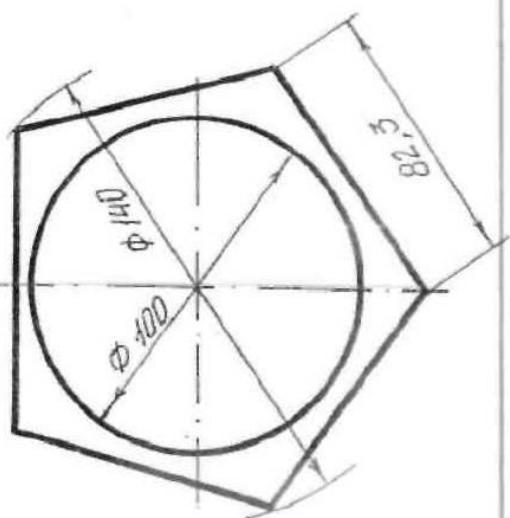
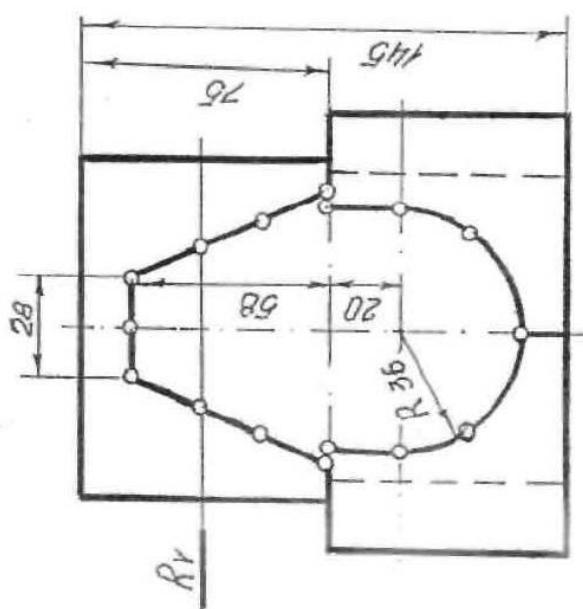
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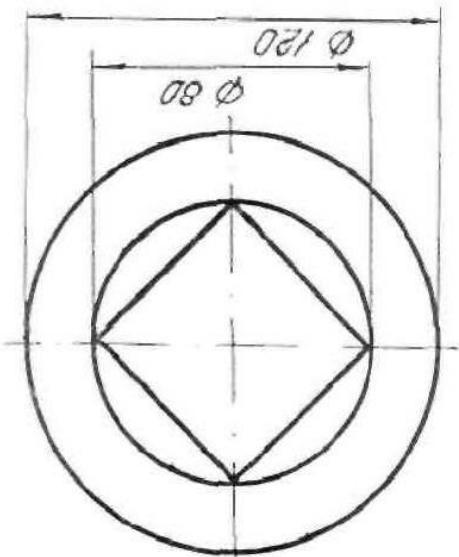
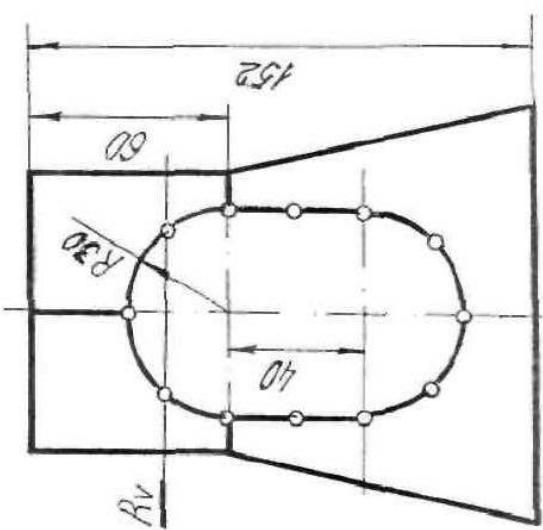


⑯

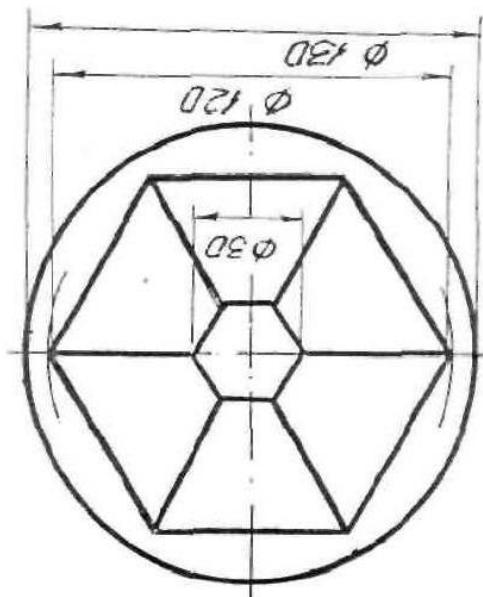
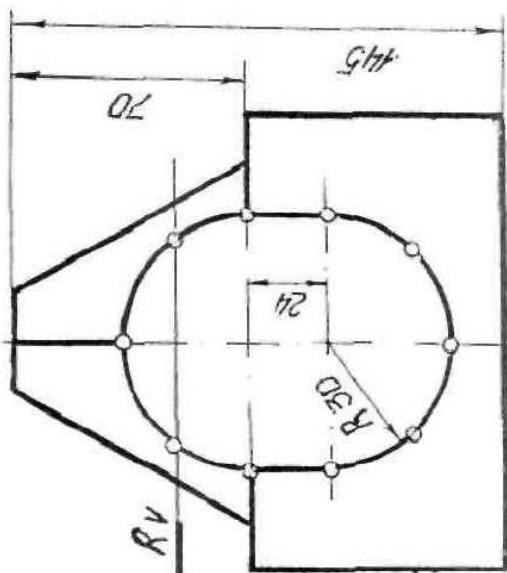


⑮

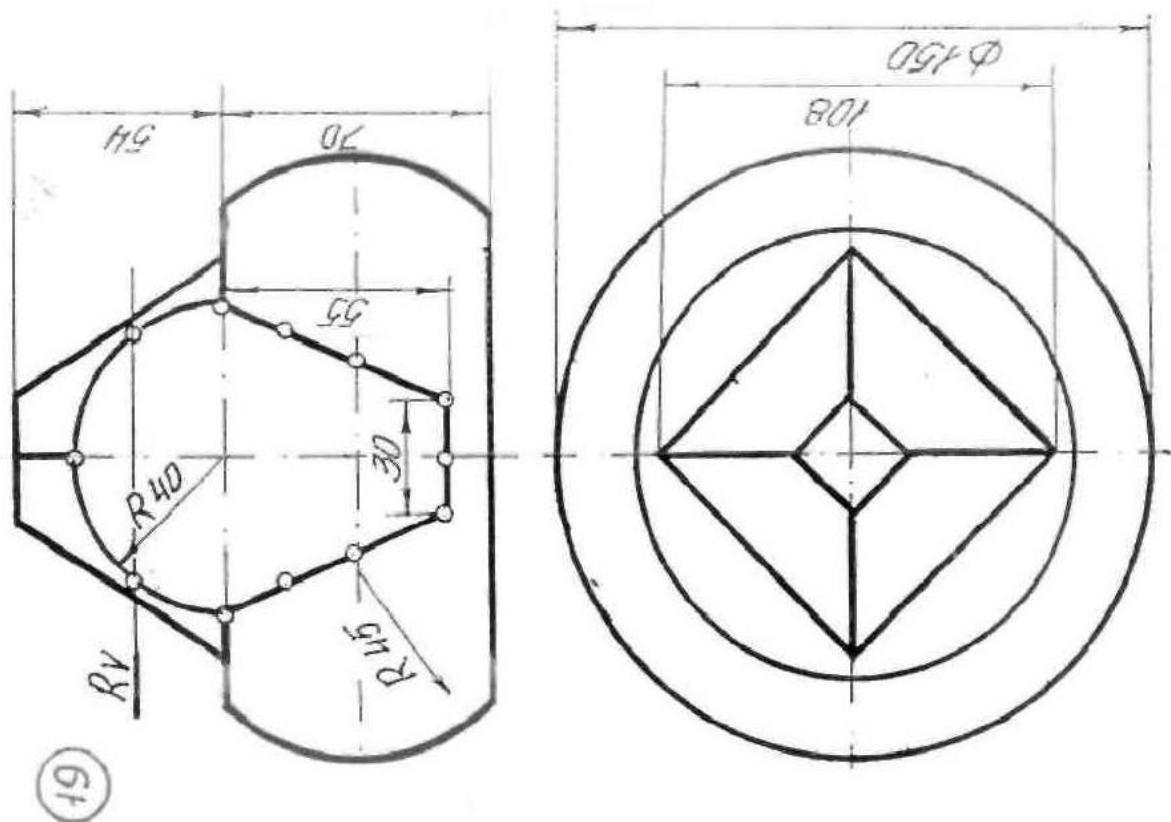
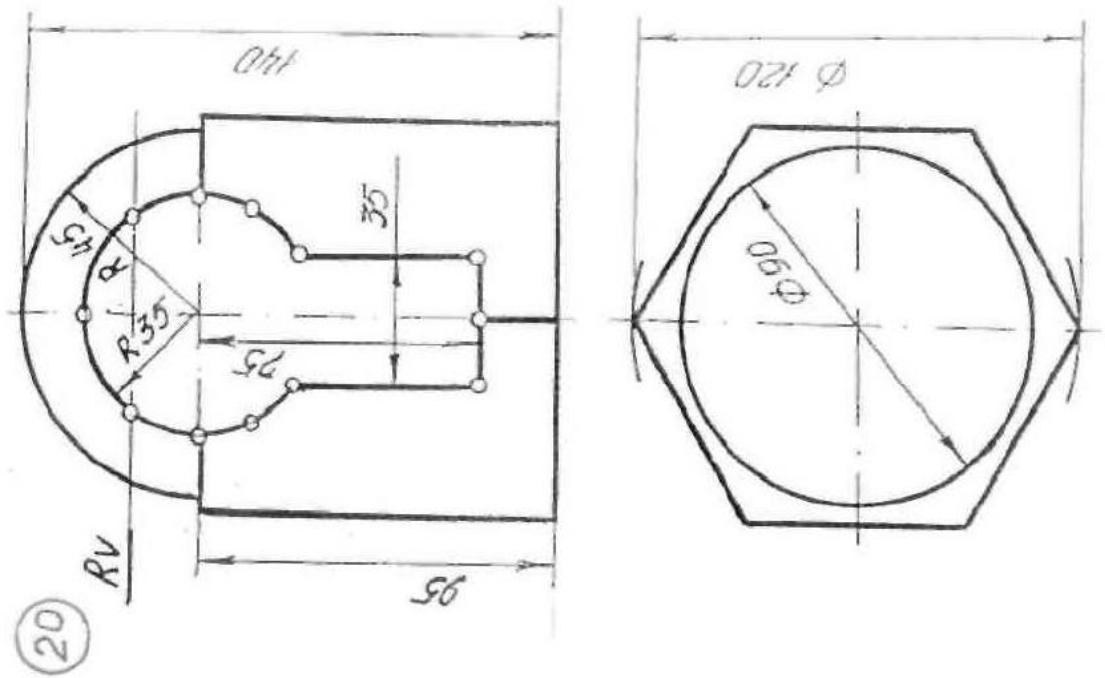


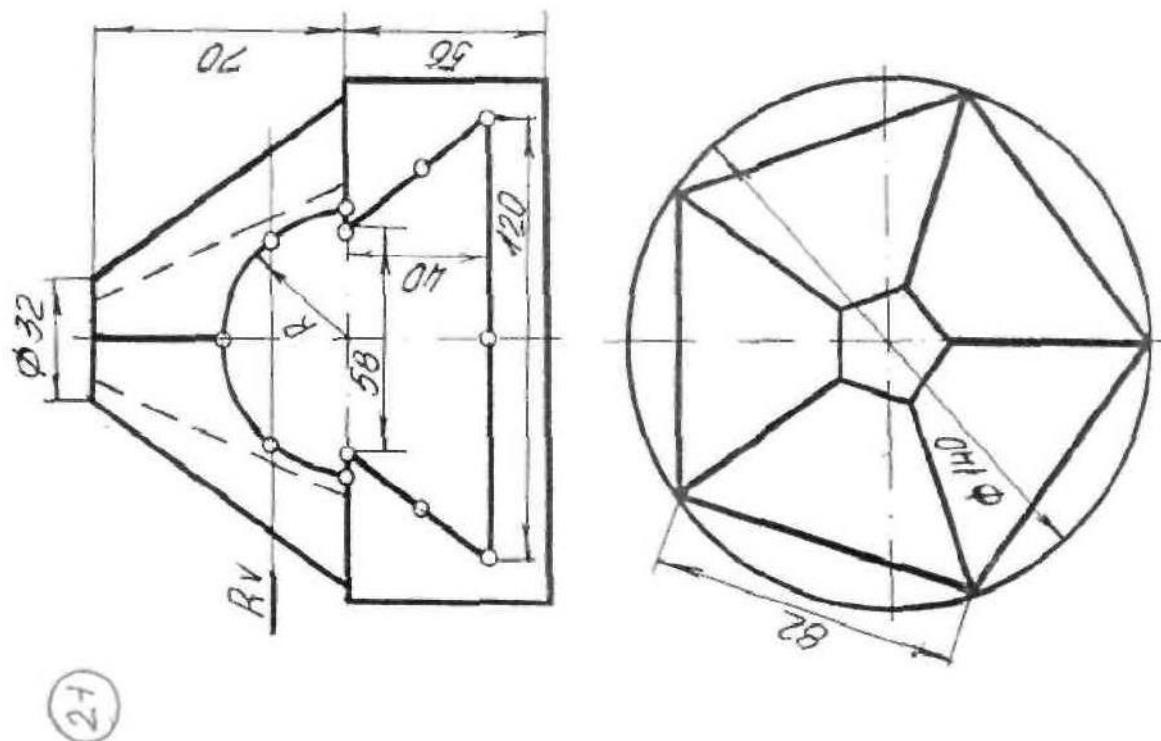
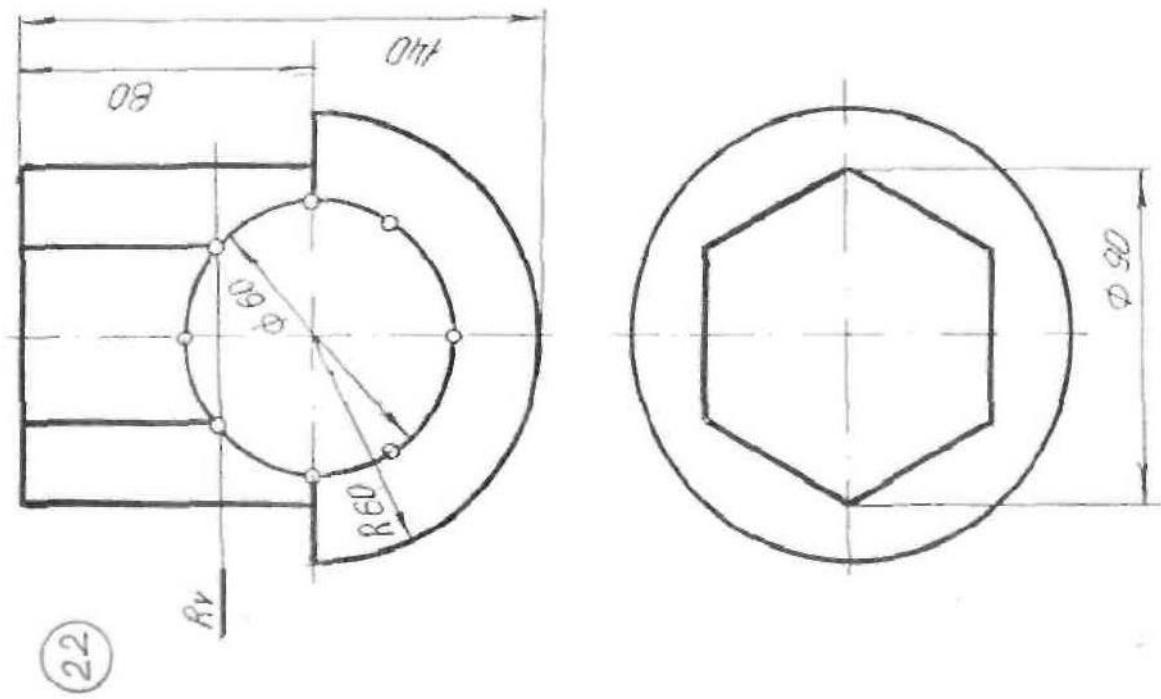


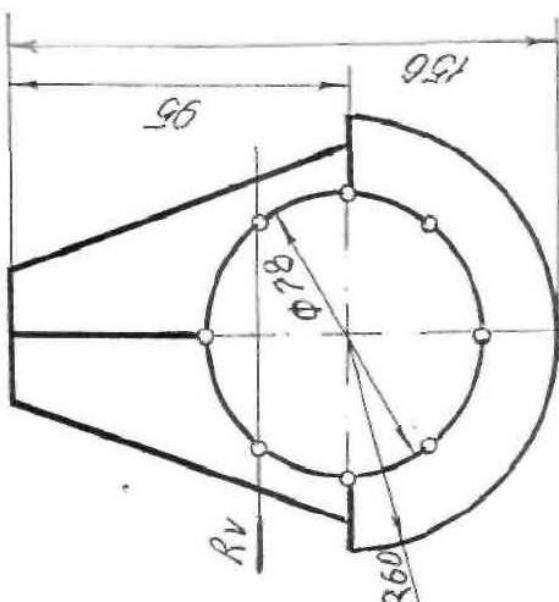
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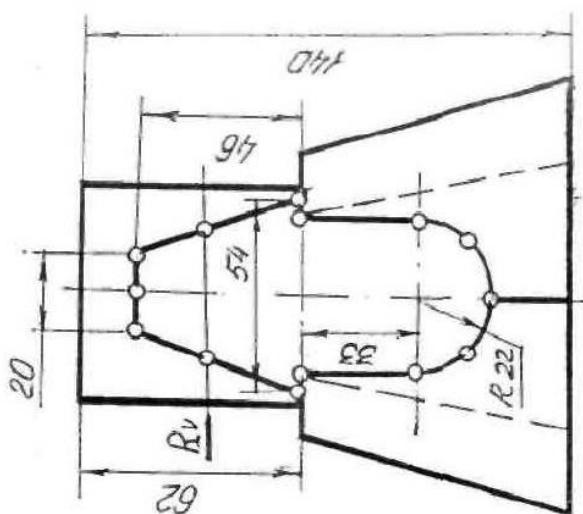
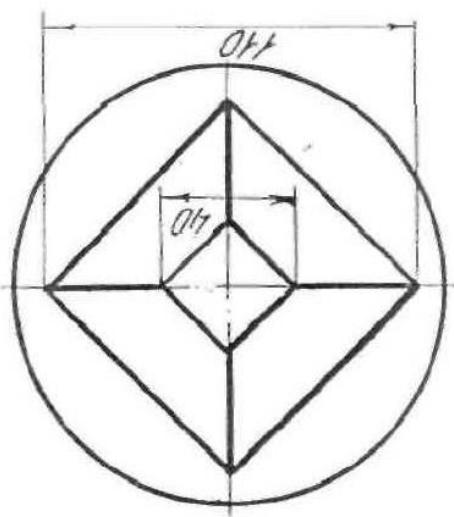
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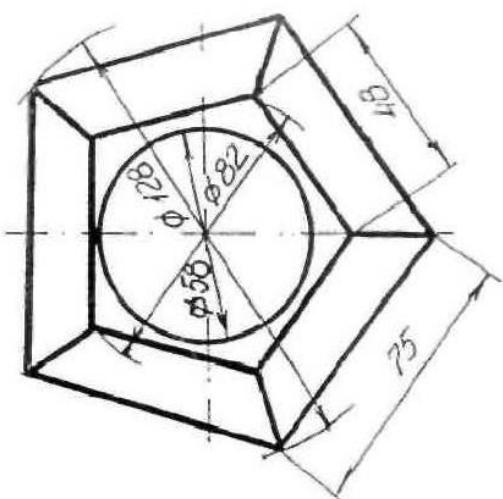


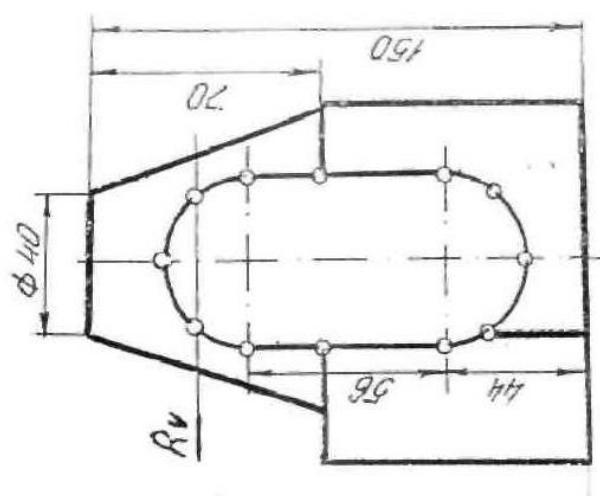


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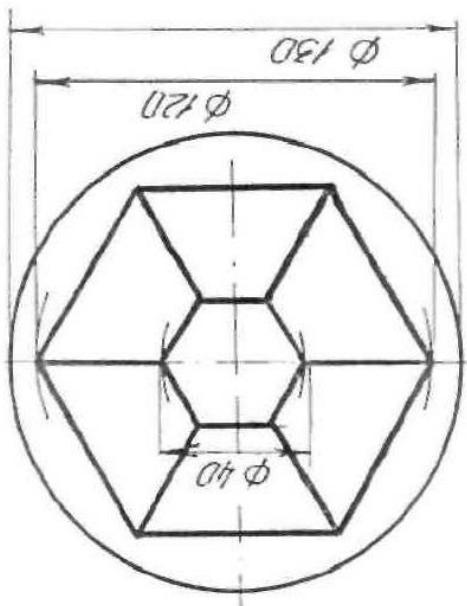
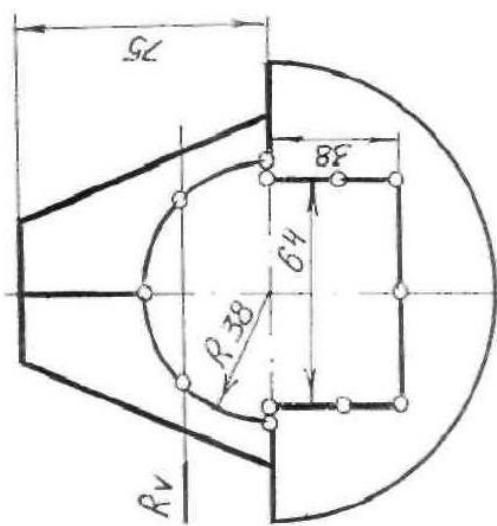
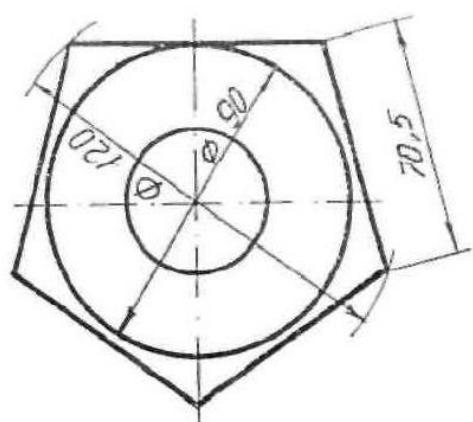


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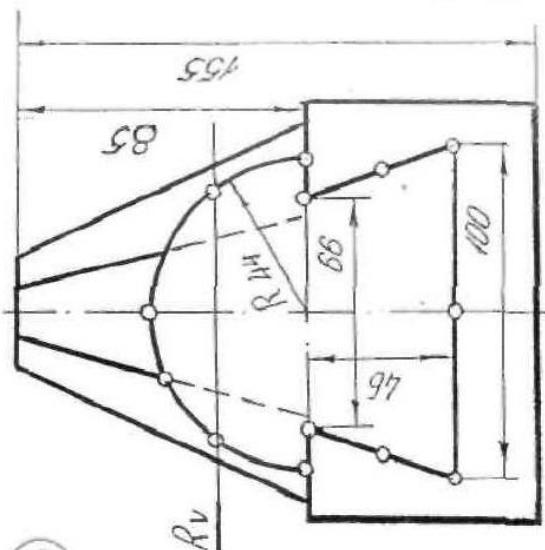




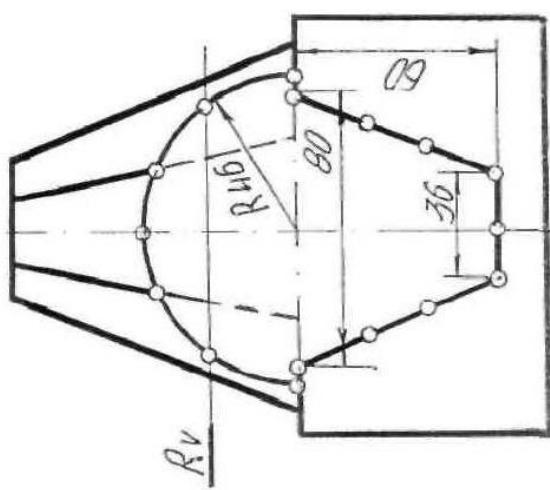
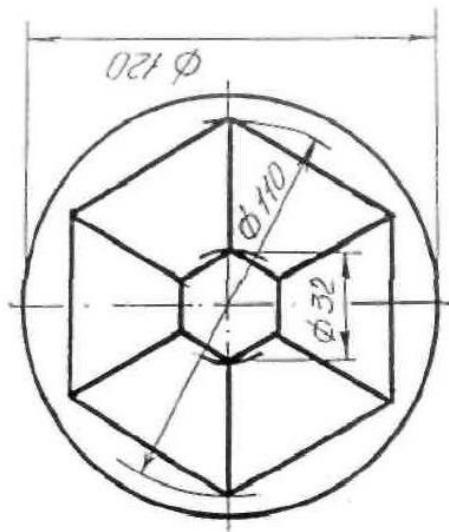
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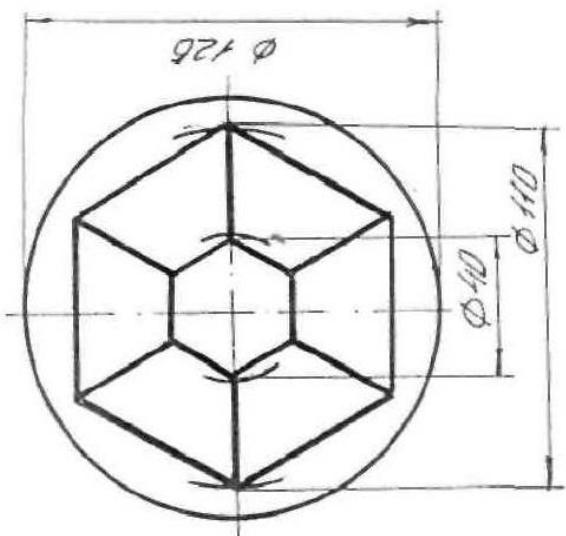
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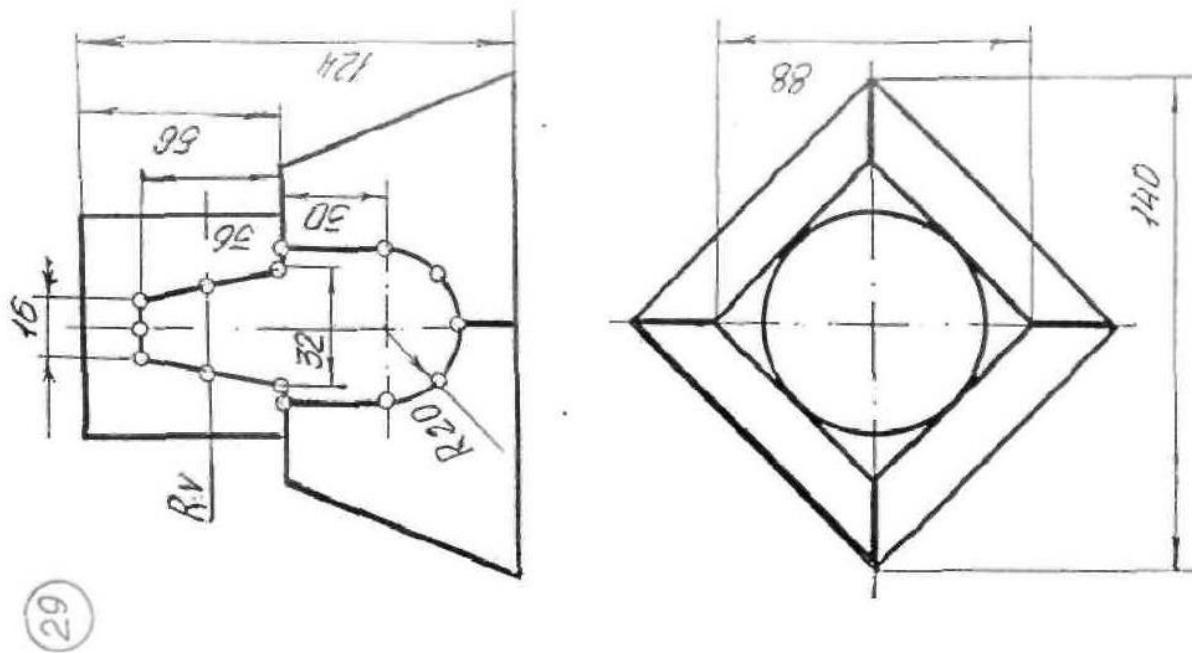
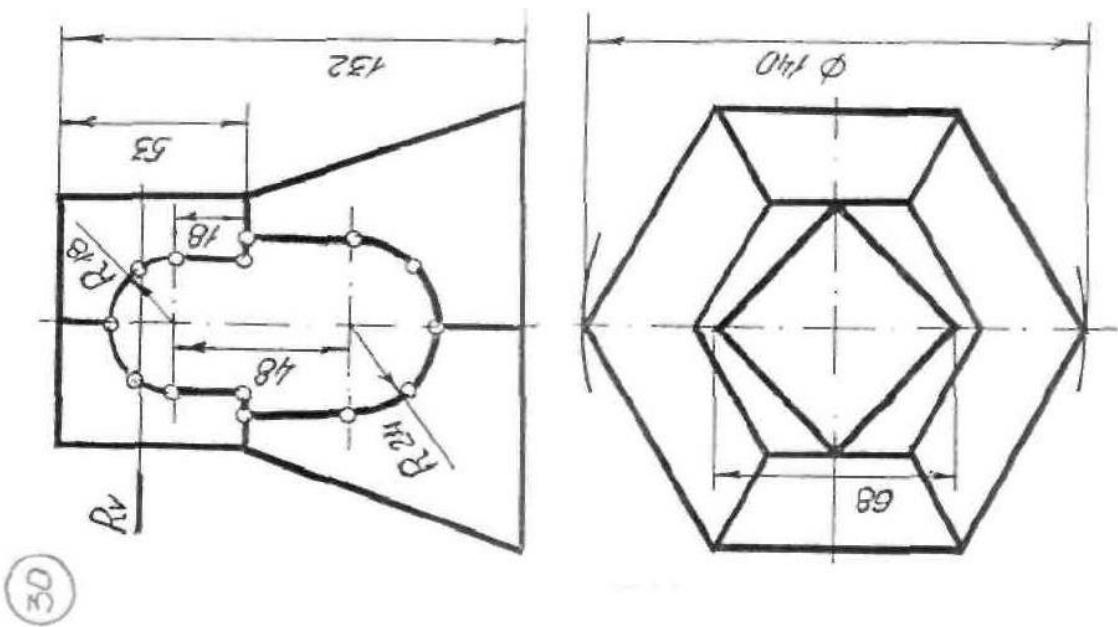


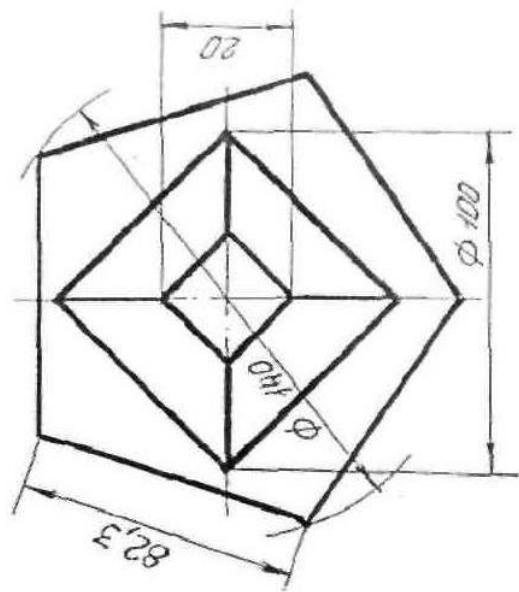
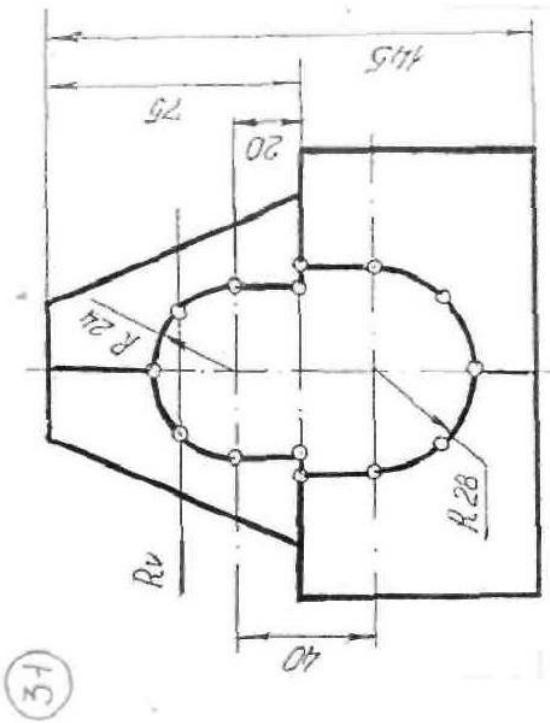
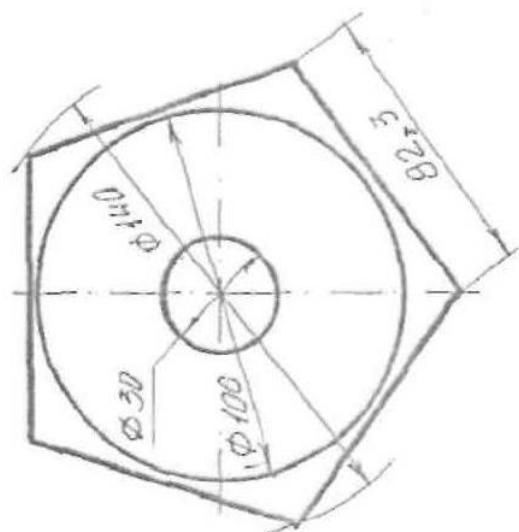
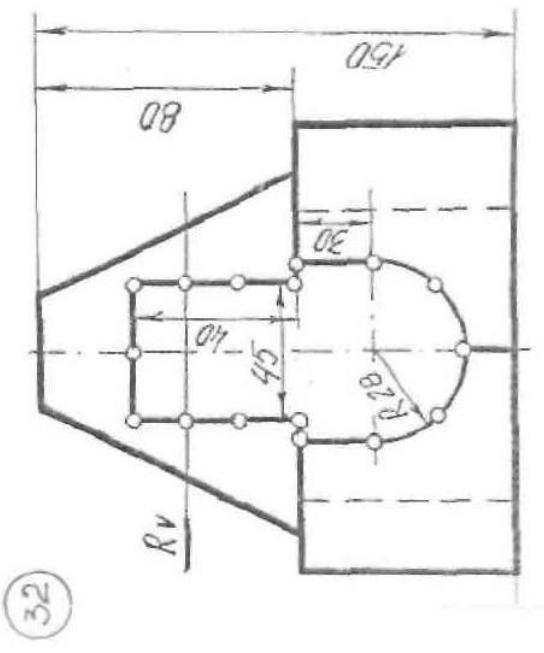
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11-MASHQ

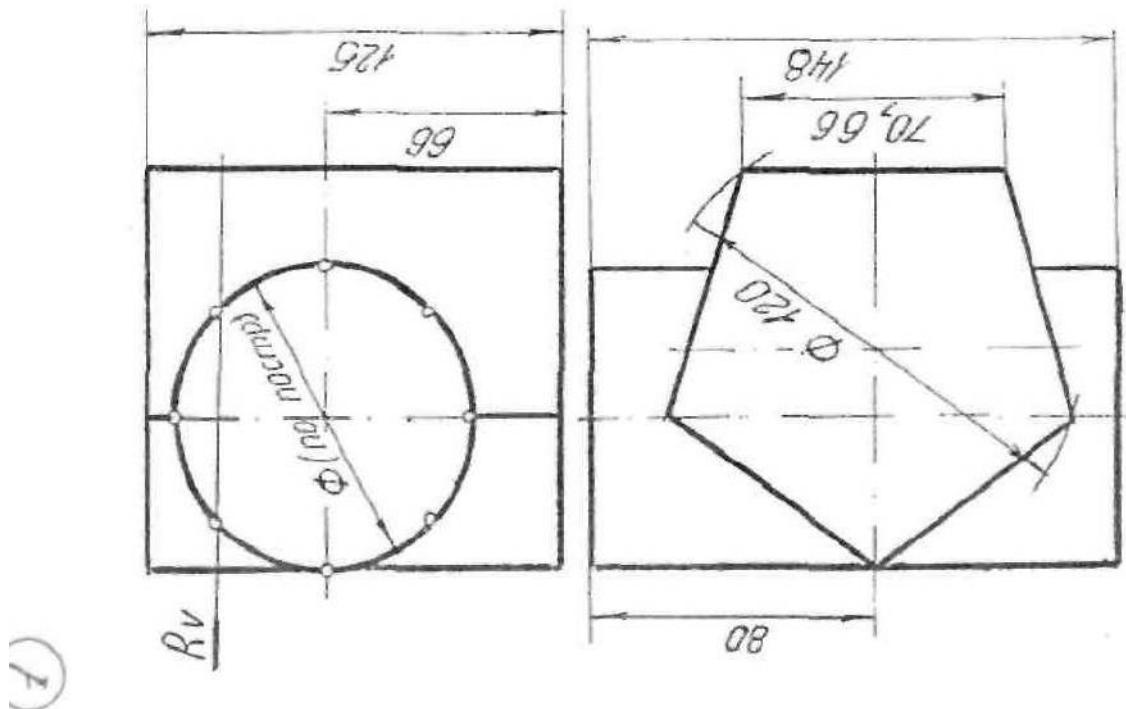
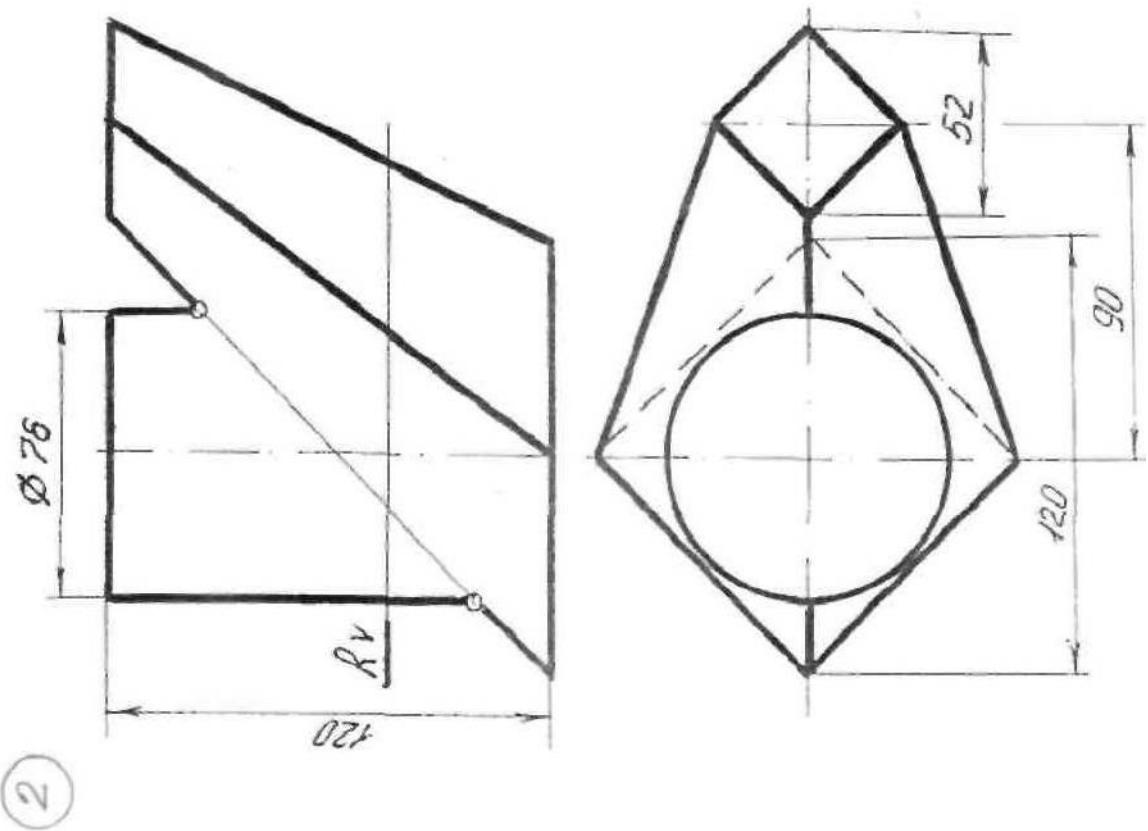
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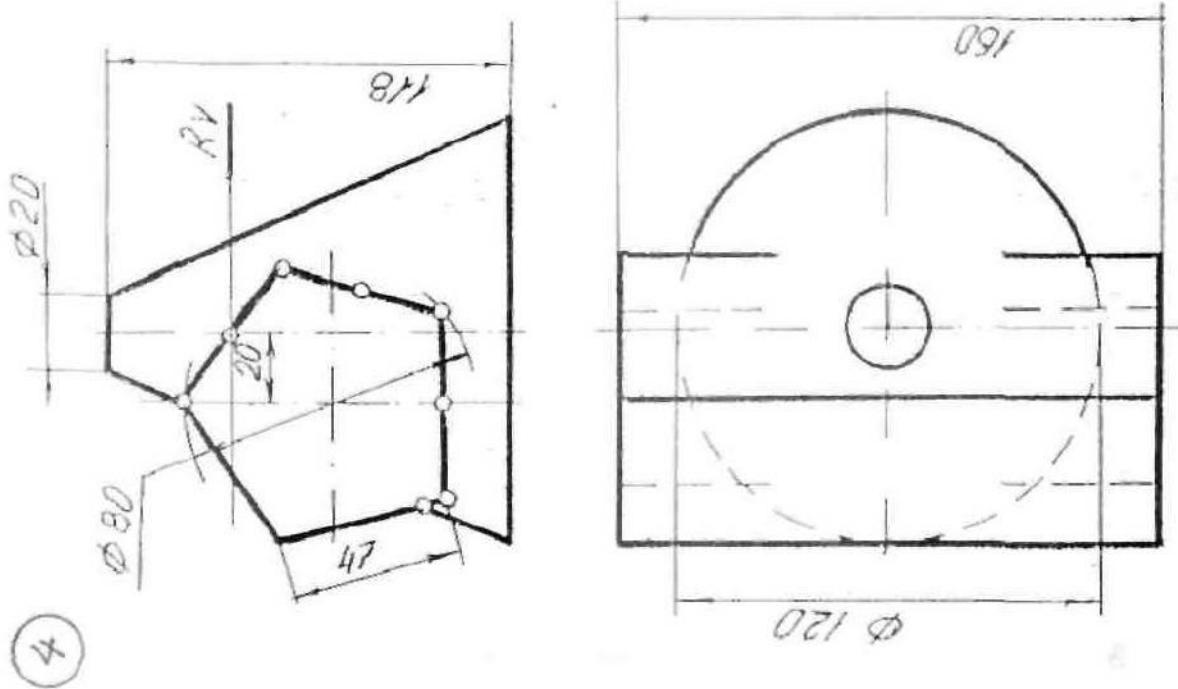
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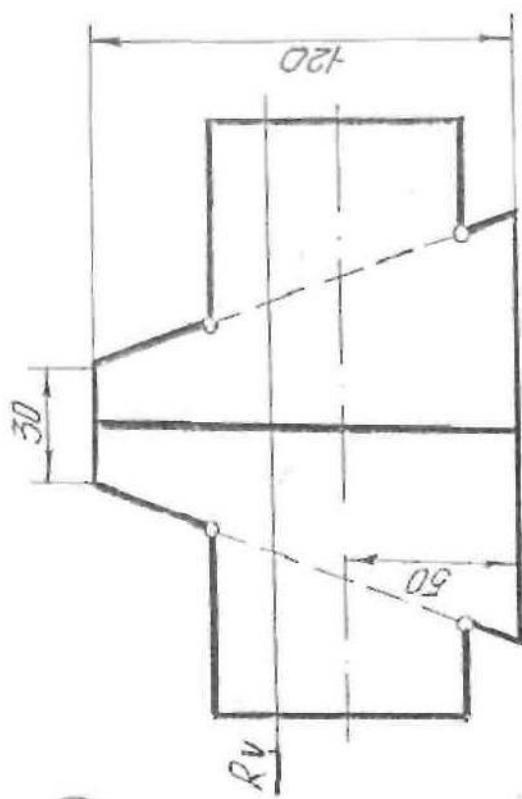
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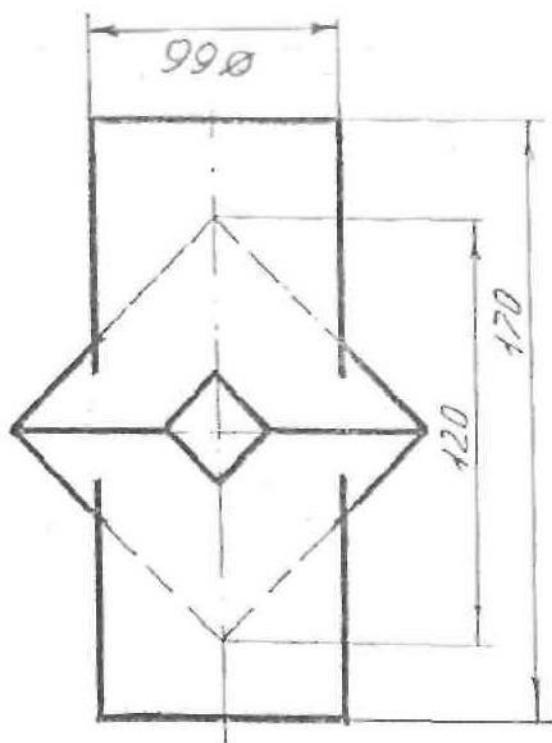


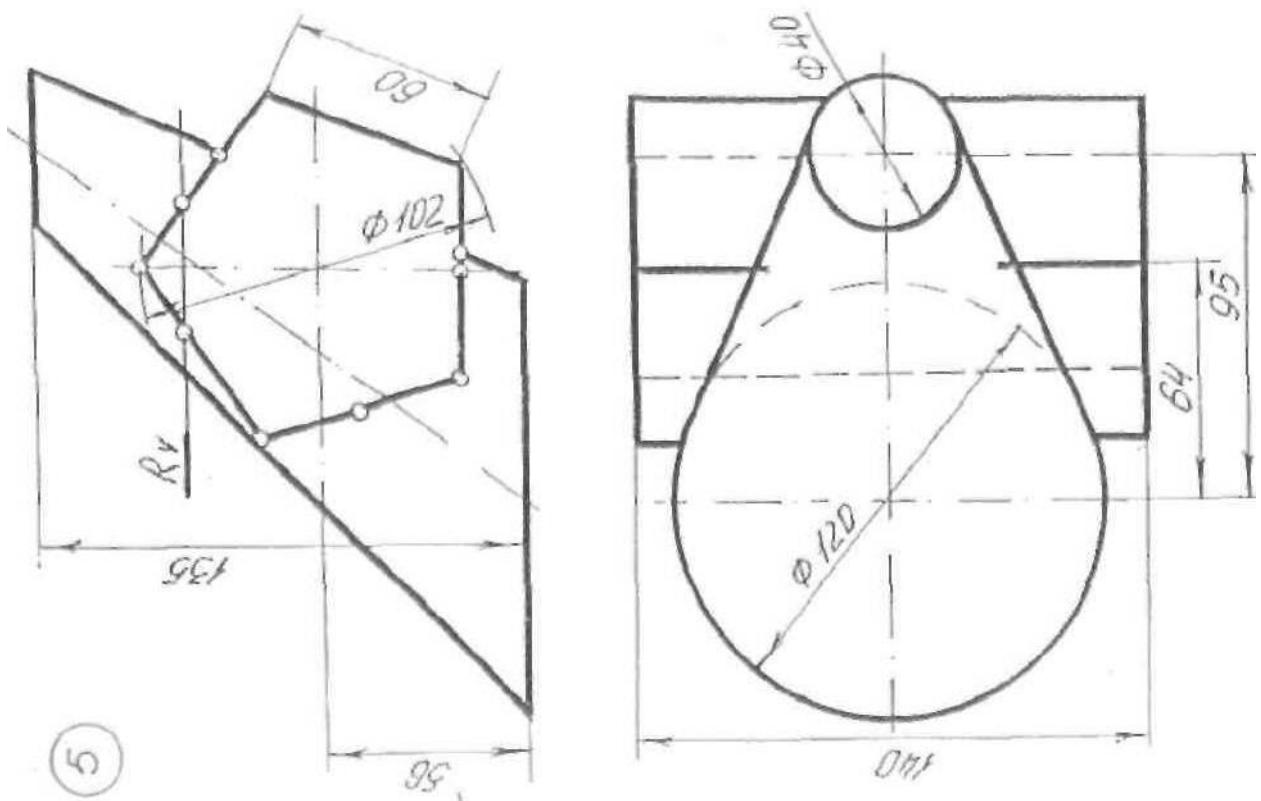
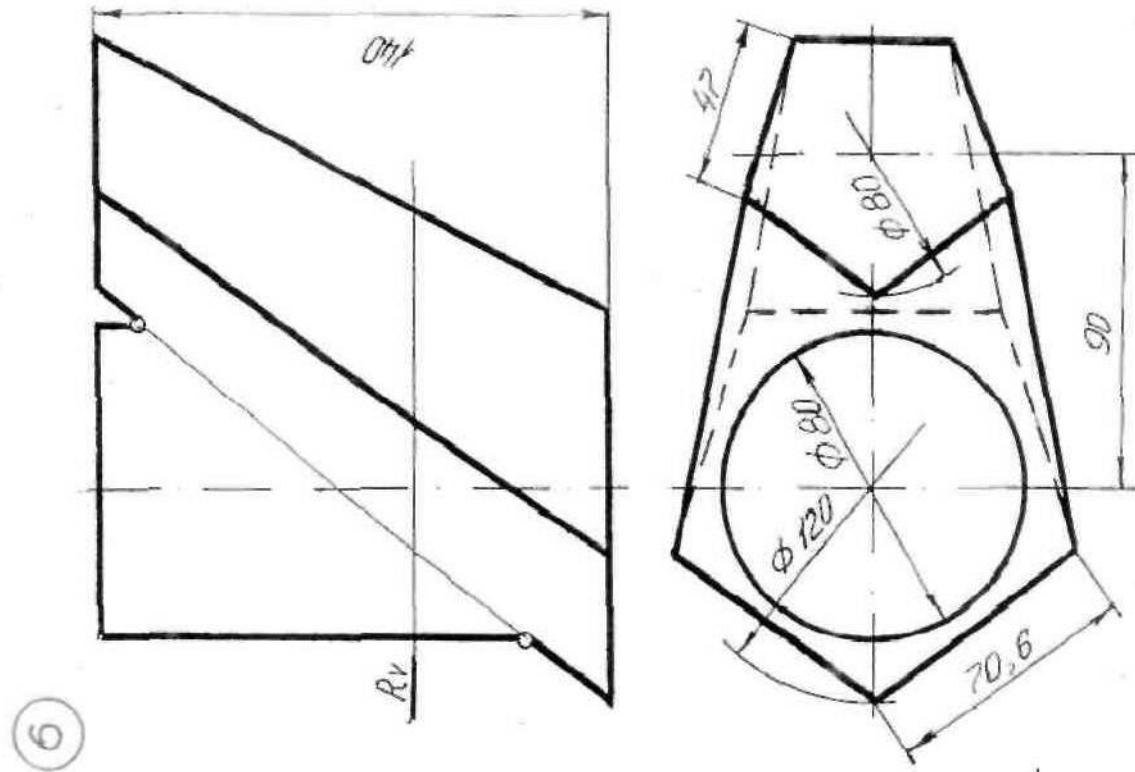


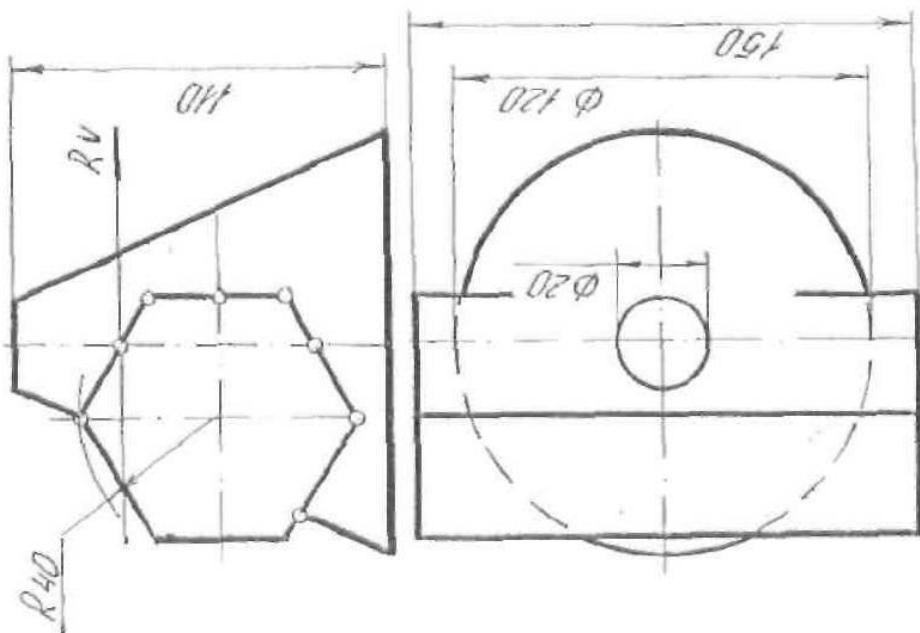
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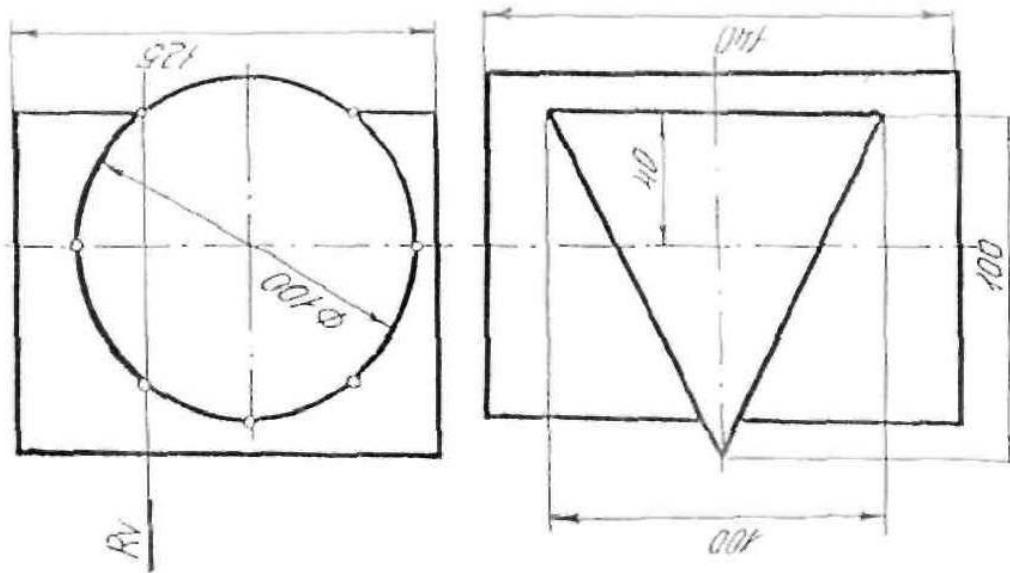
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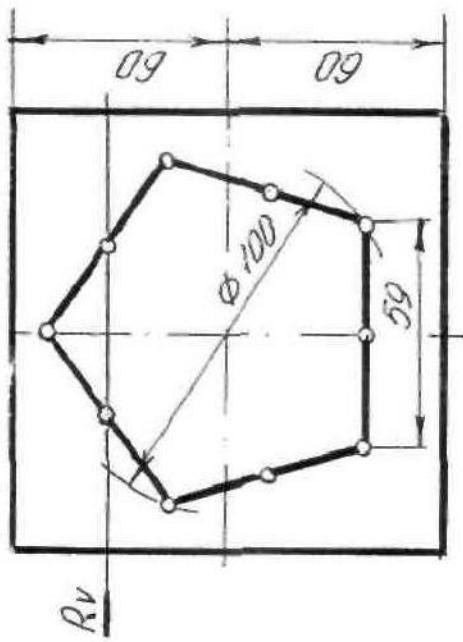




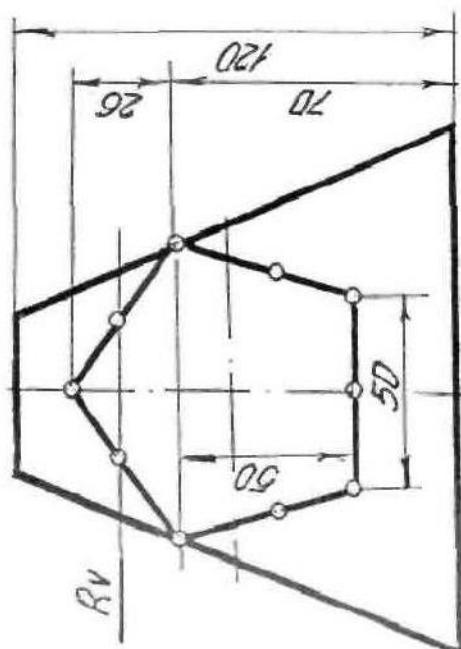
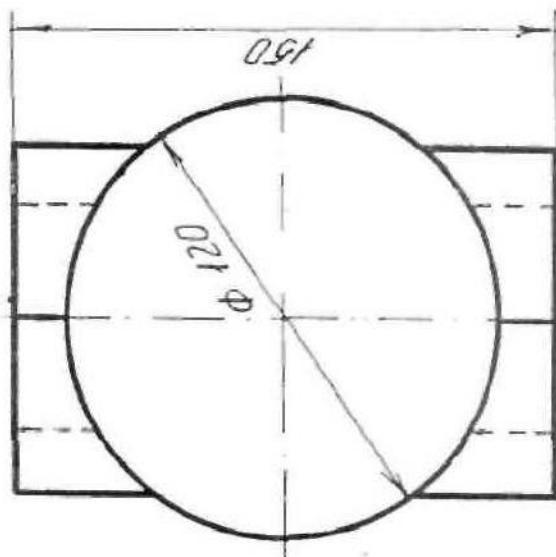
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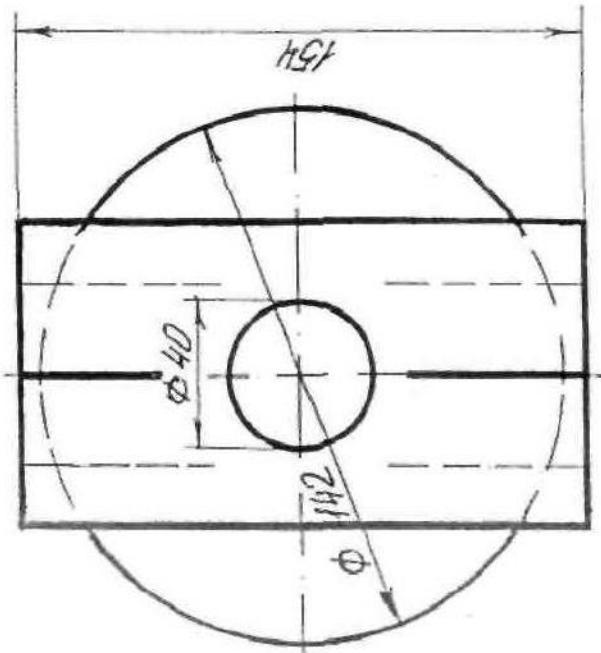
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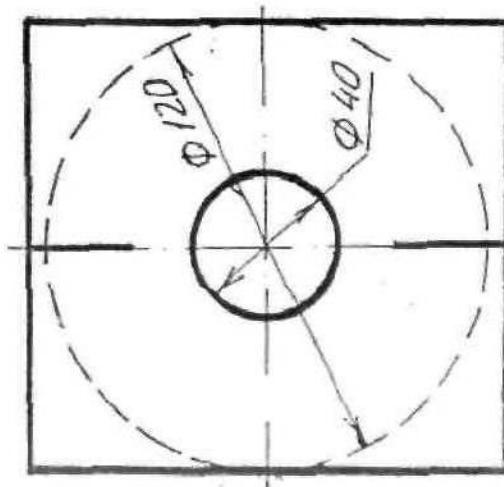
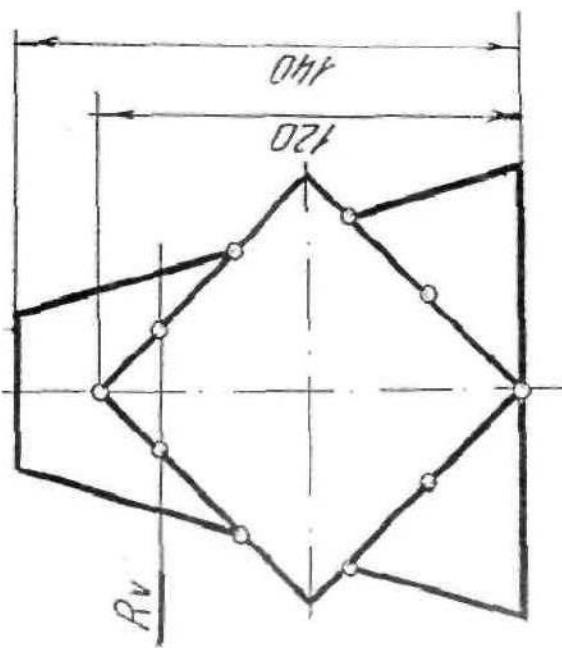


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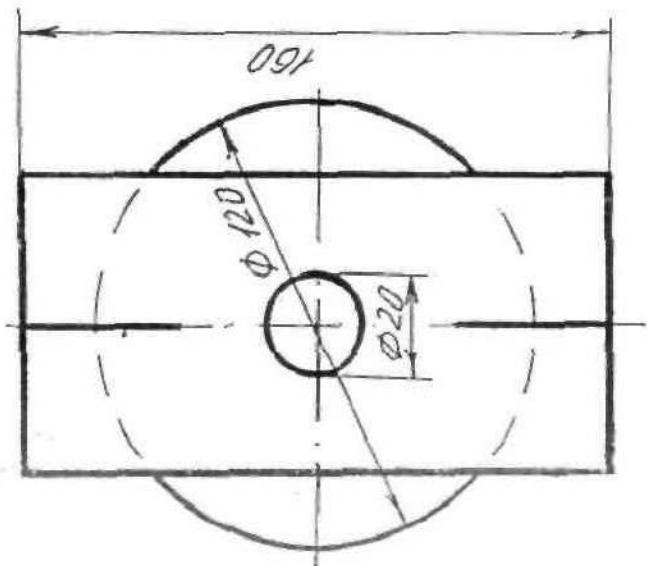
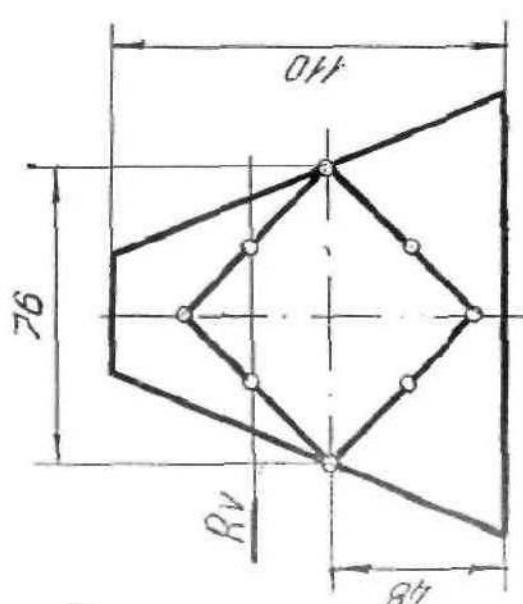


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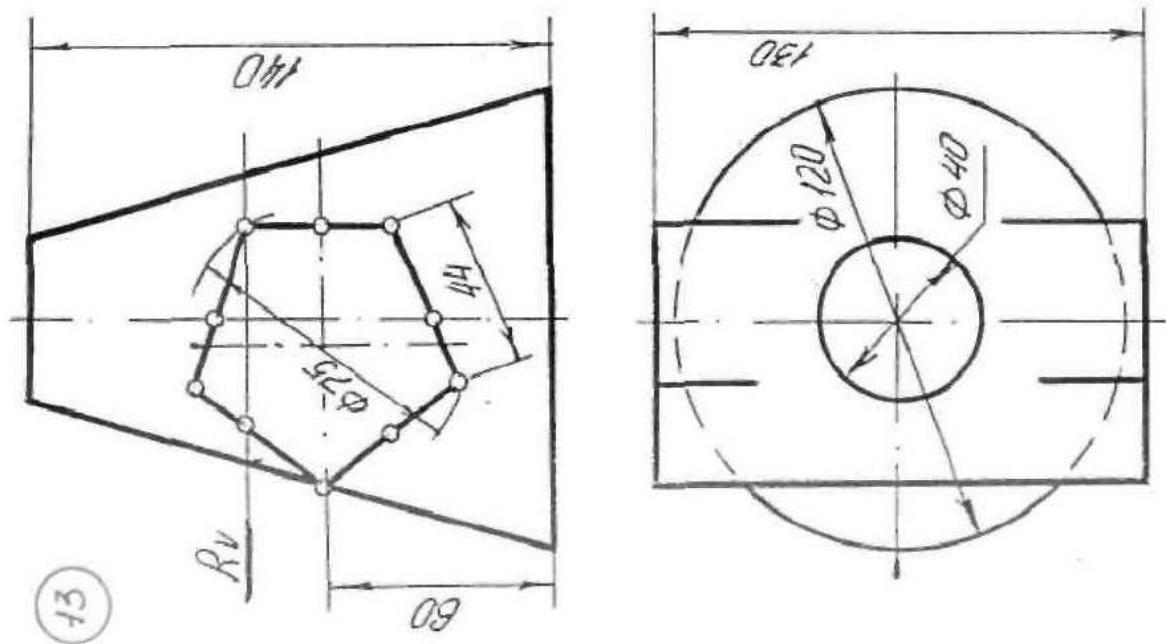
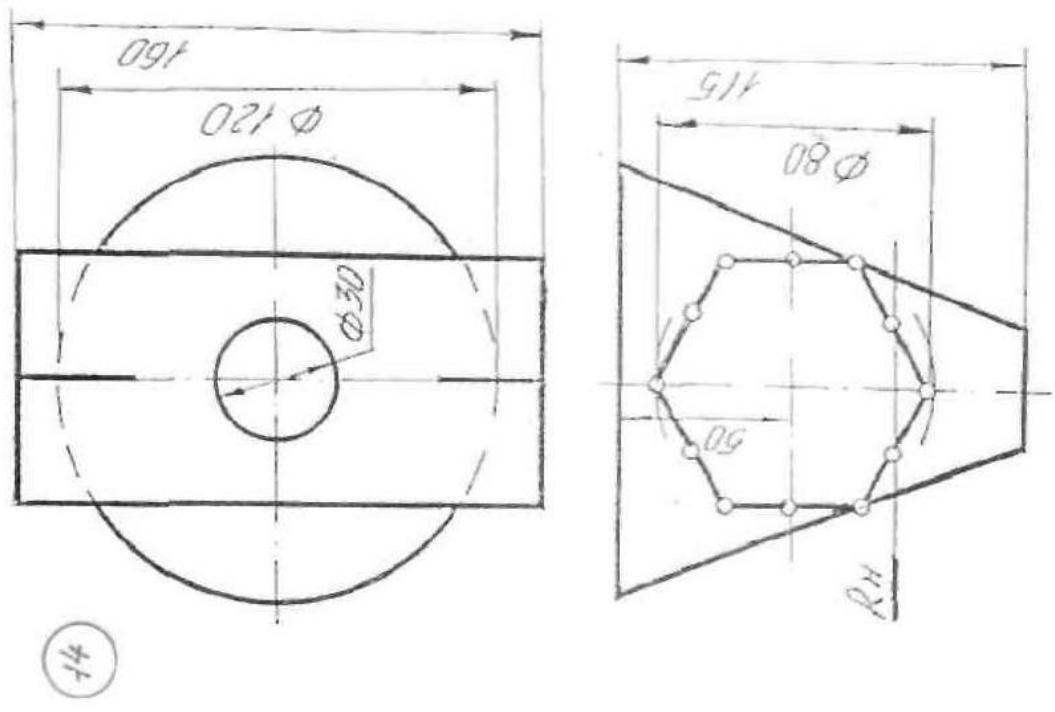


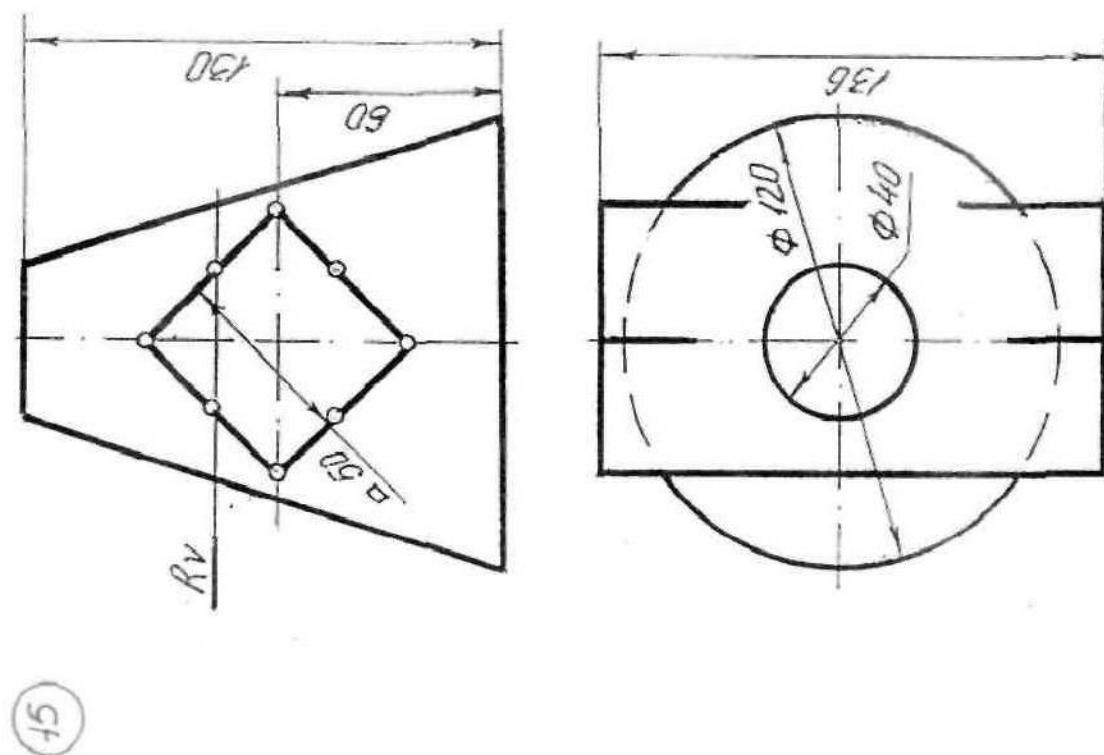
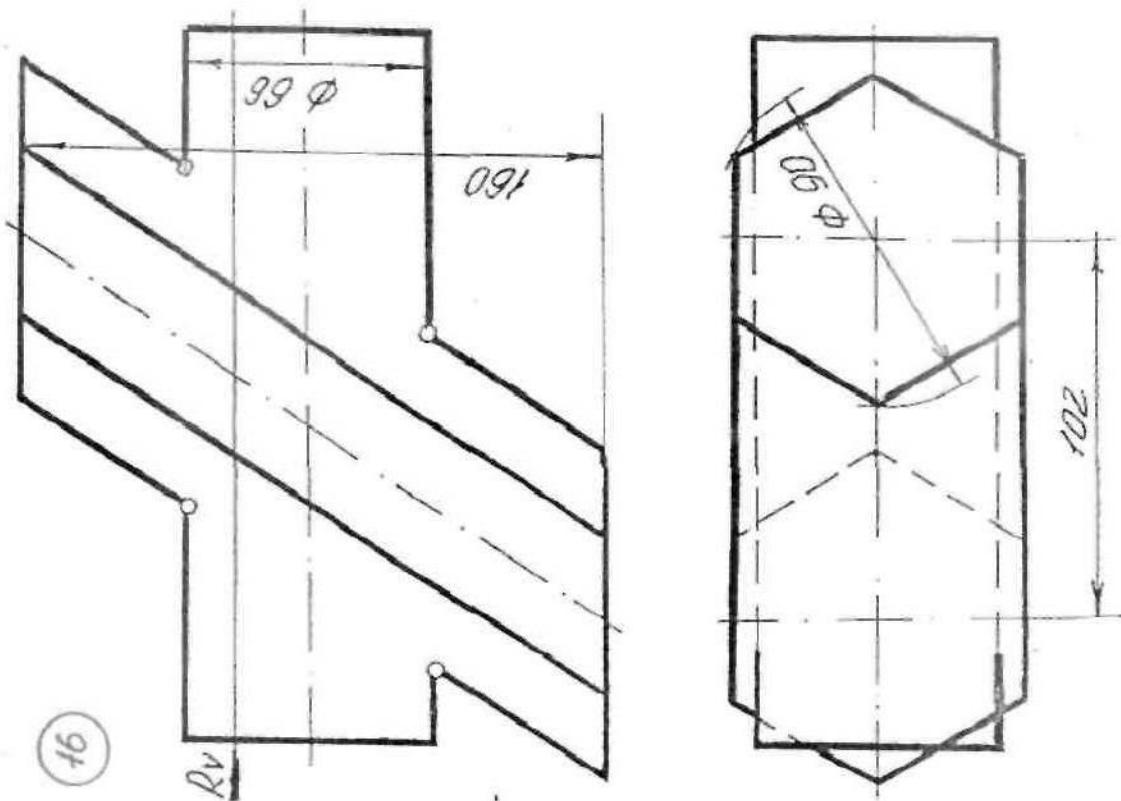


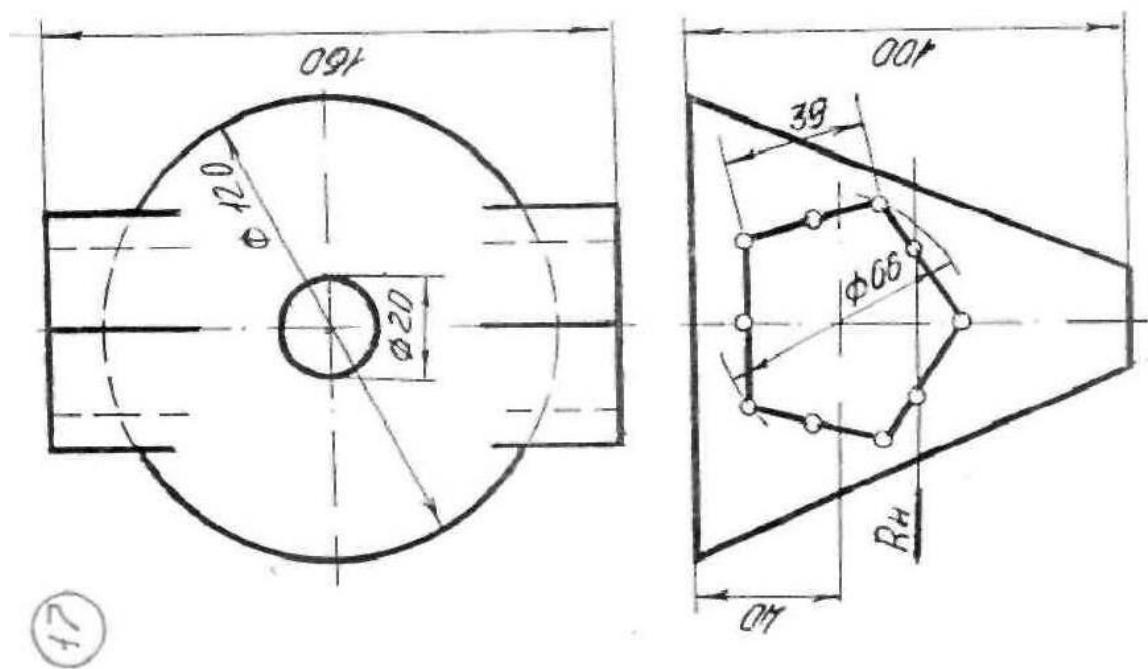
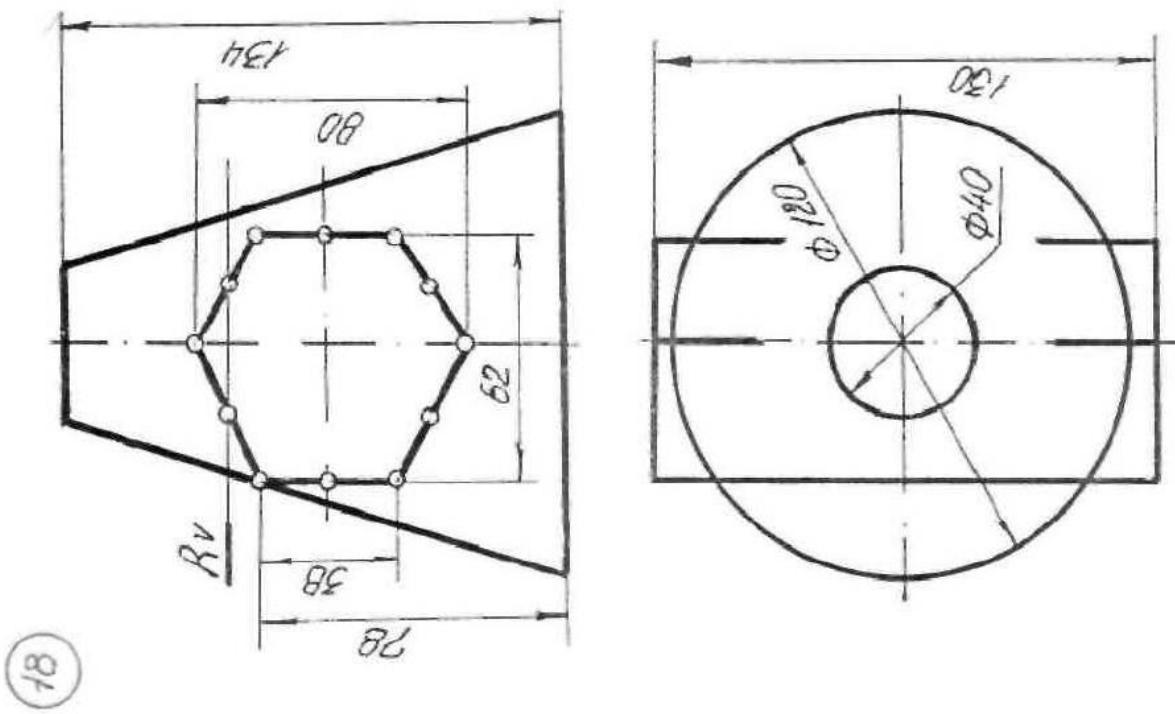
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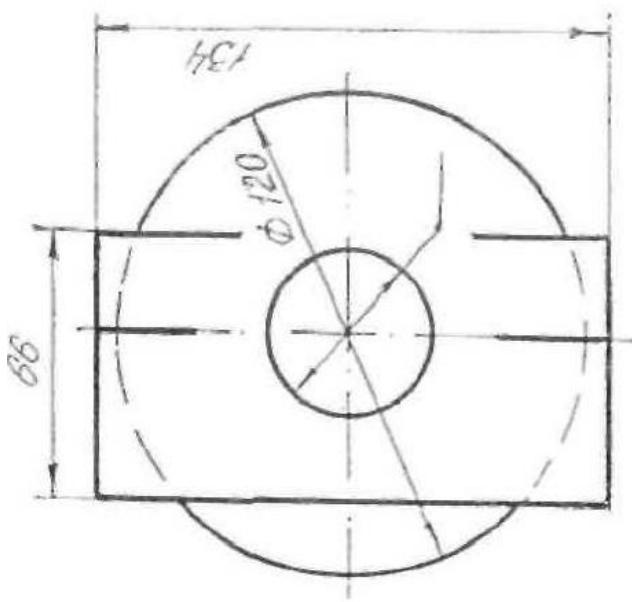


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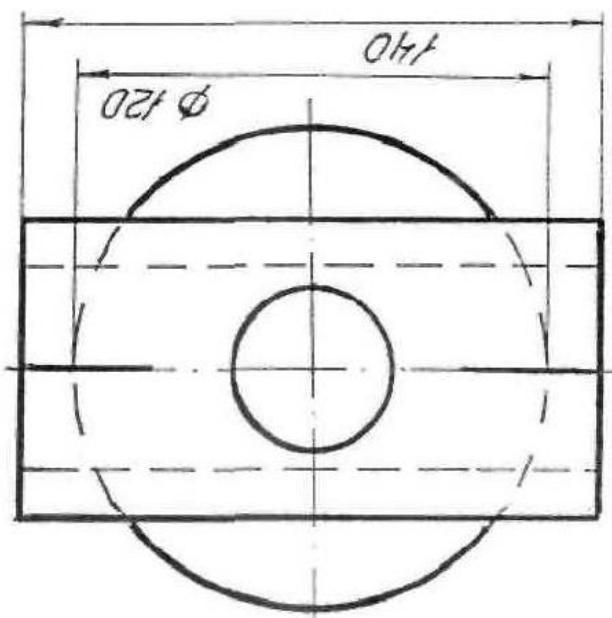
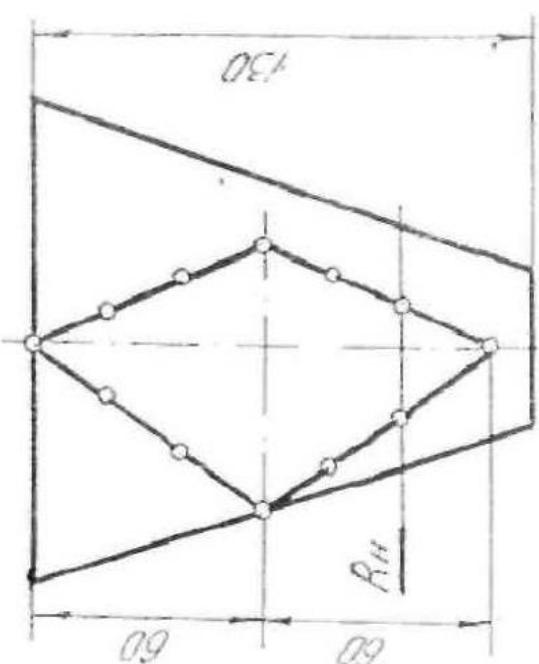




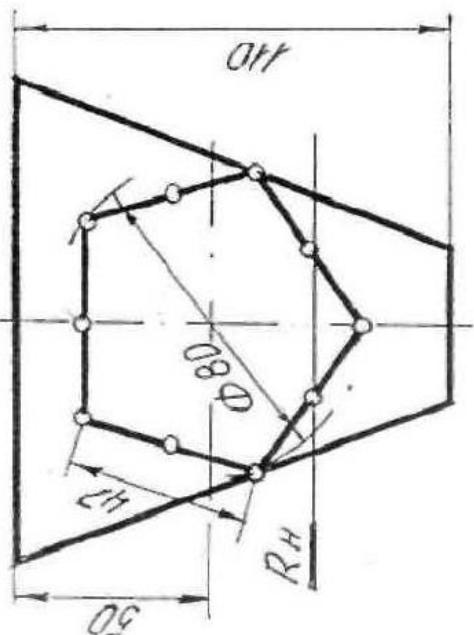


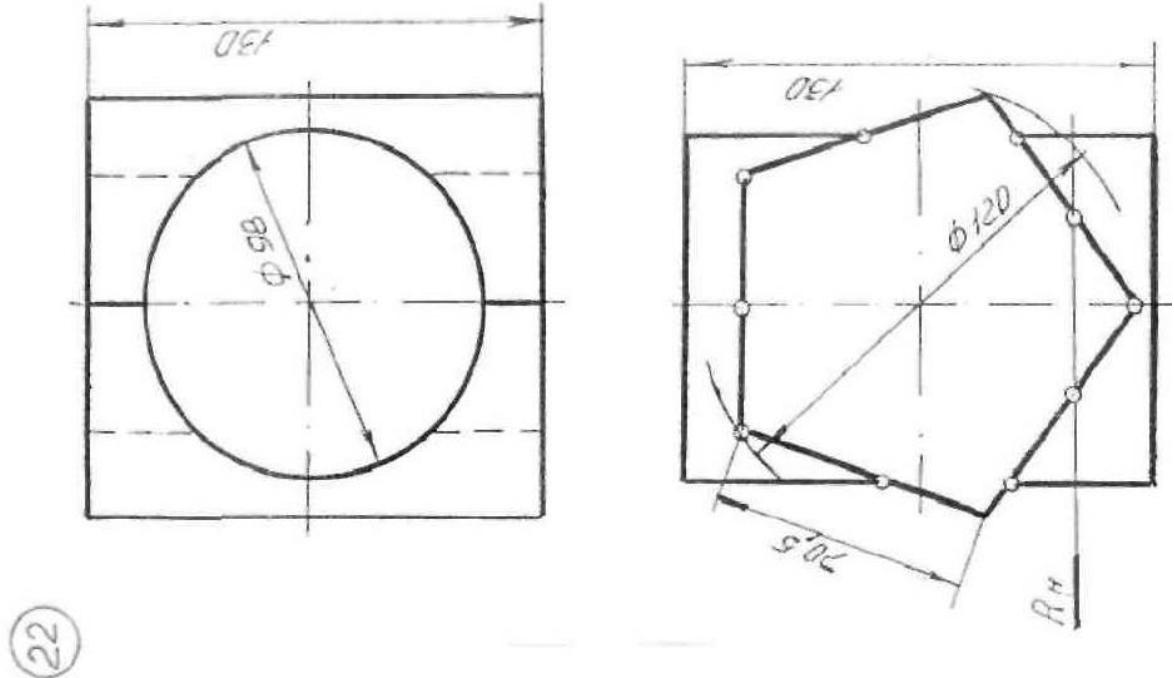


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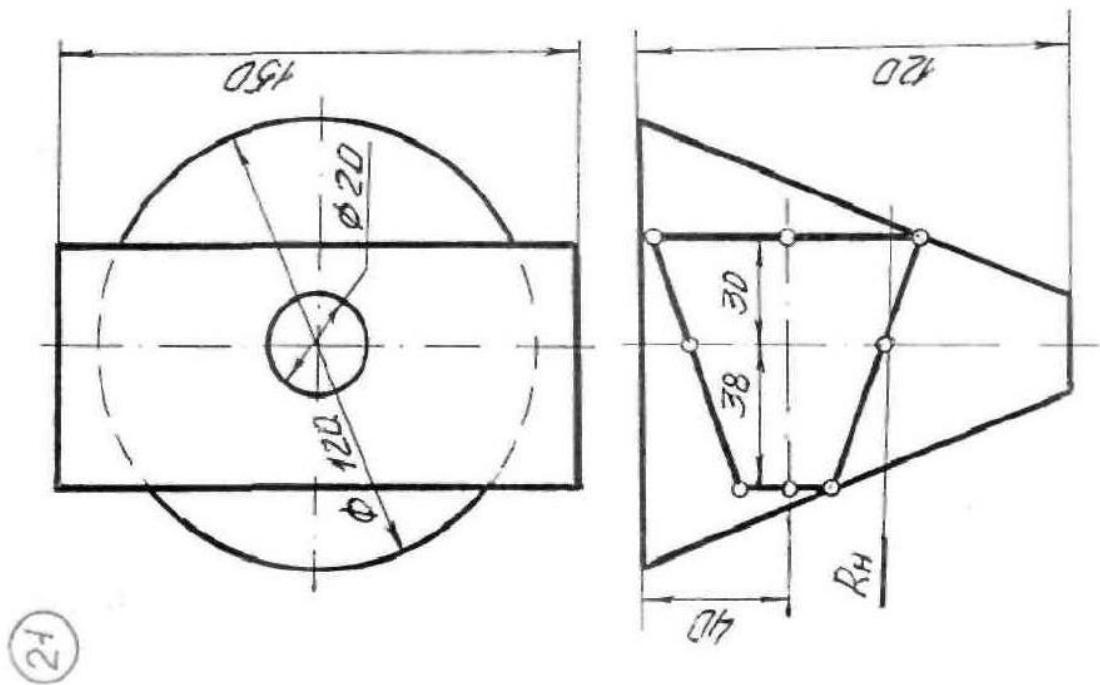


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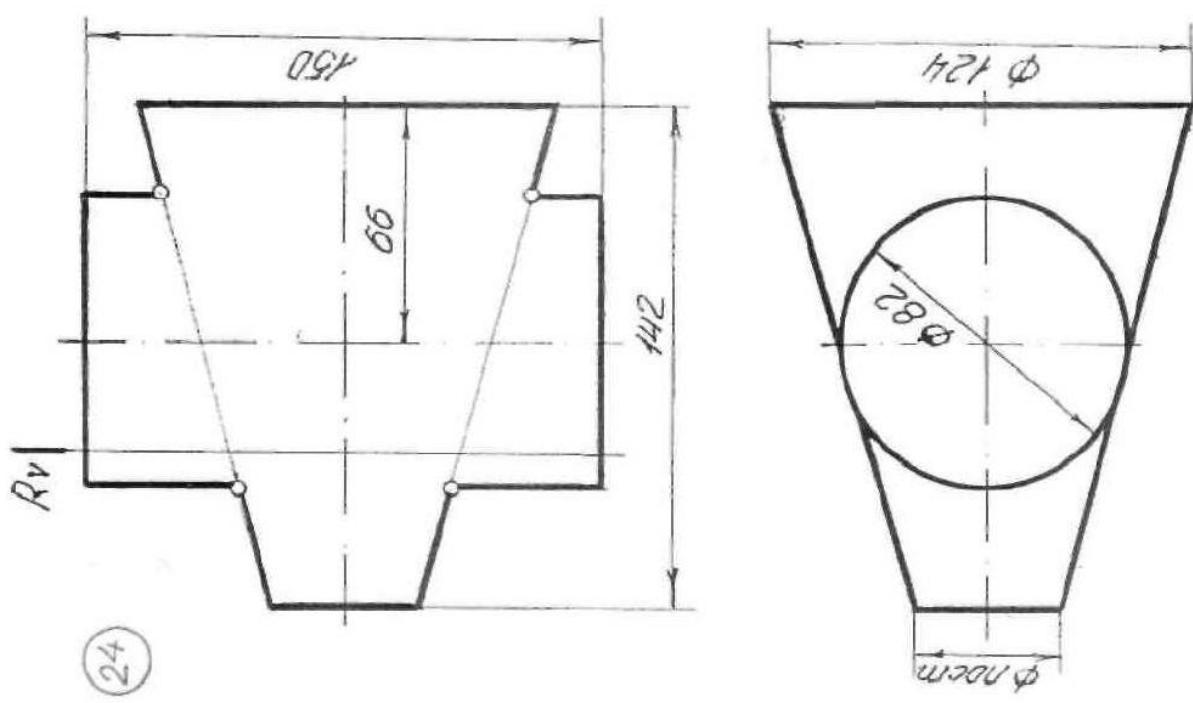




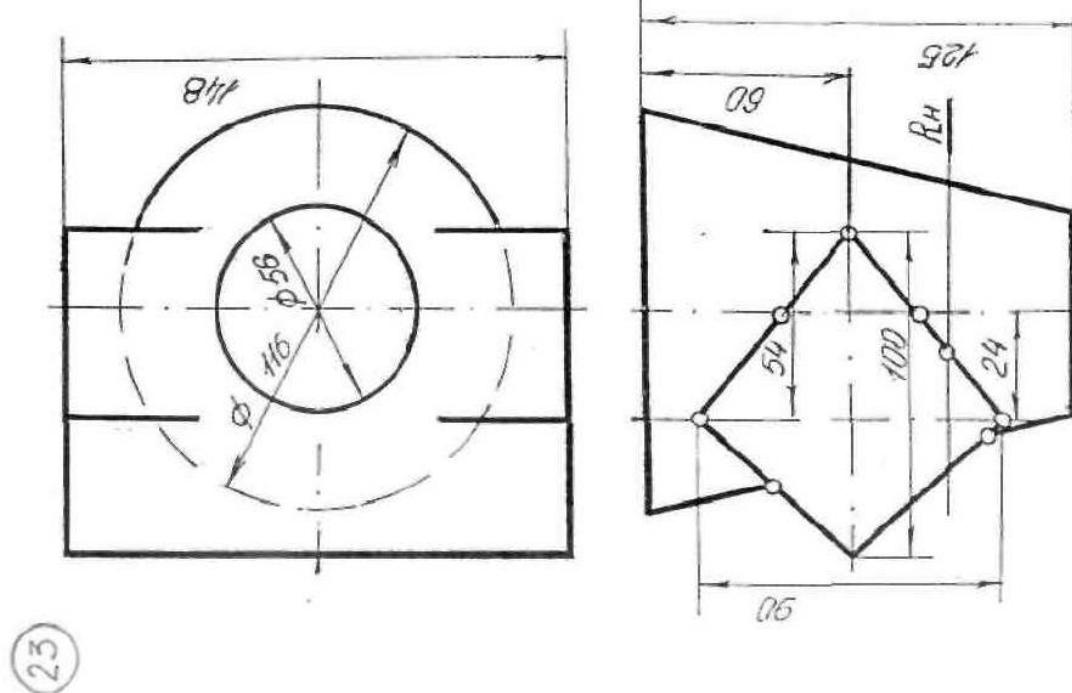
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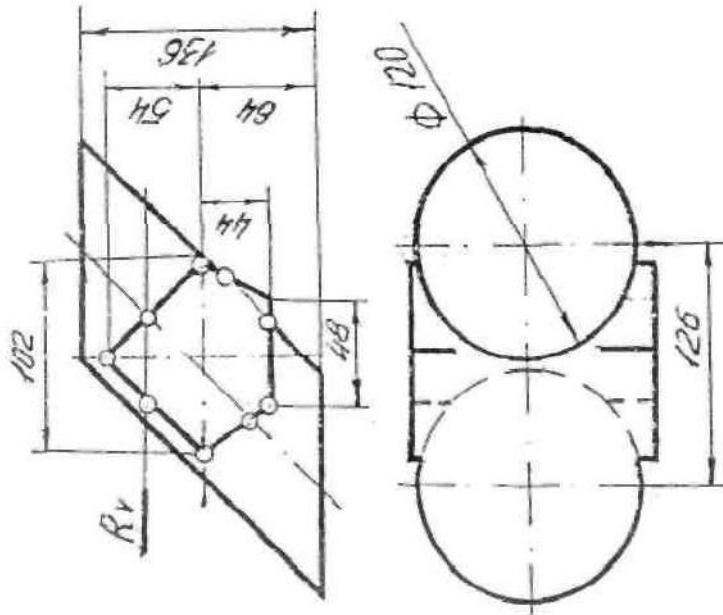
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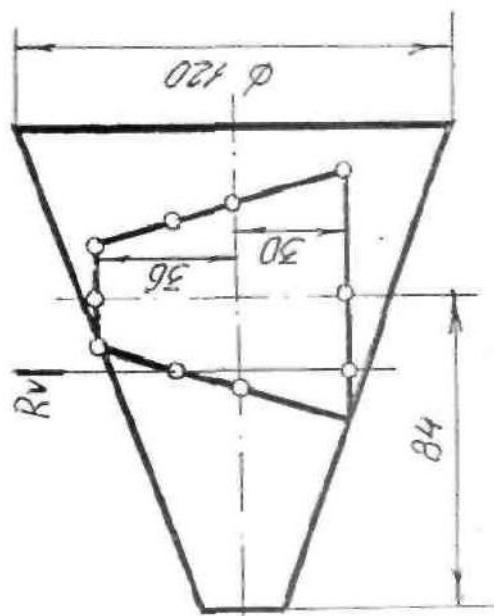
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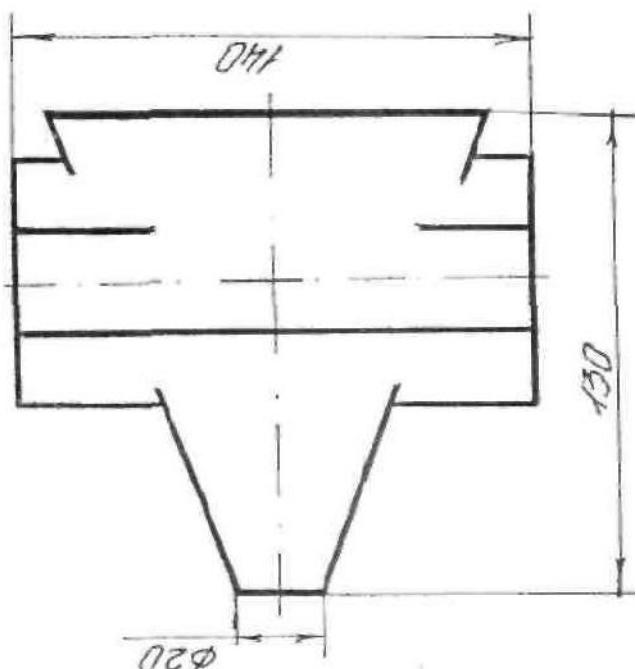
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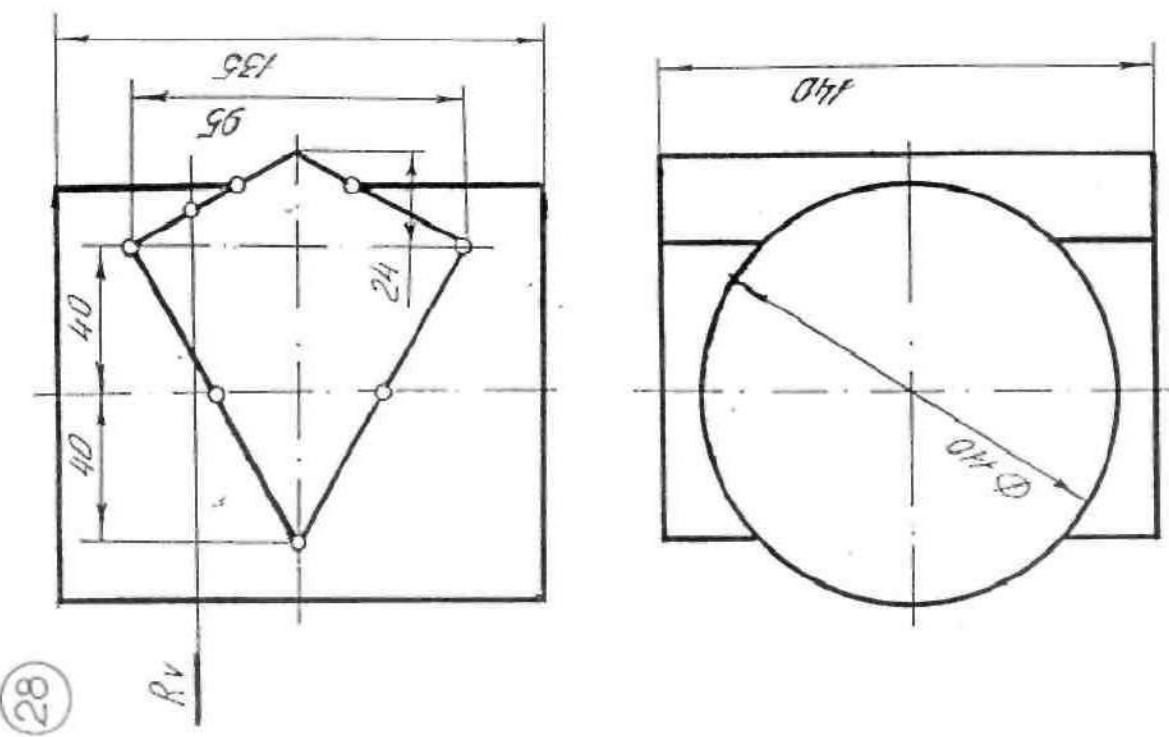


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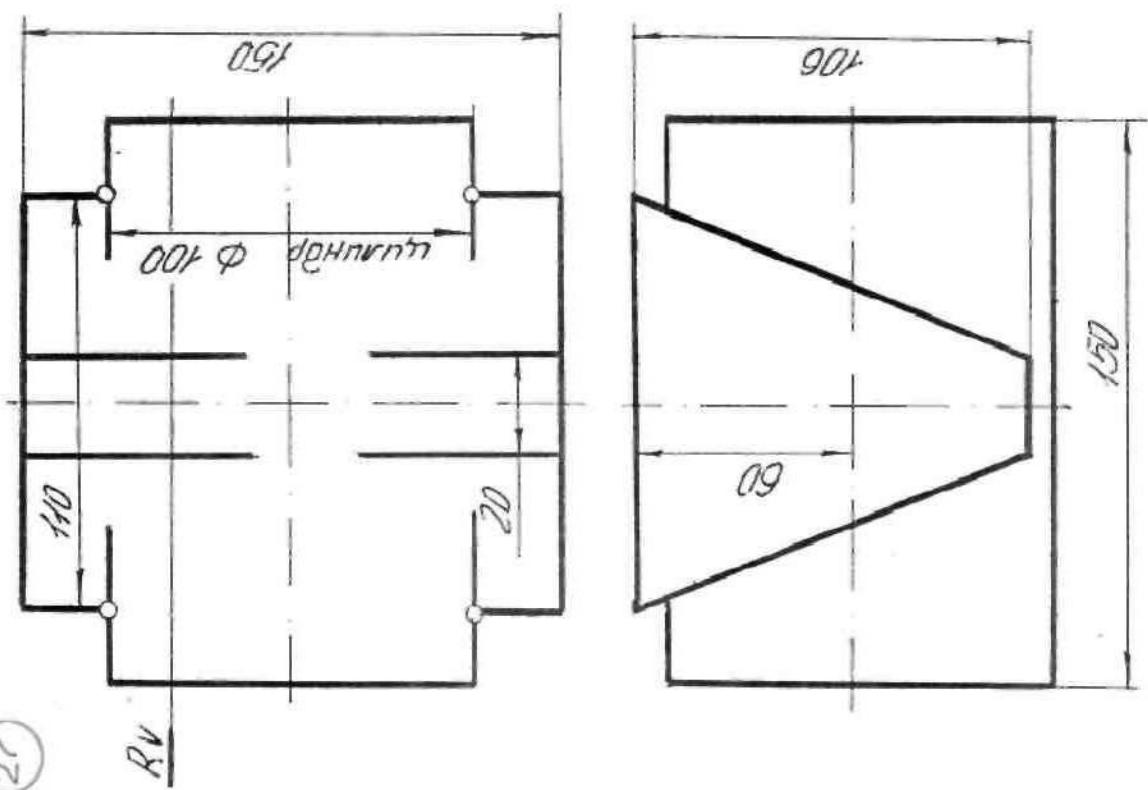
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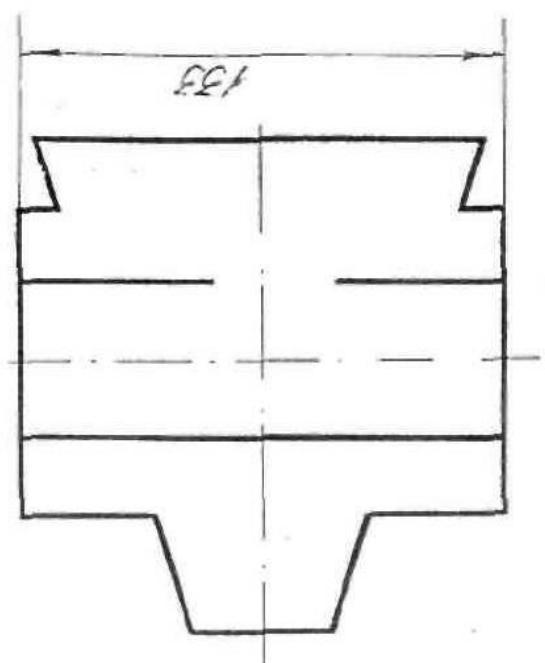
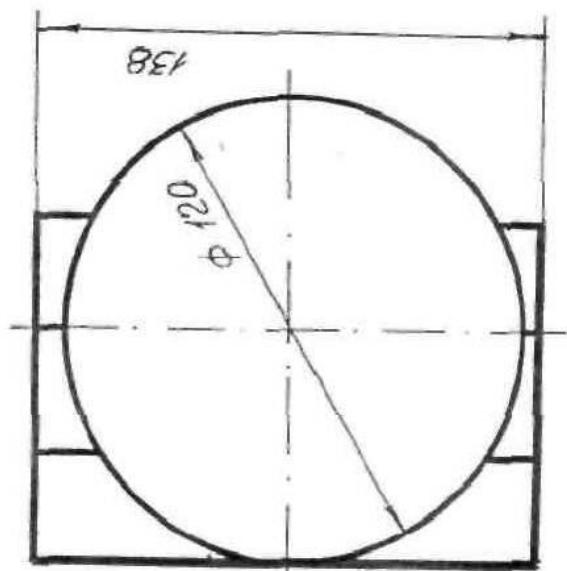
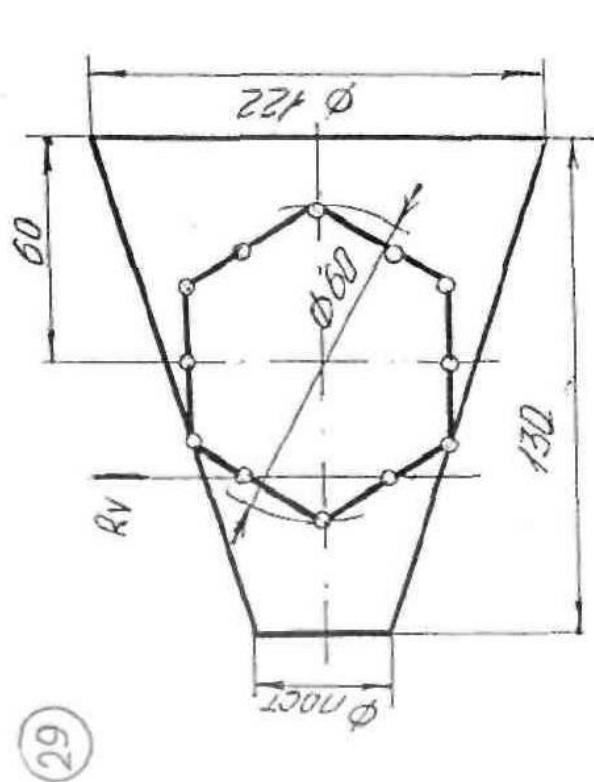
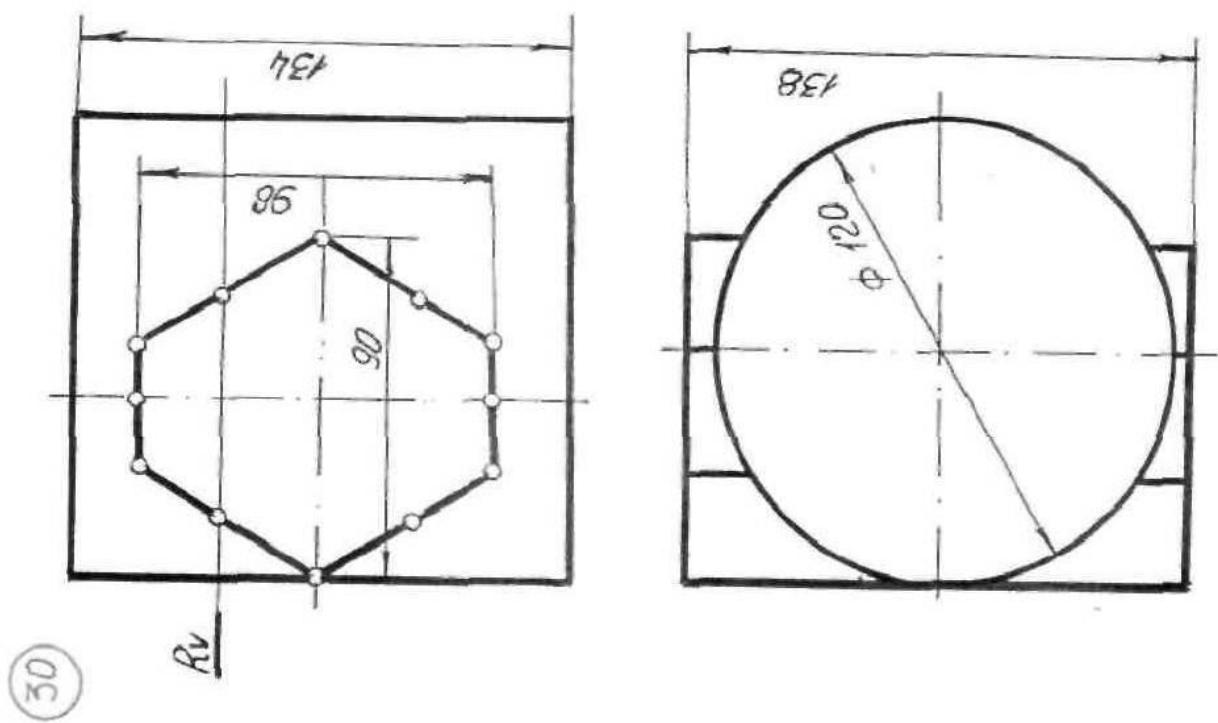
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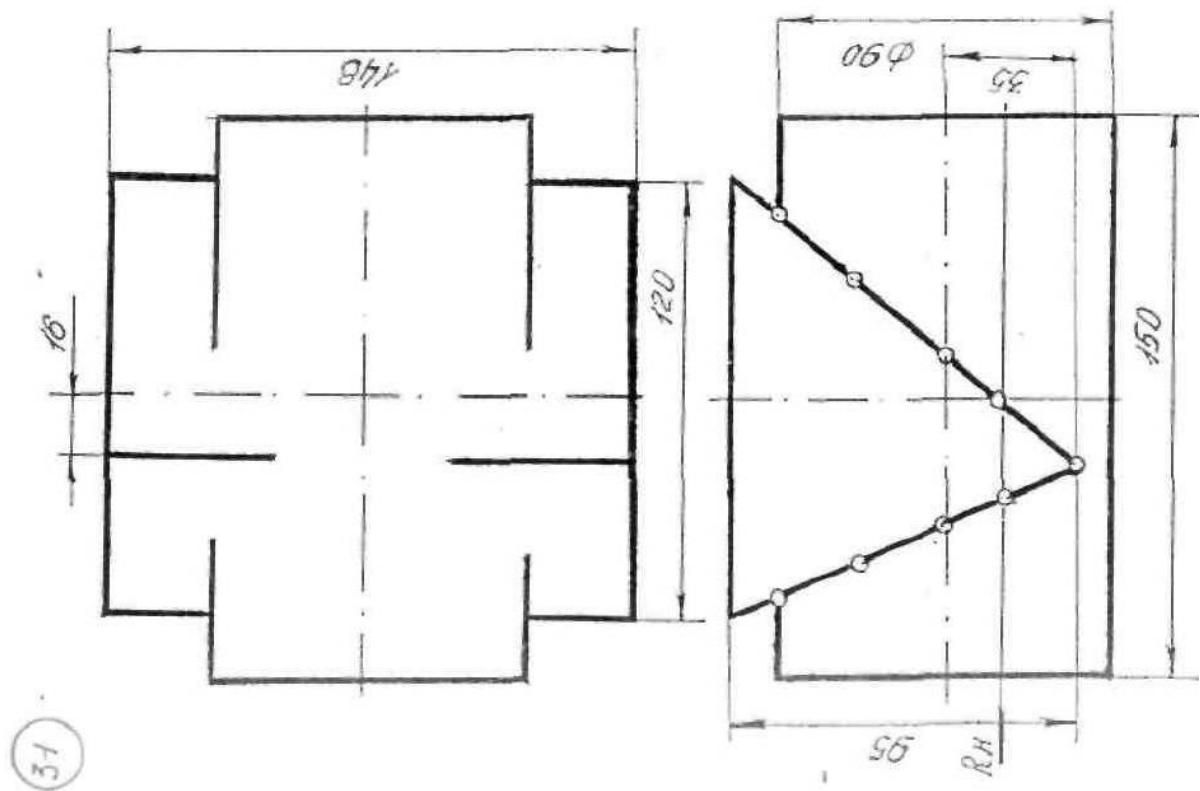
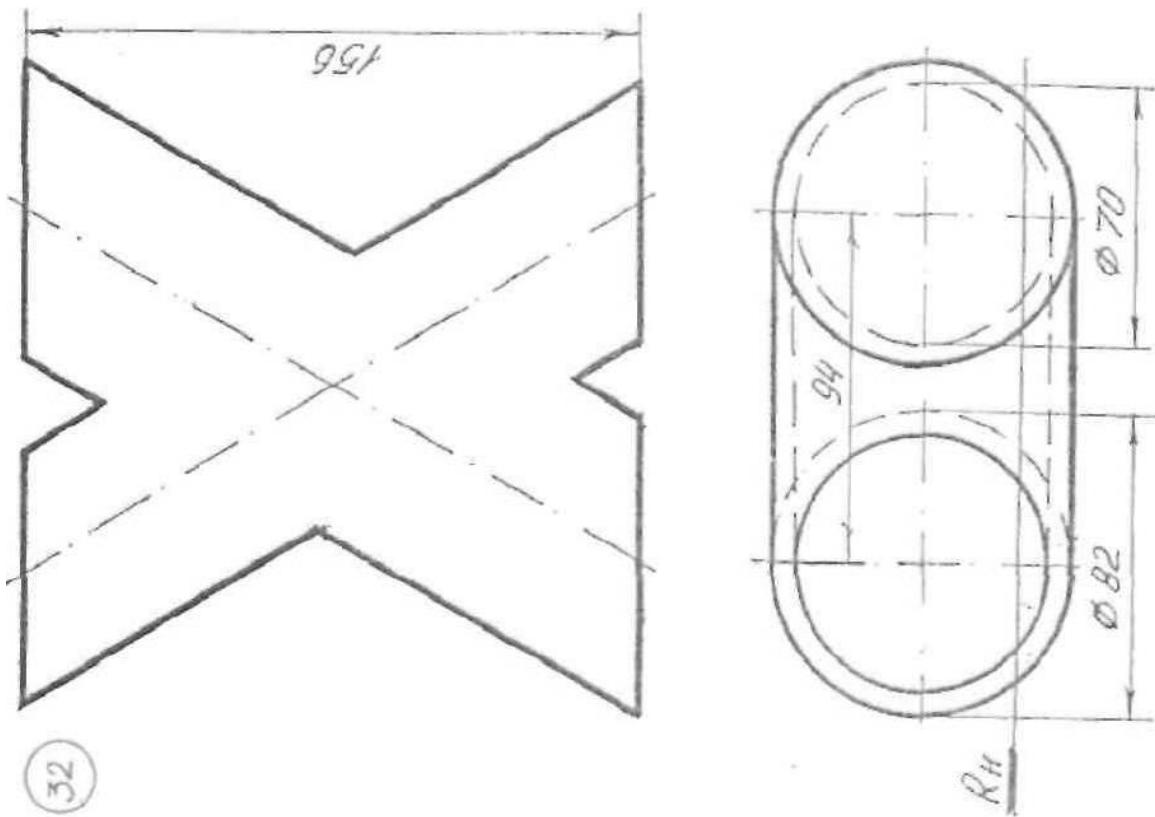
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(27)

R_V





12-MASHQ

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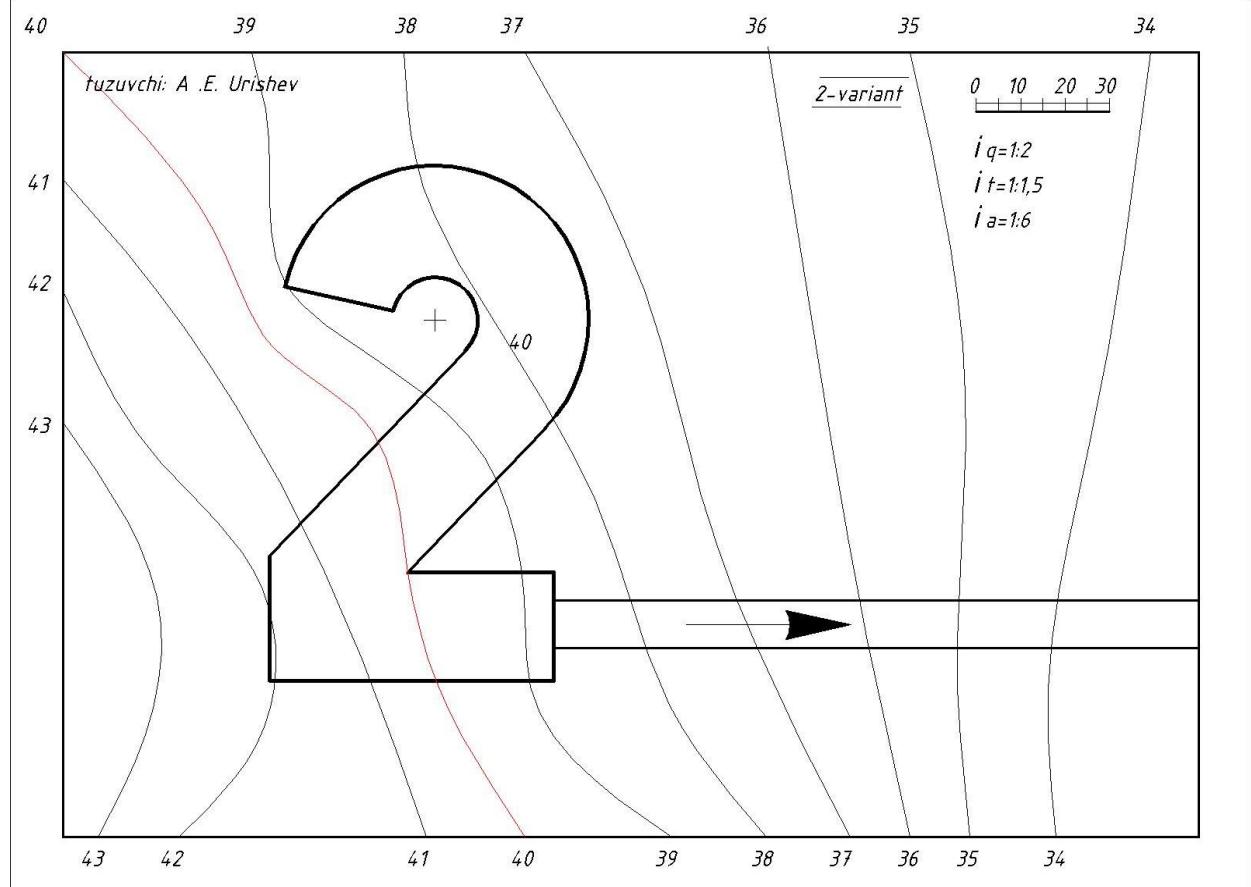
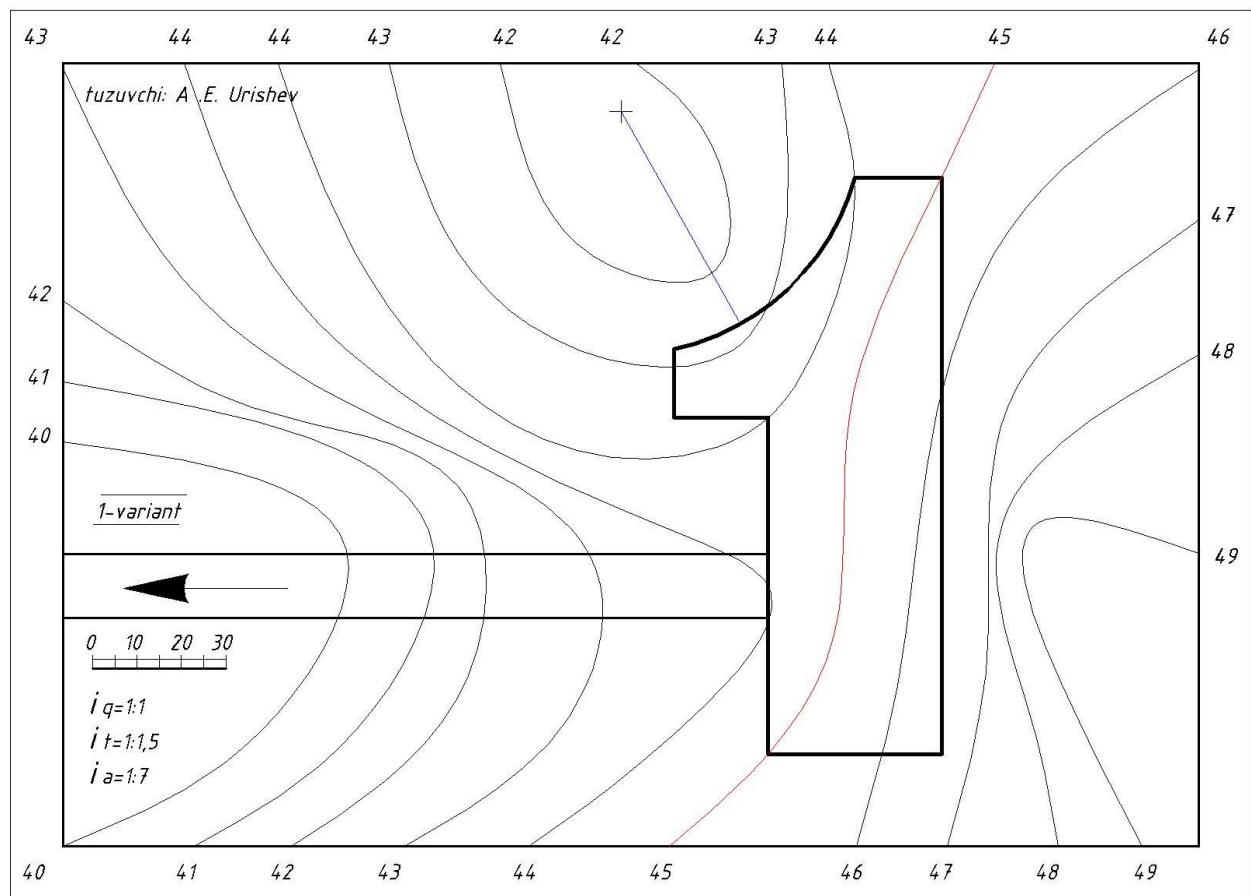
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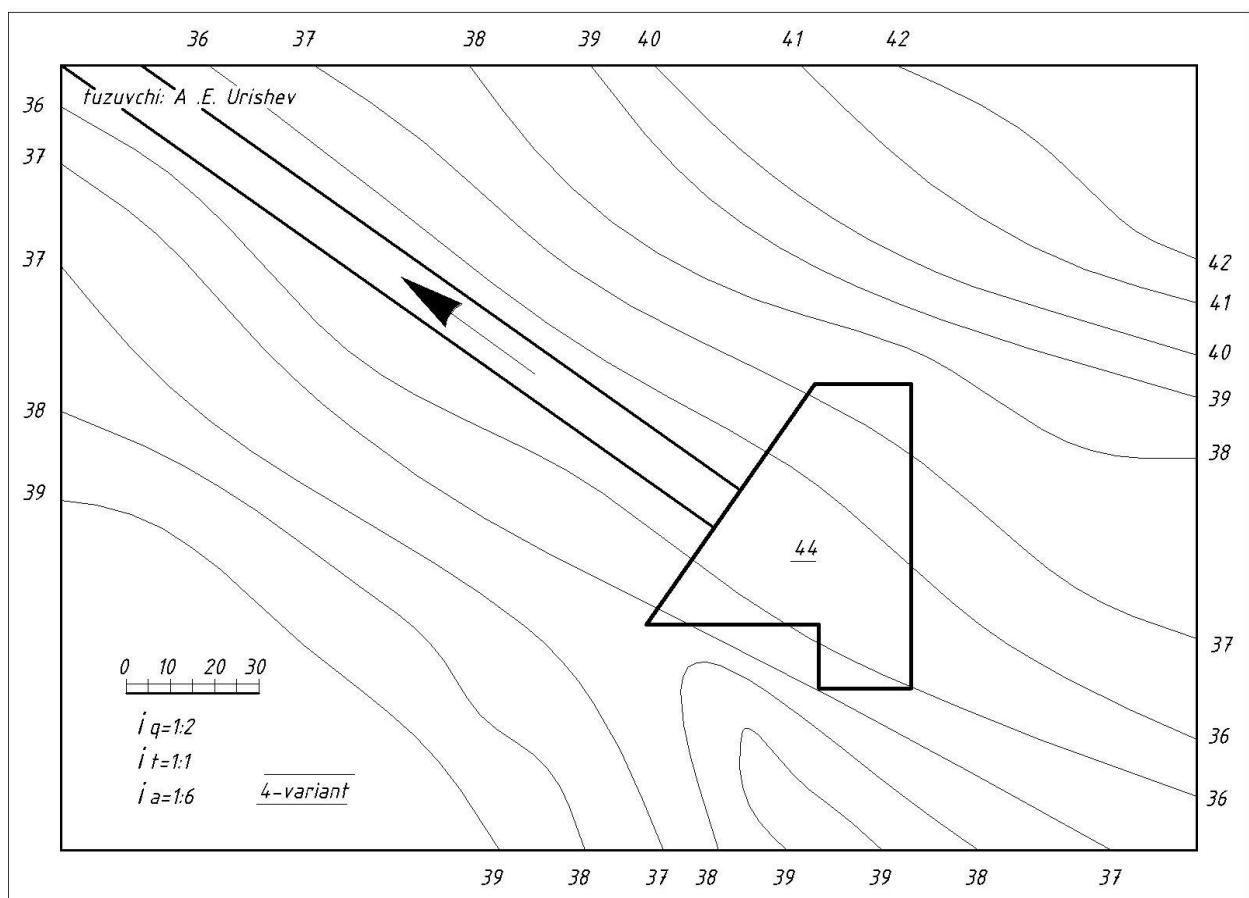
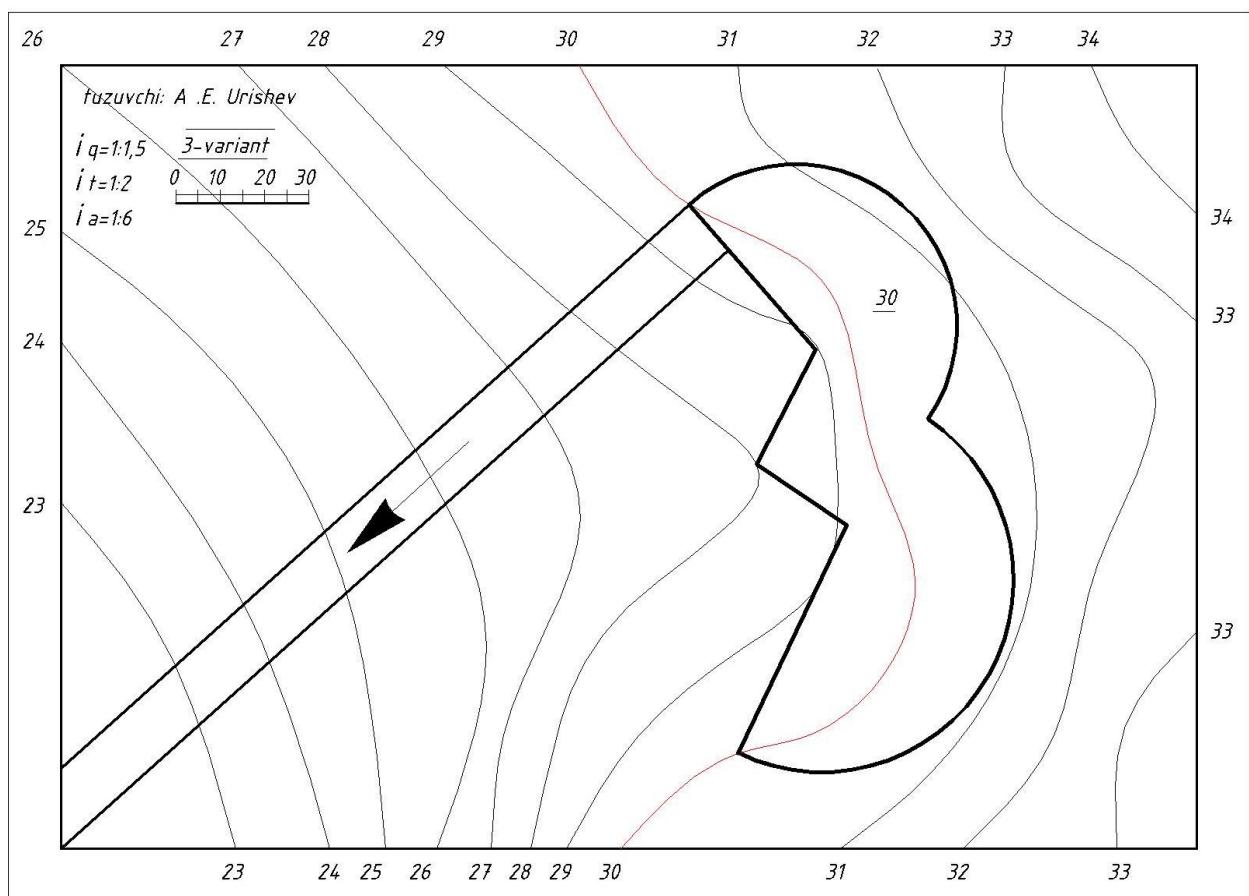
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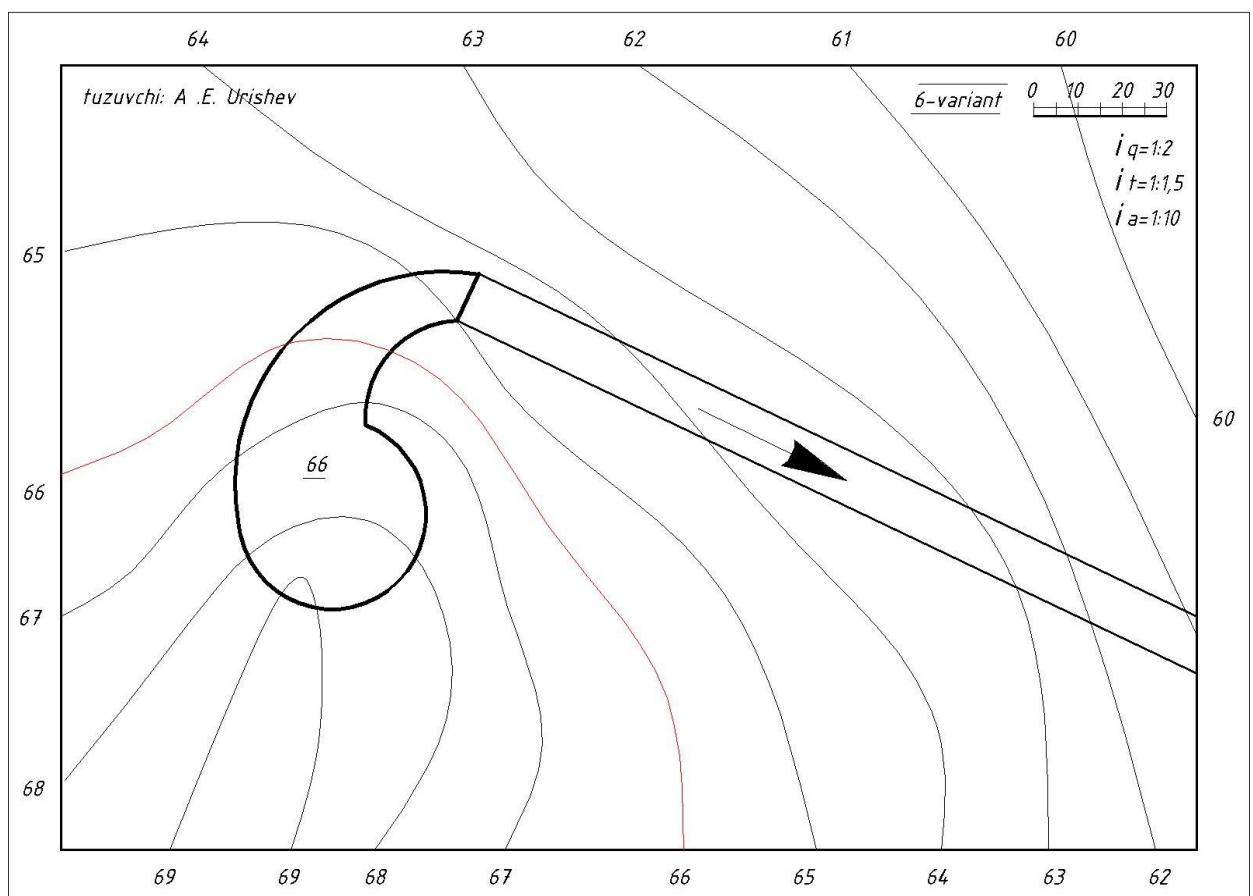
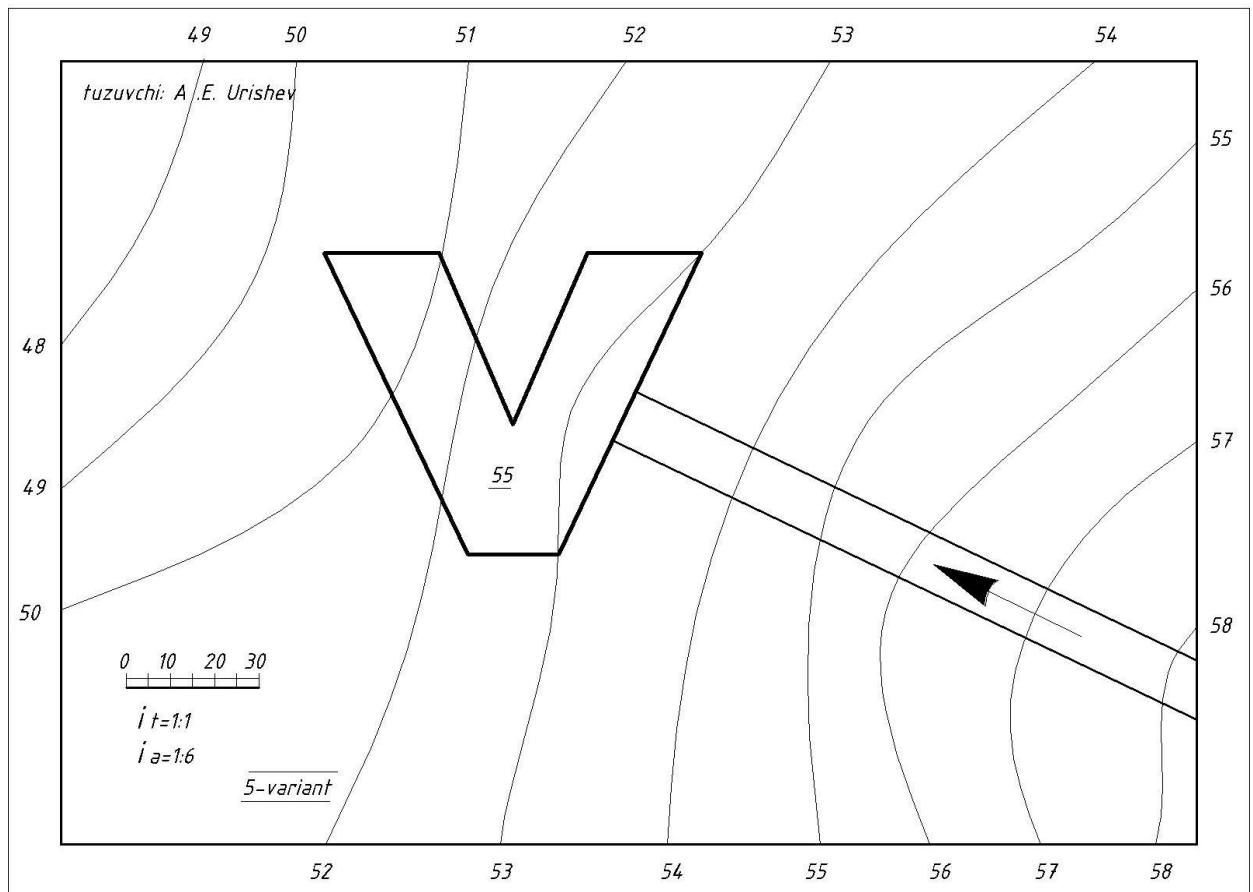
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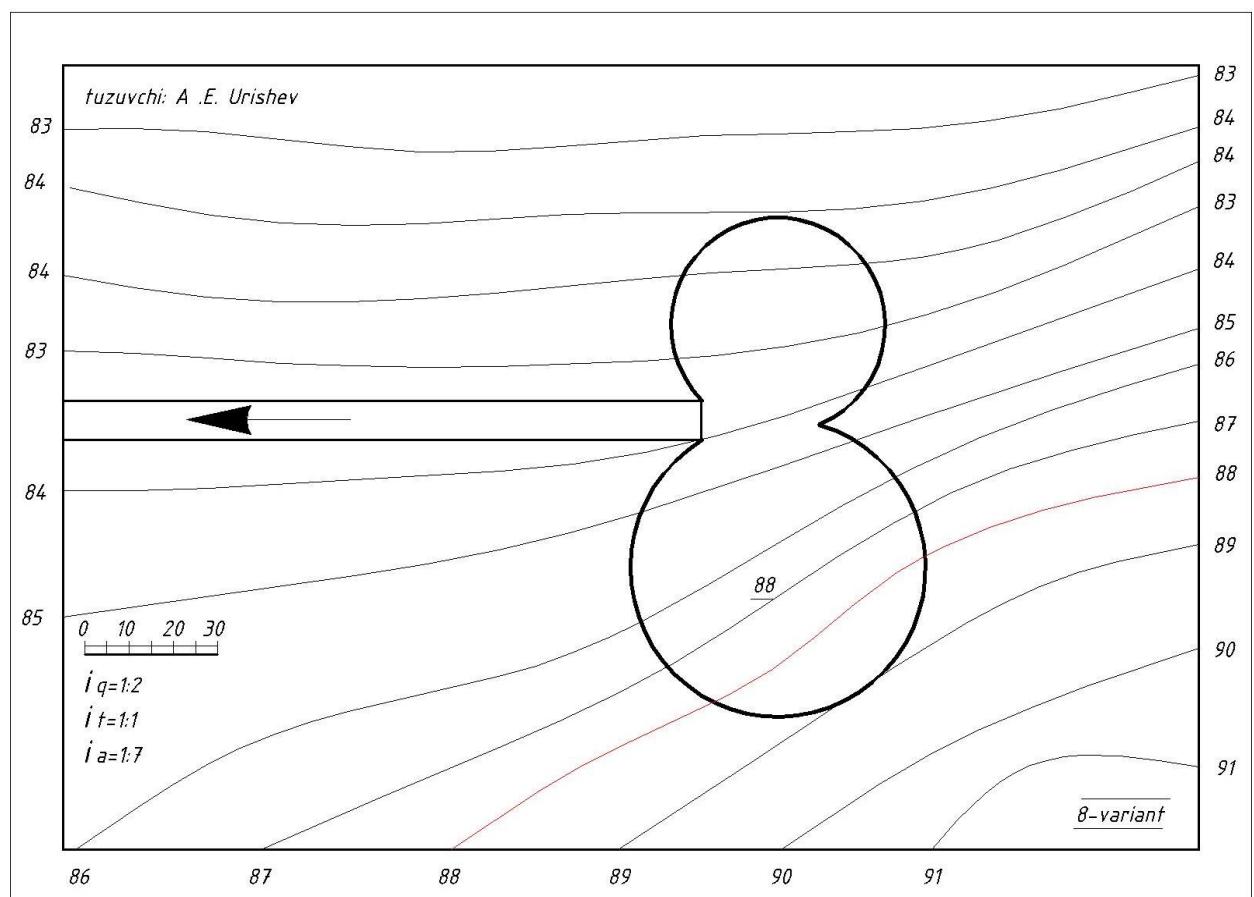
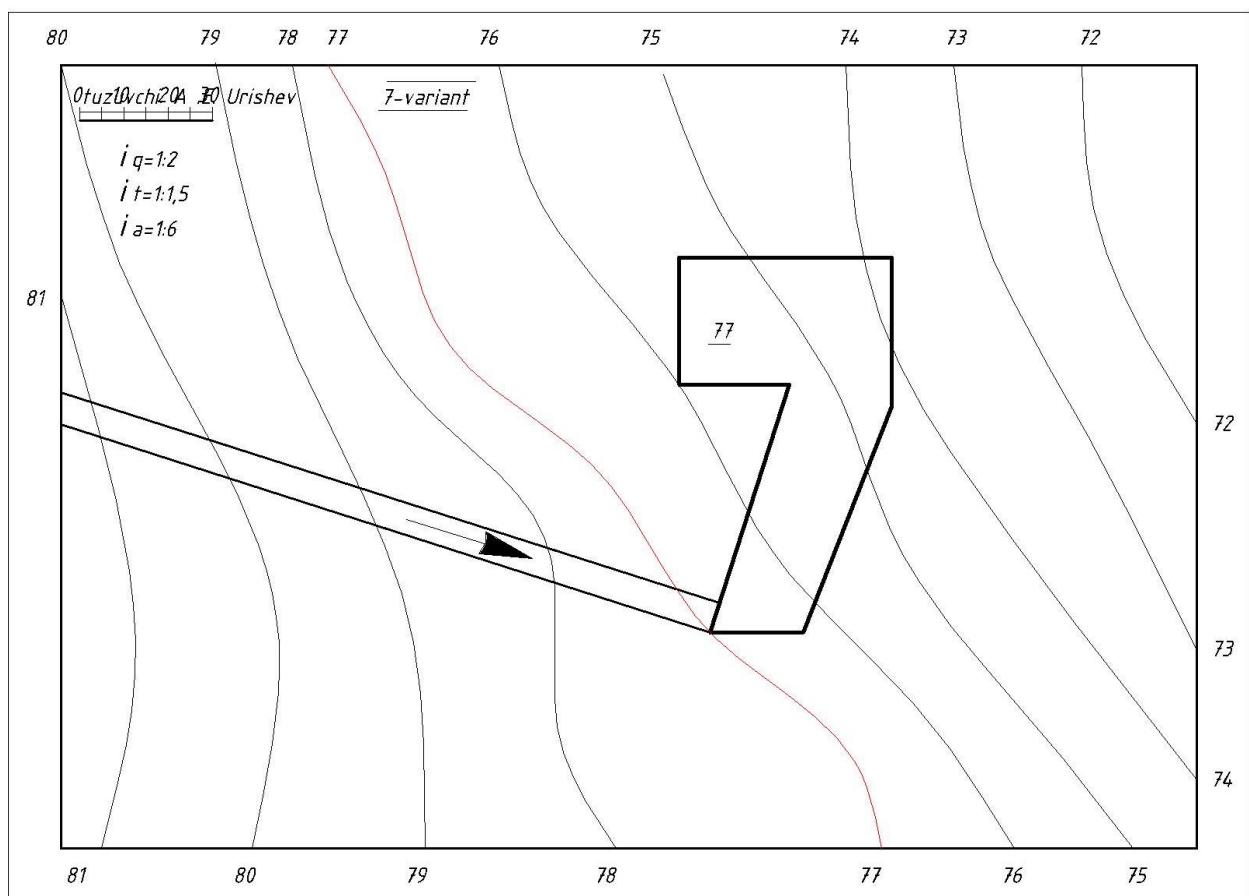
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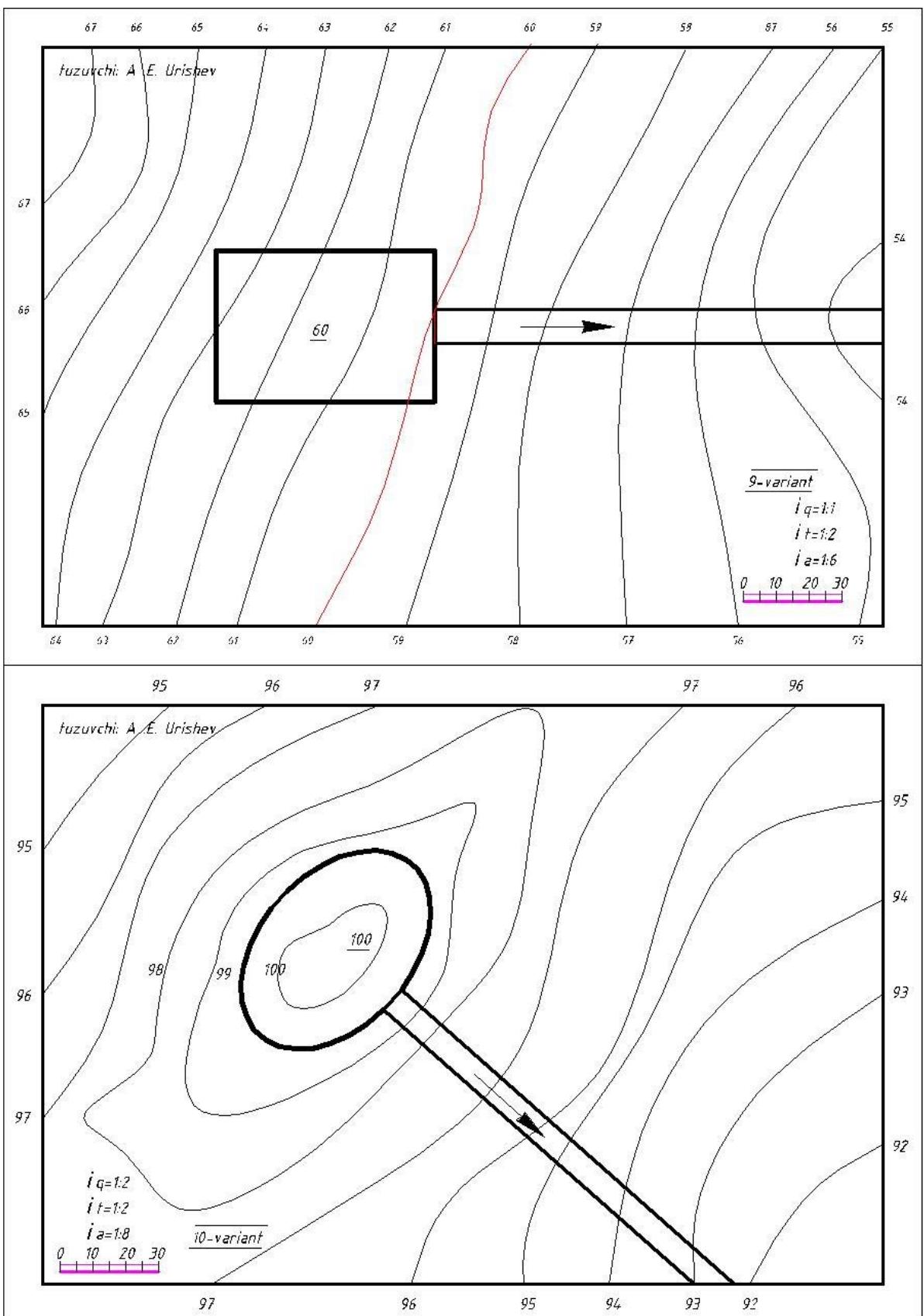
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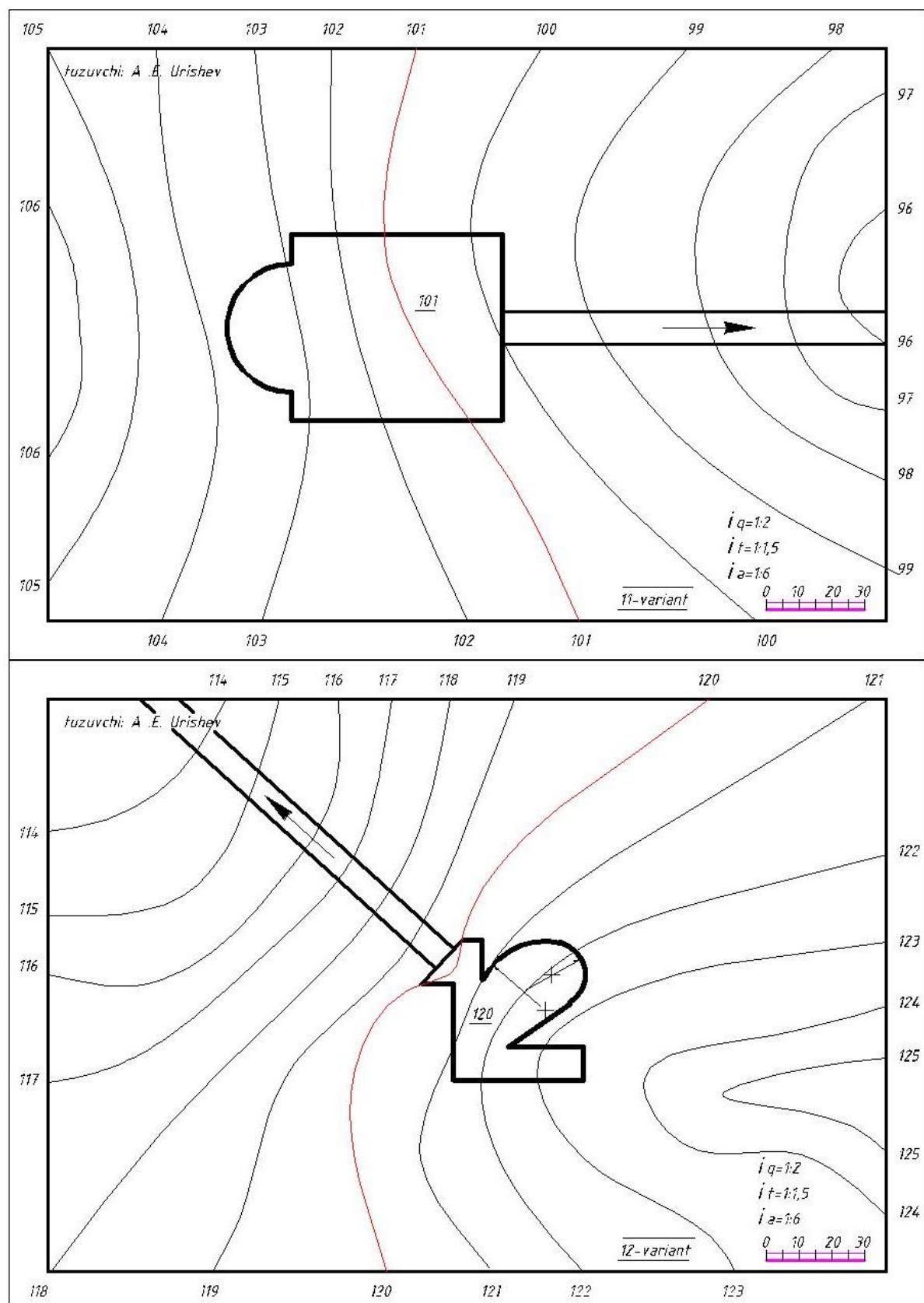


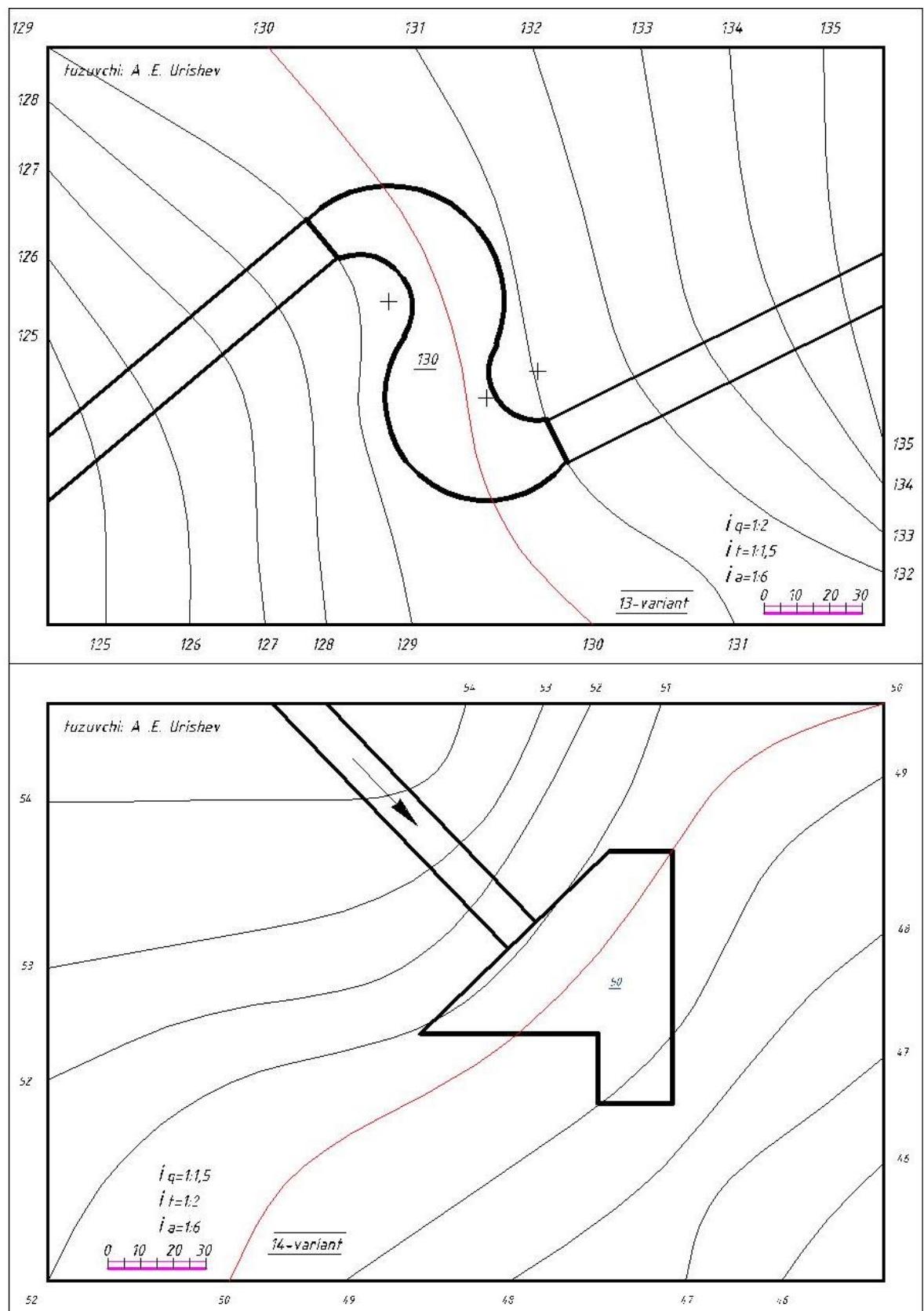


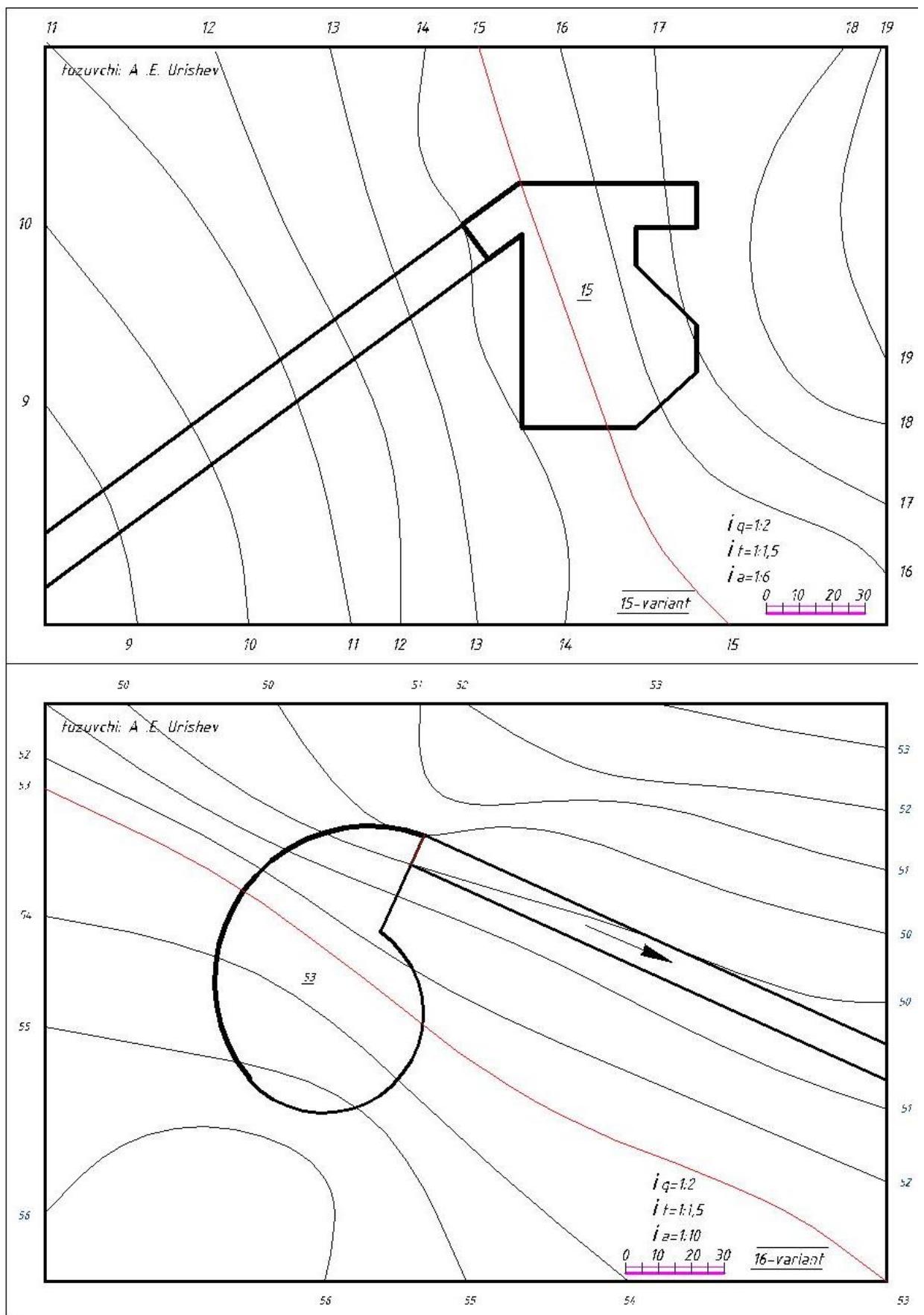


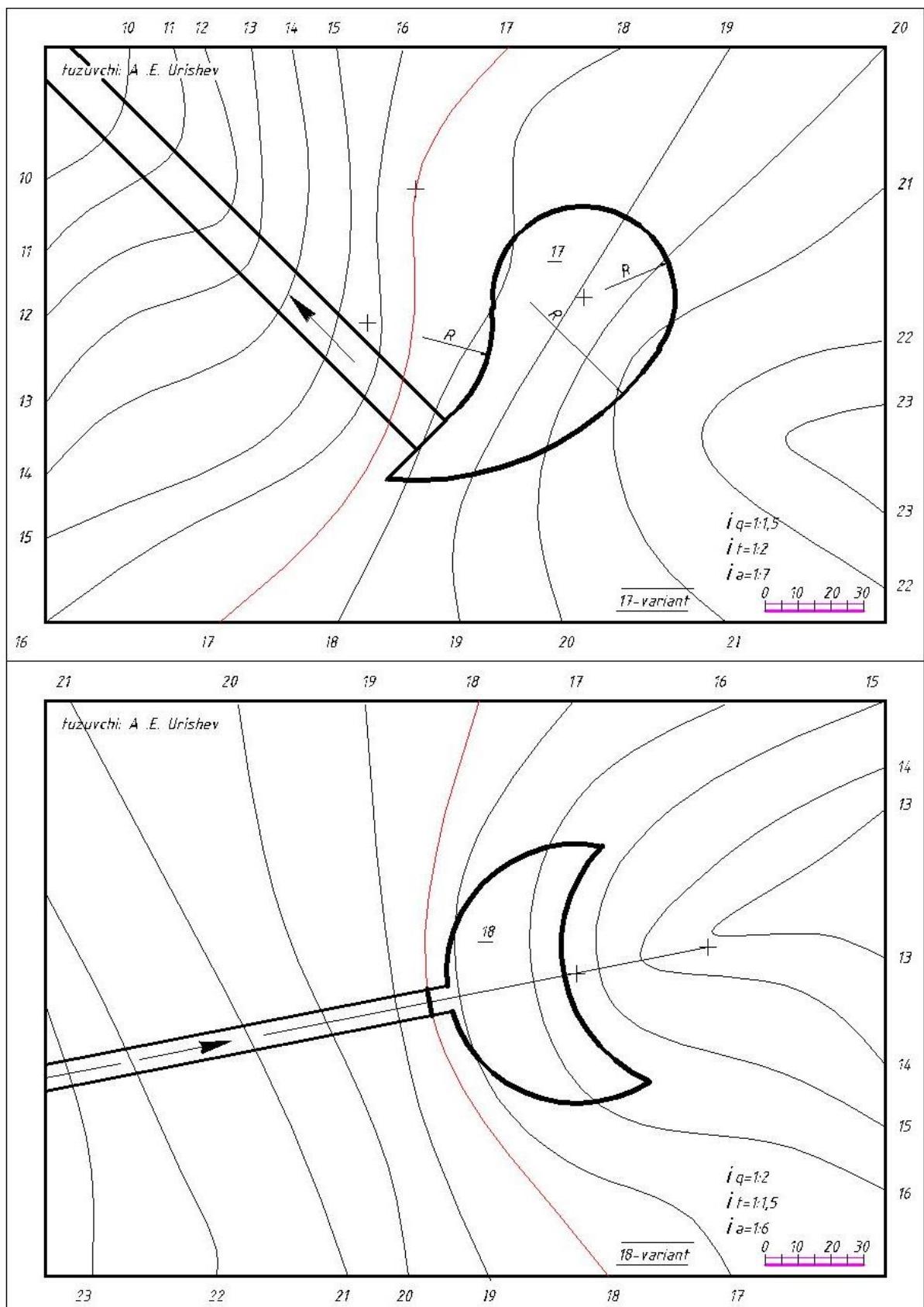


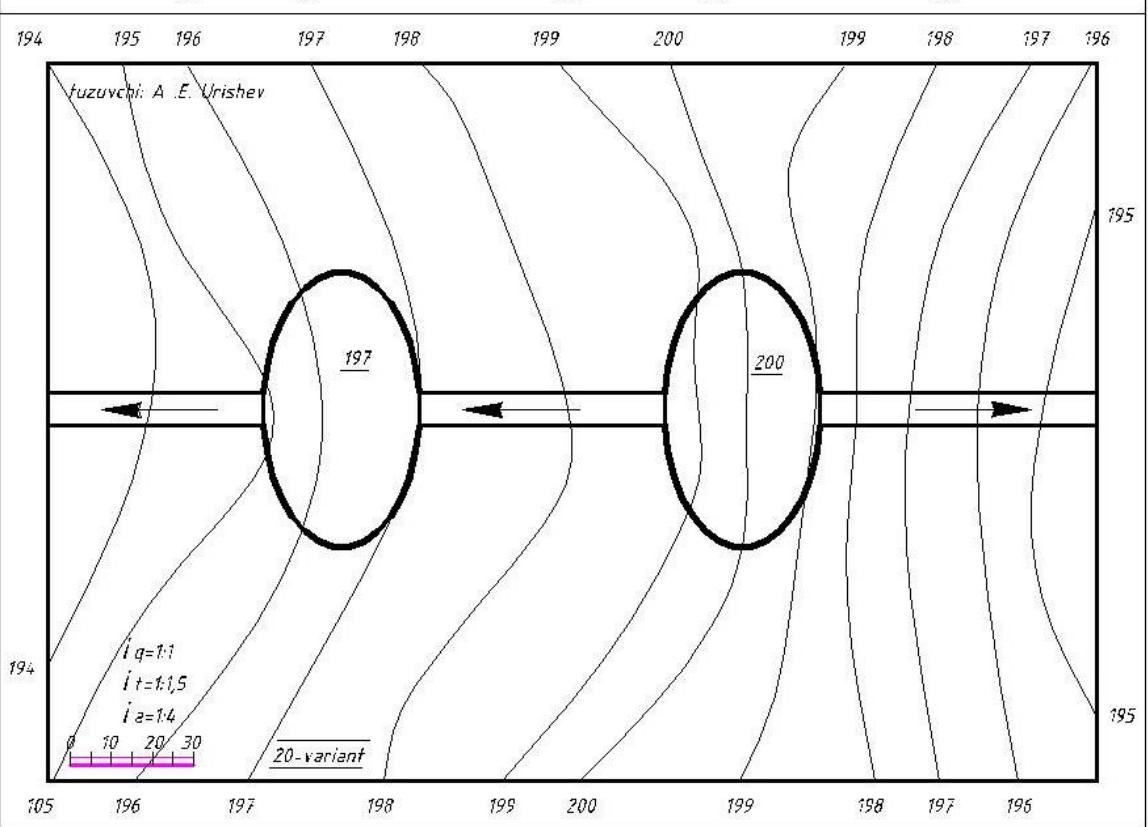
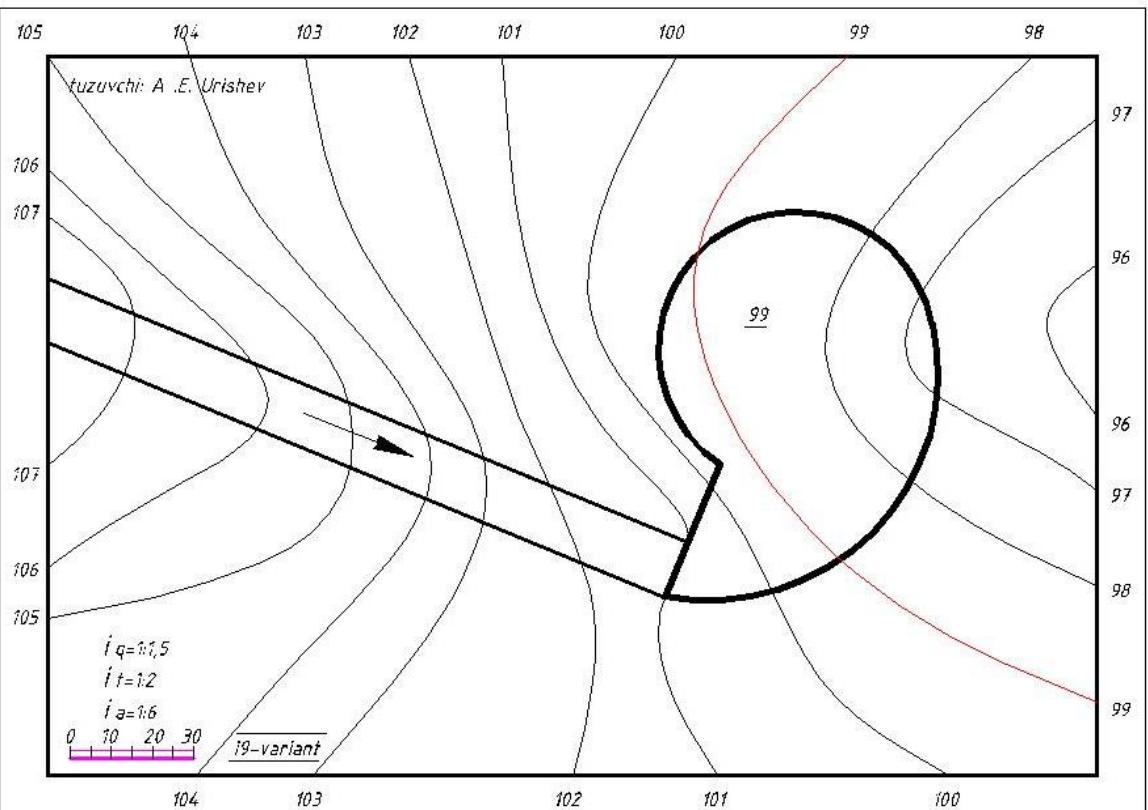


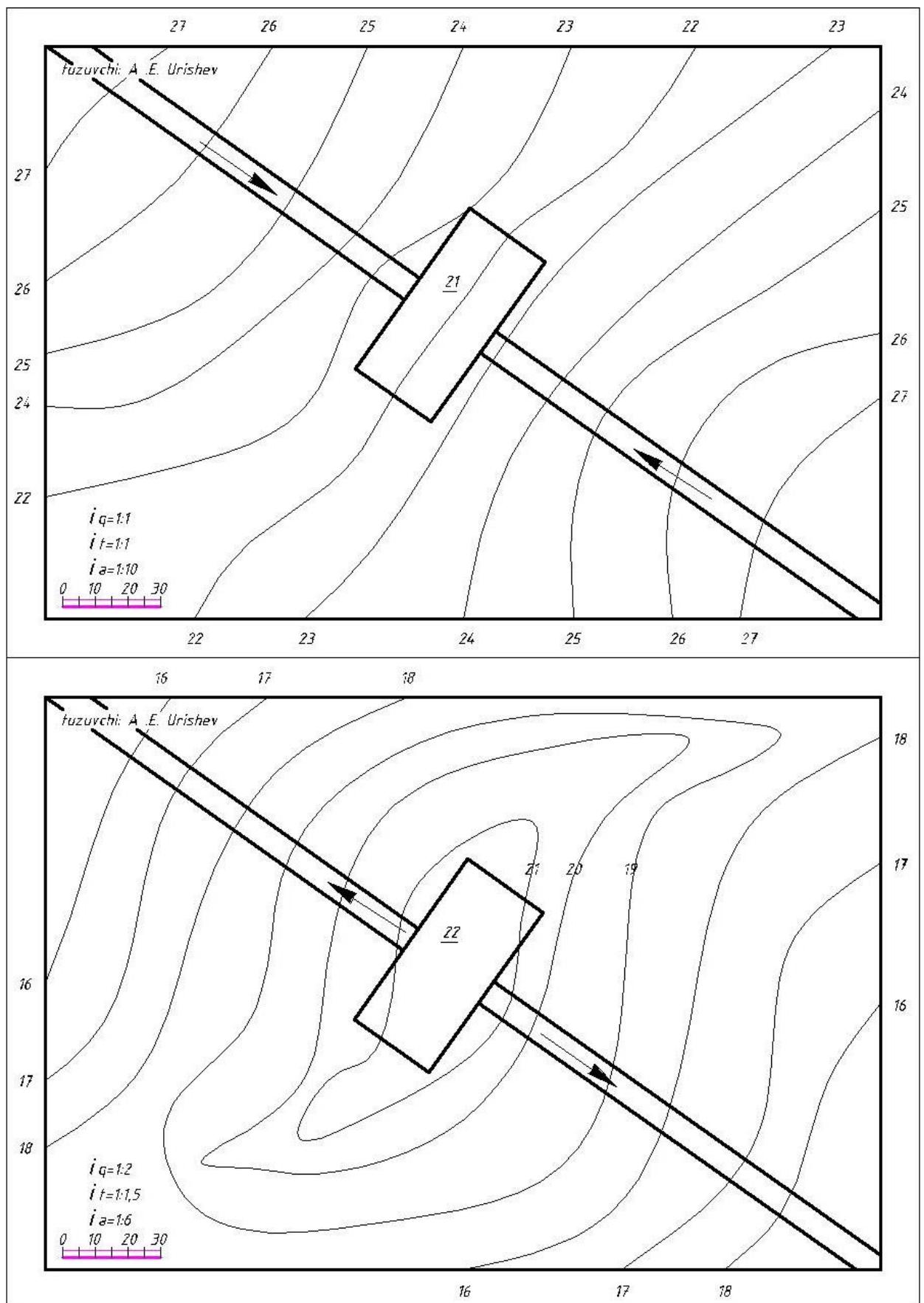


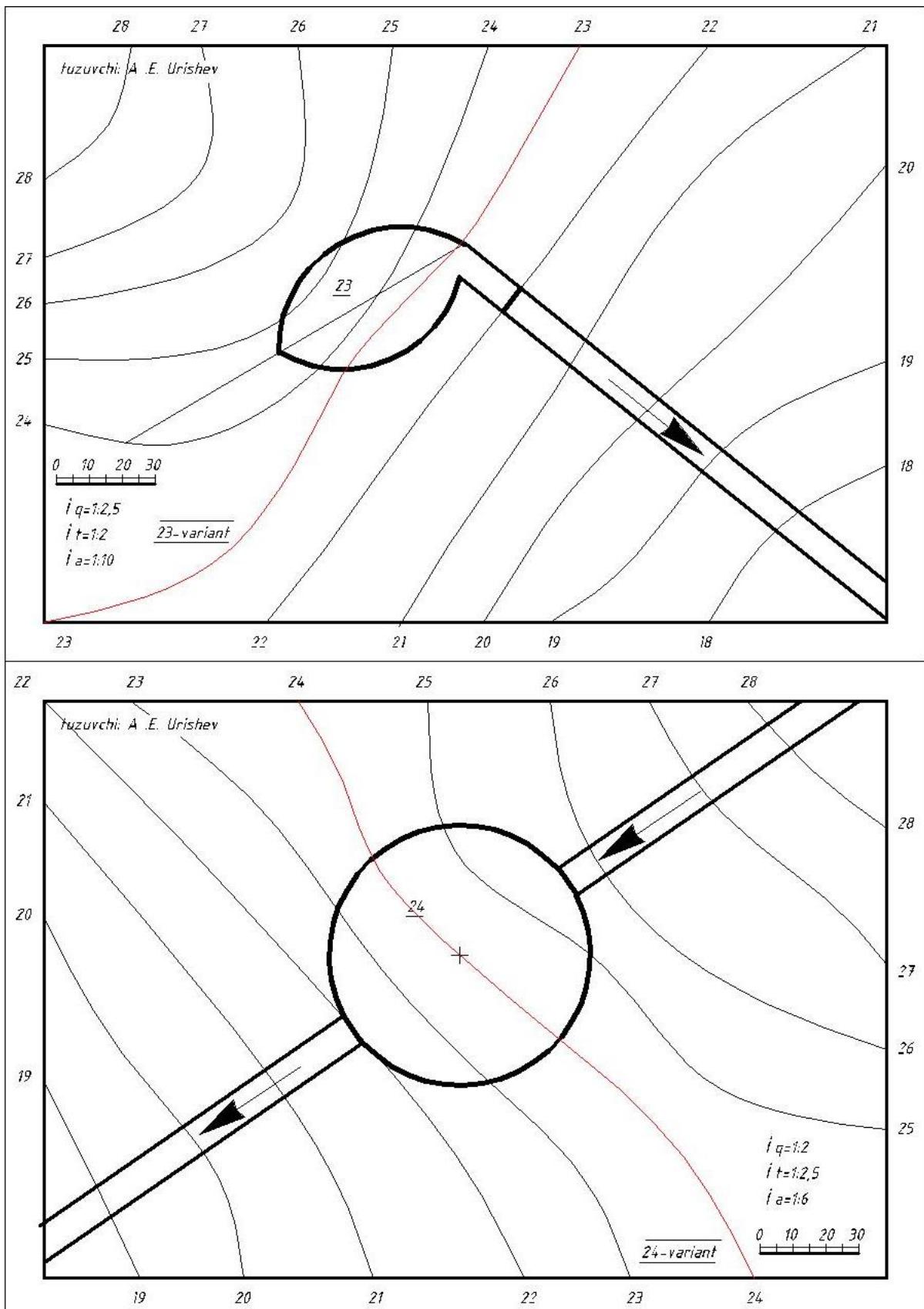












13-MASHQ

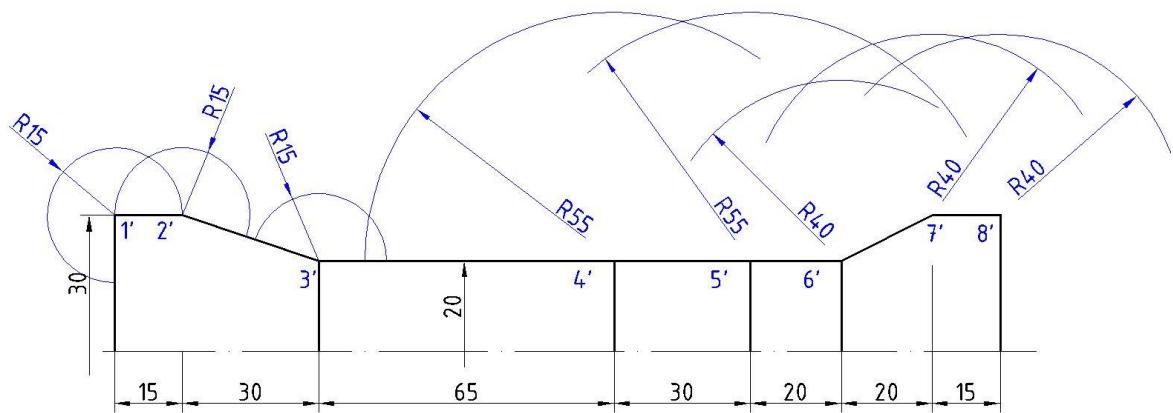
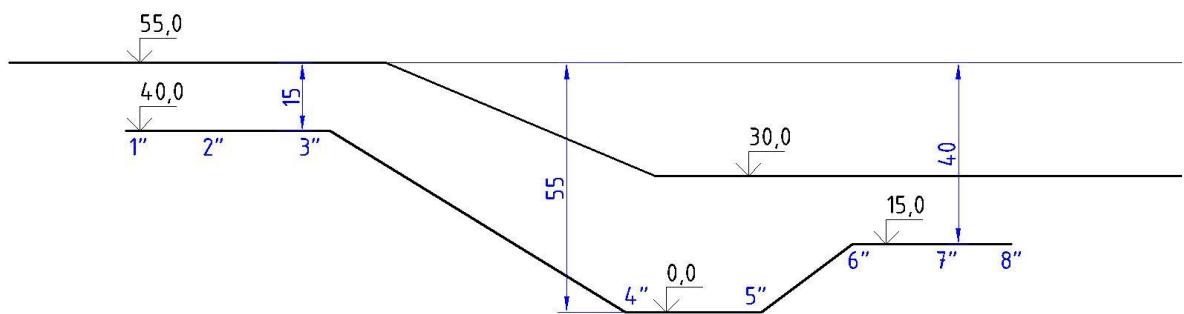
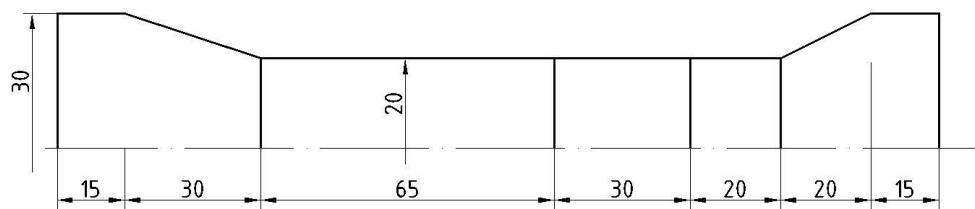
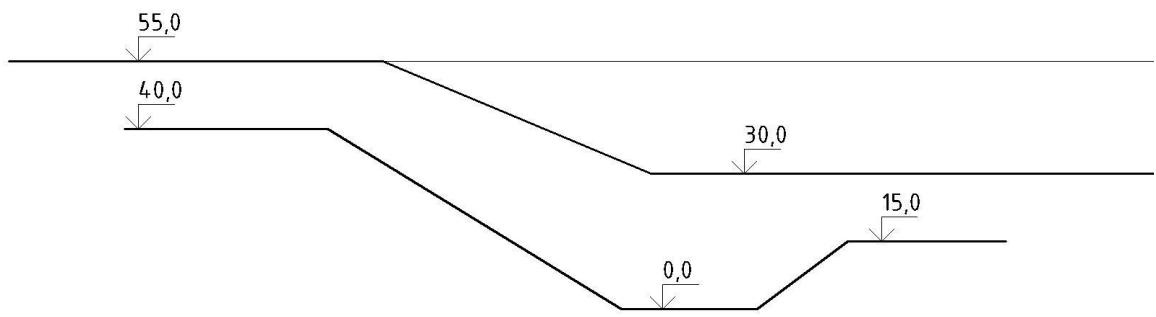
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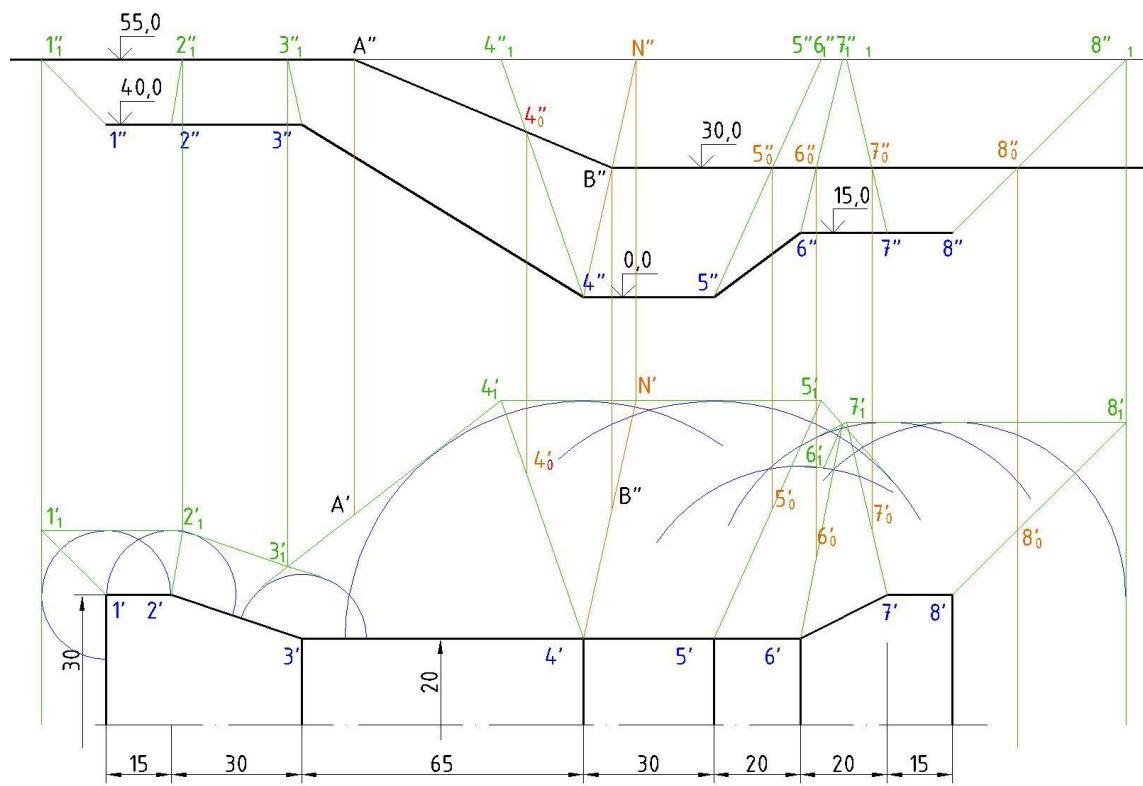
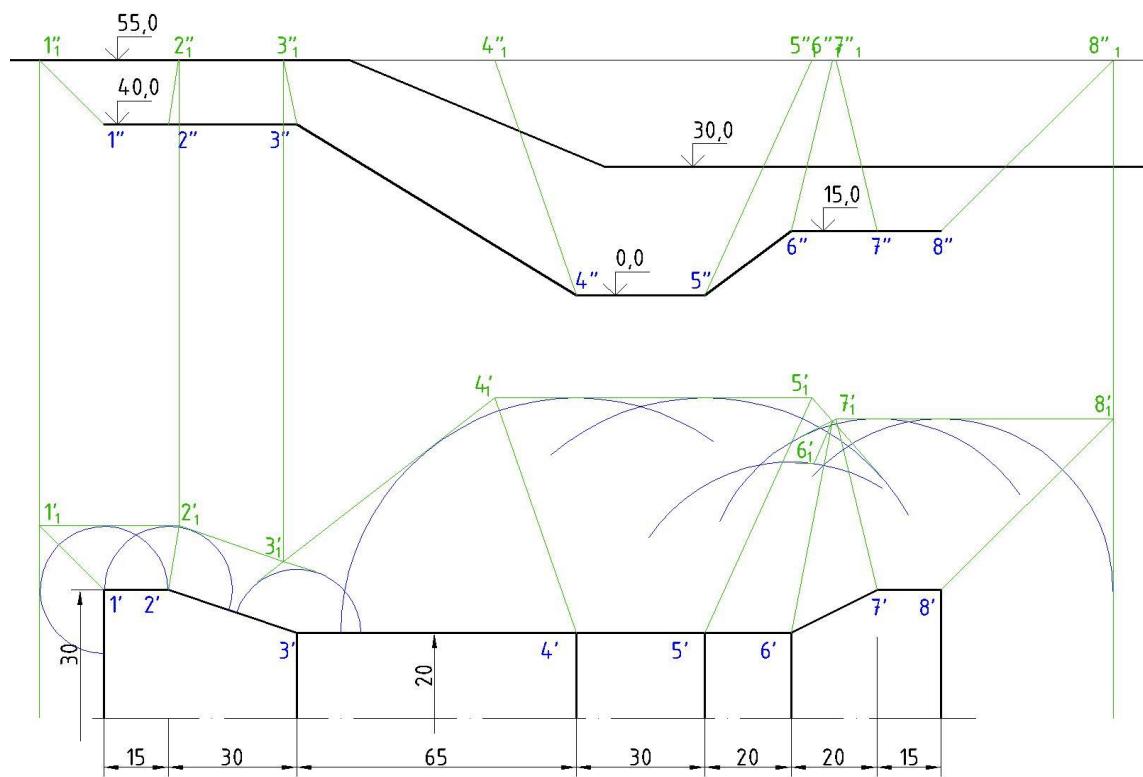
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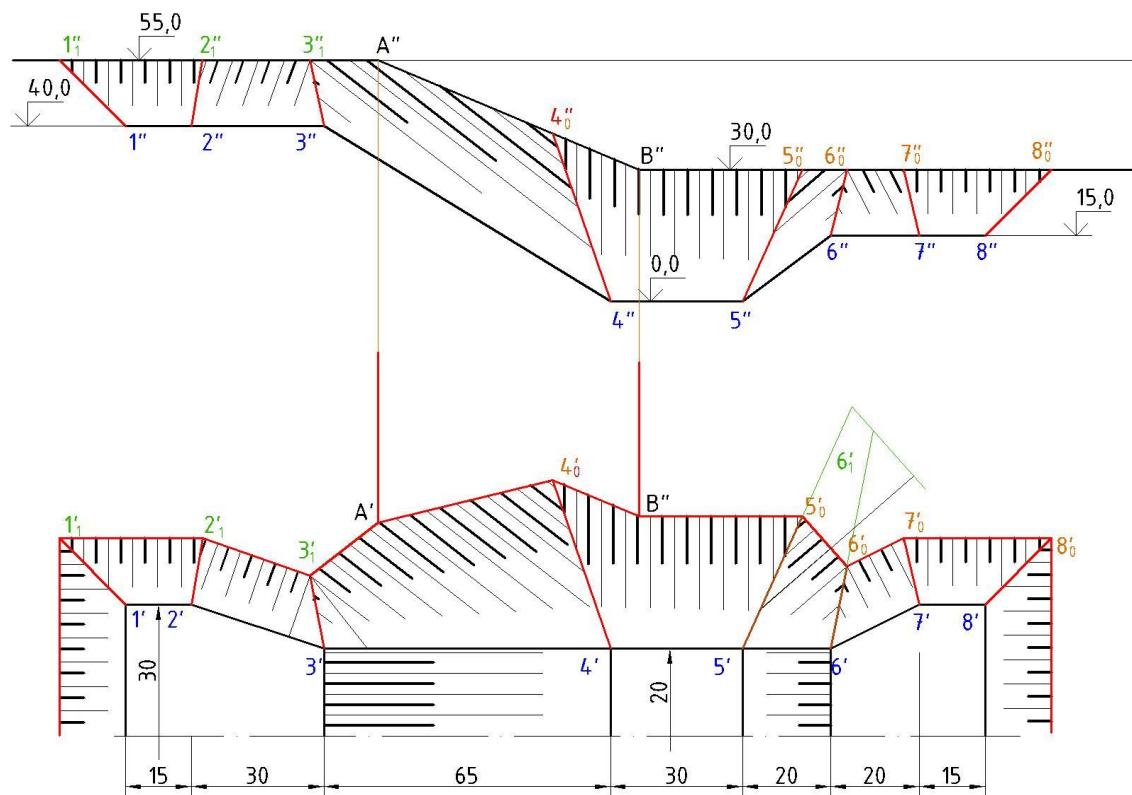
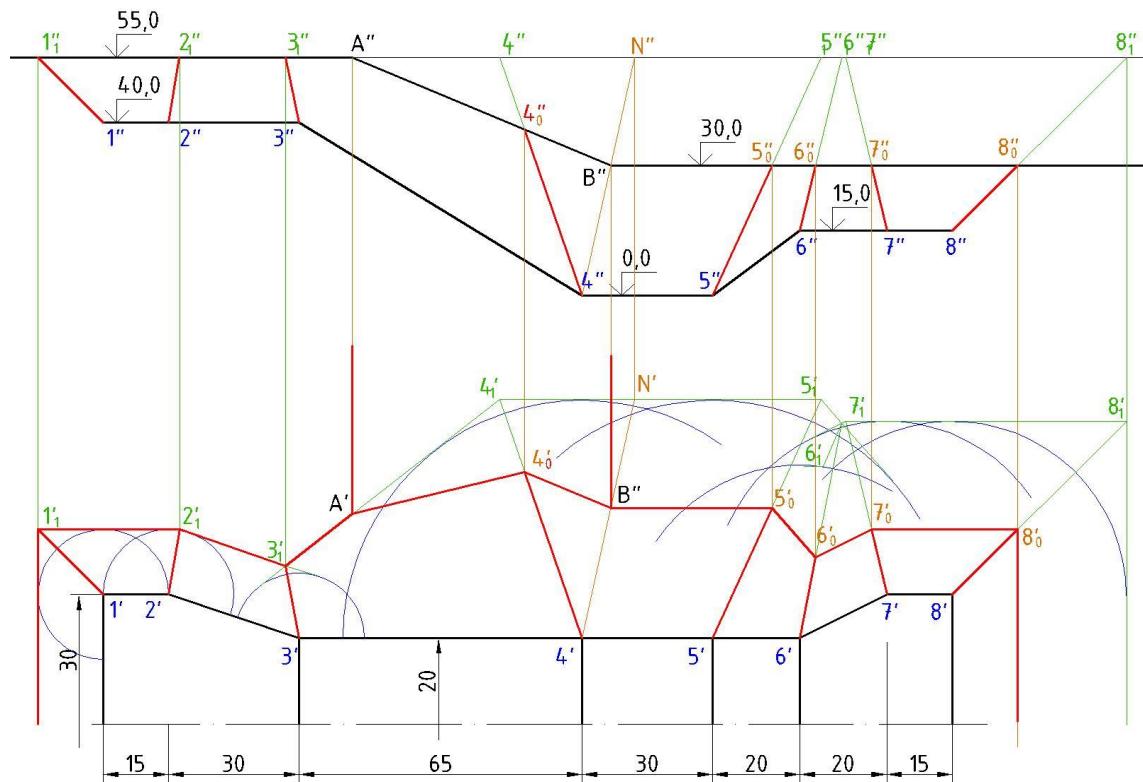
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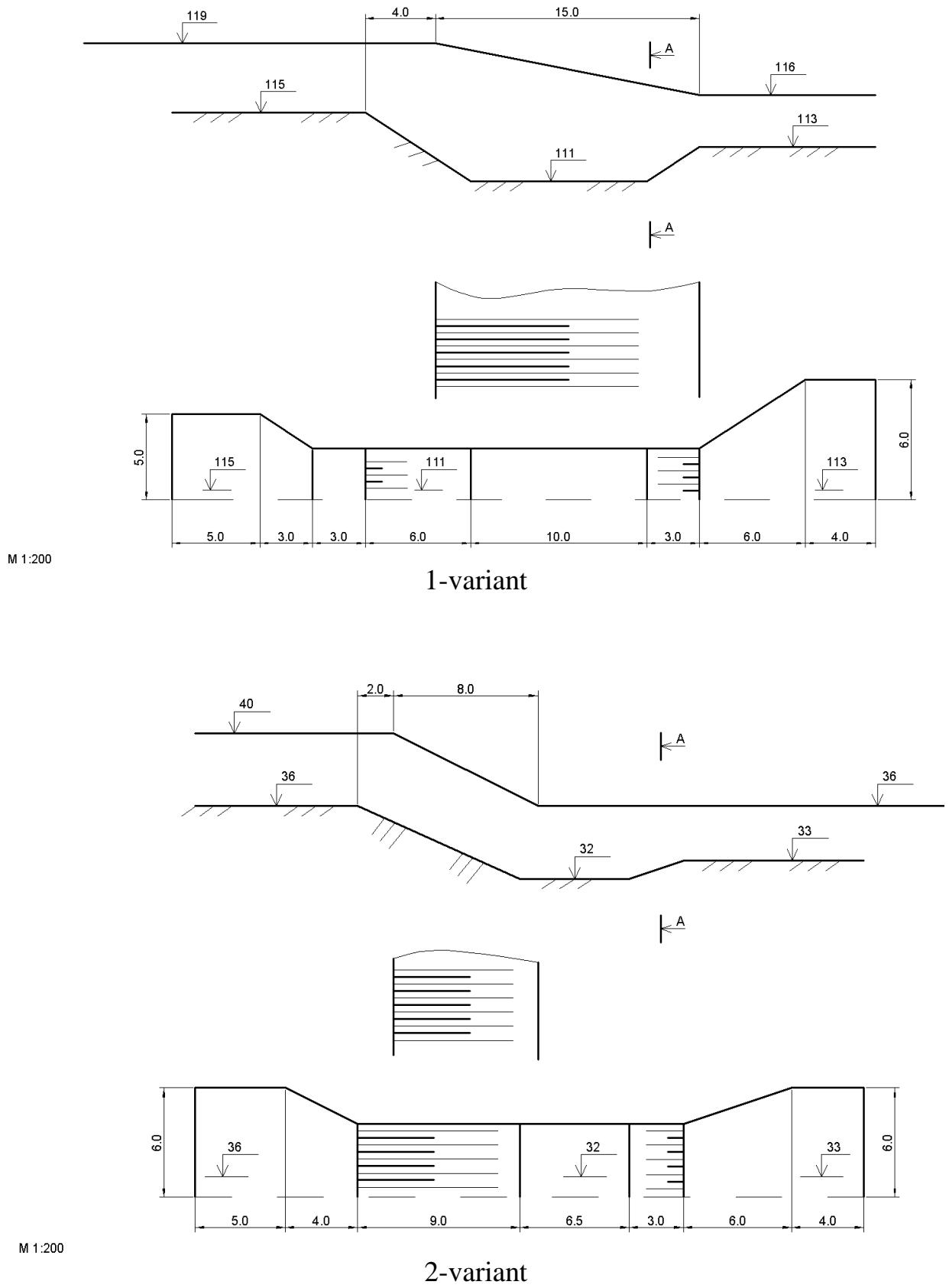
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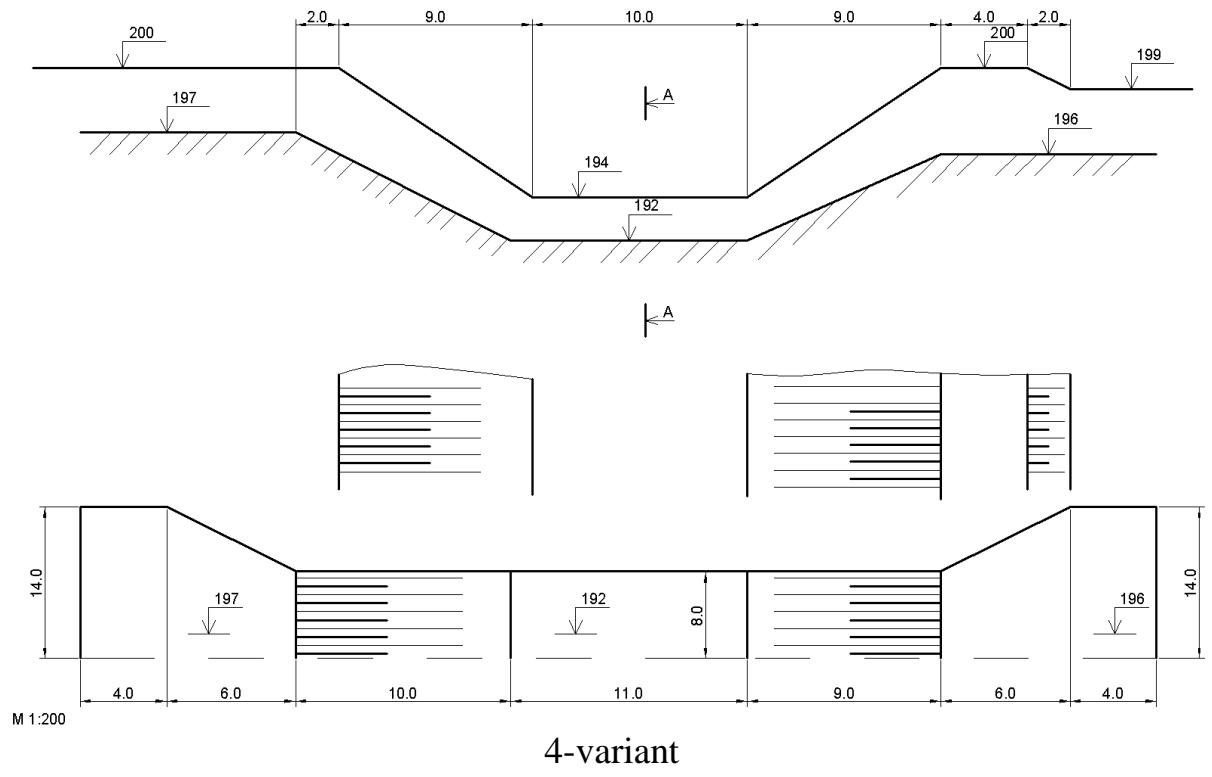
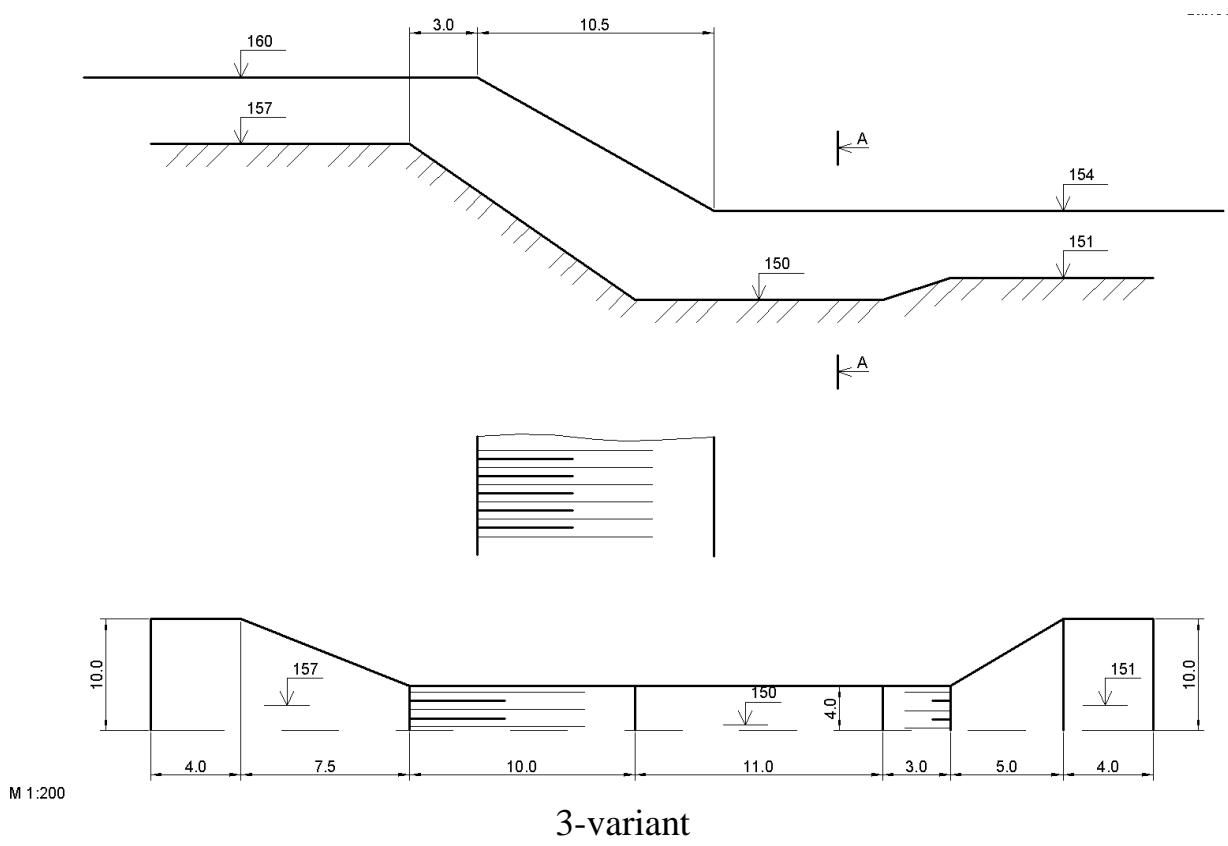
VARIANTLAR

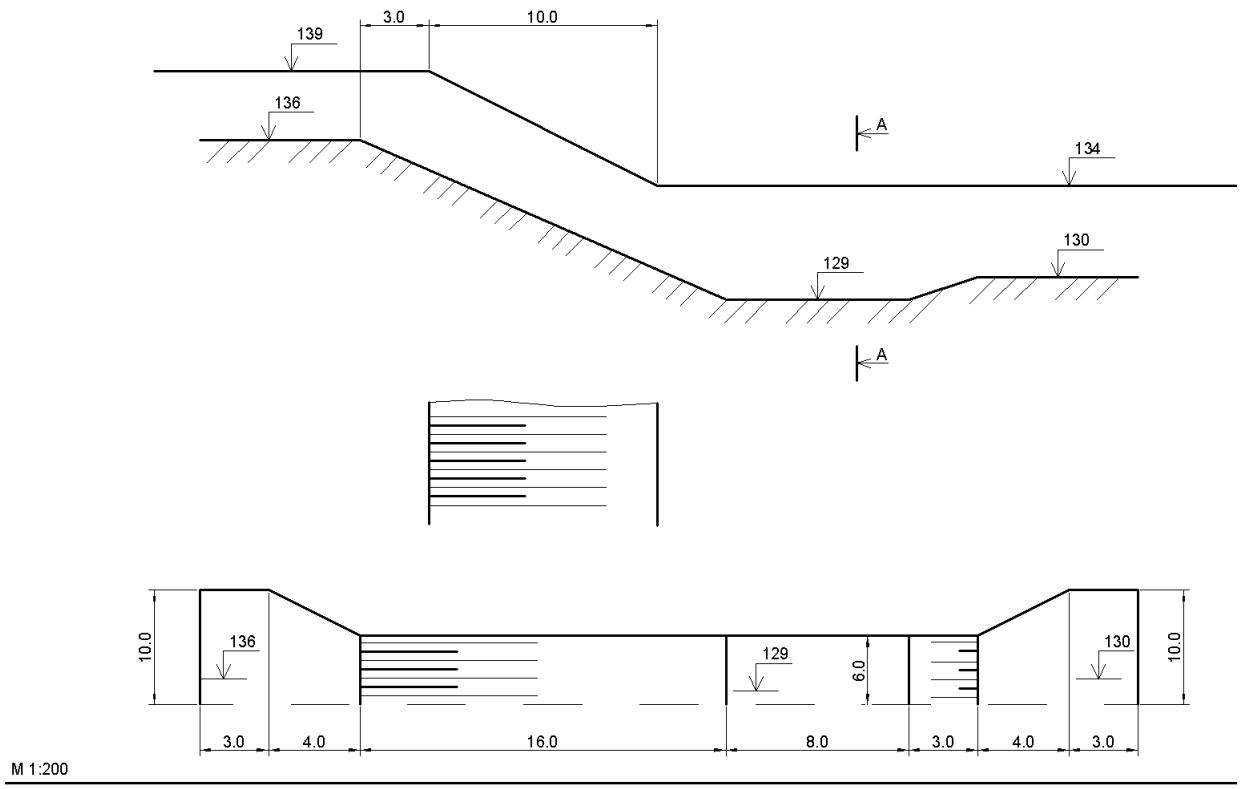




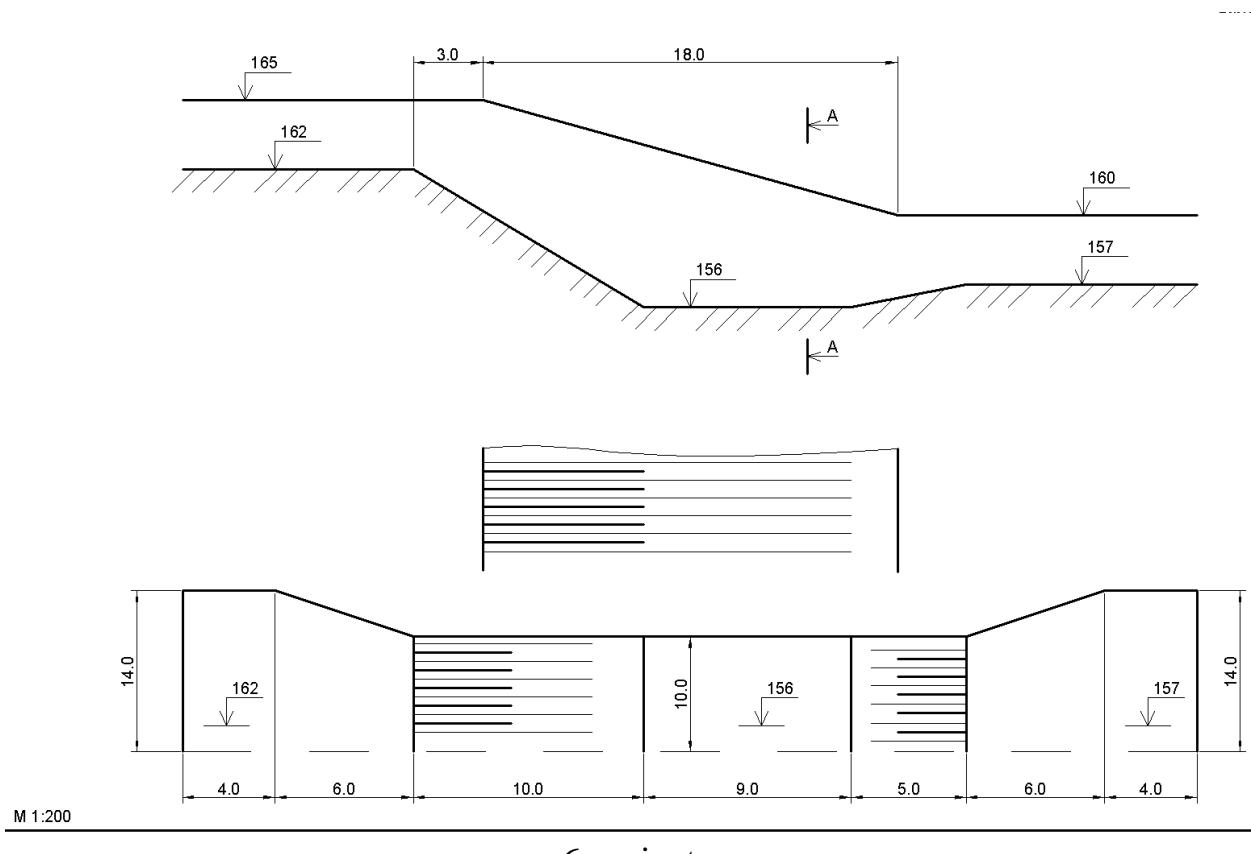




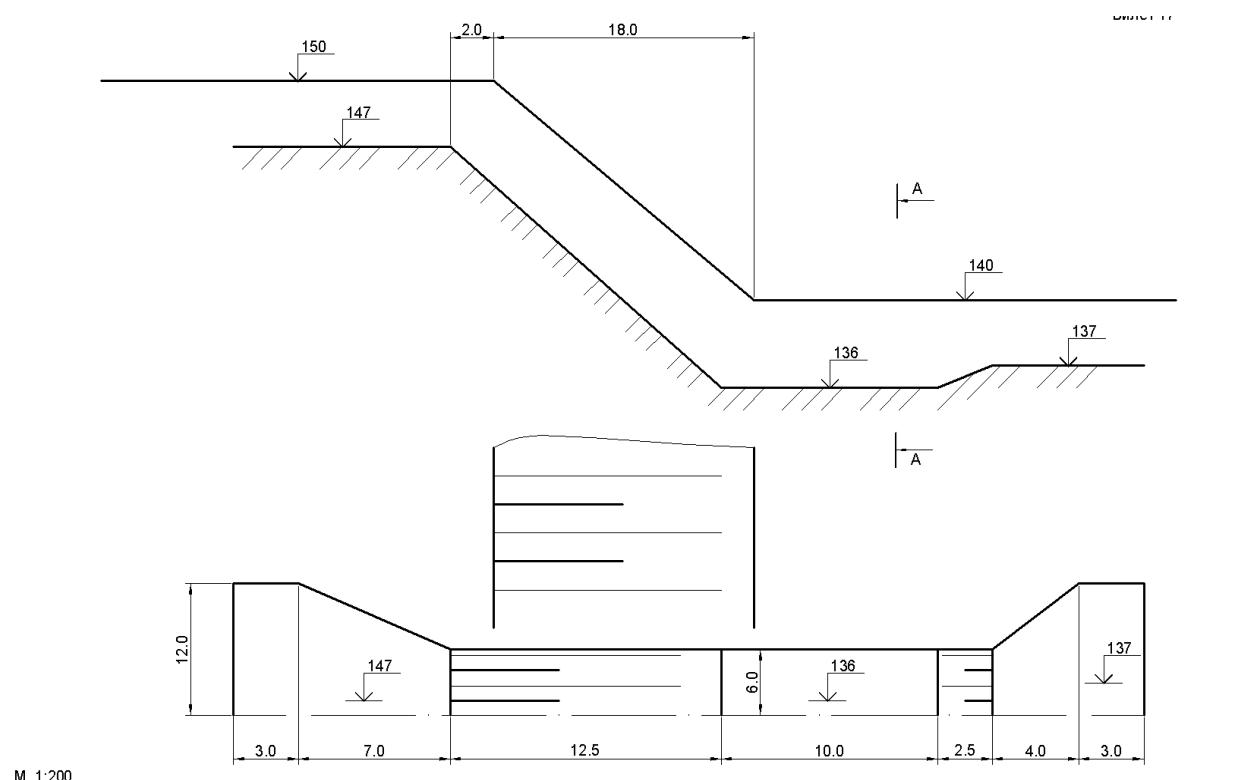
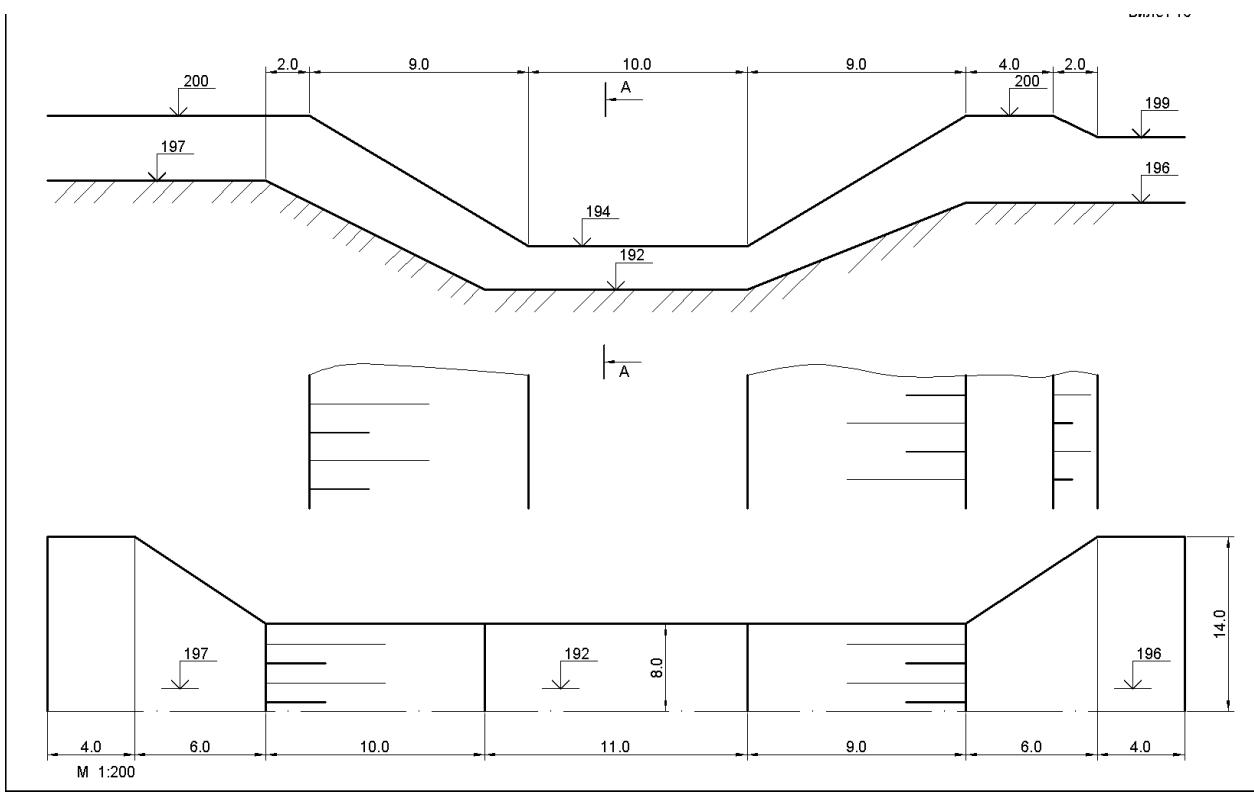




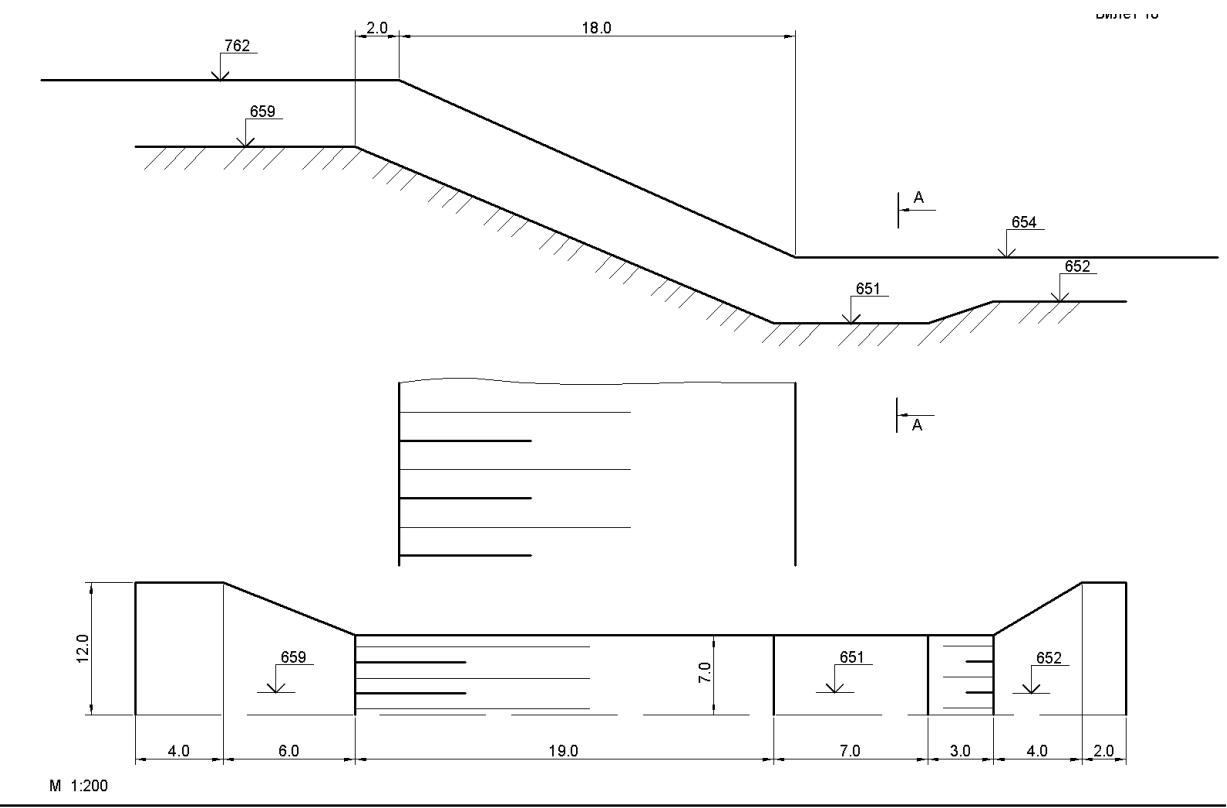
5-variant



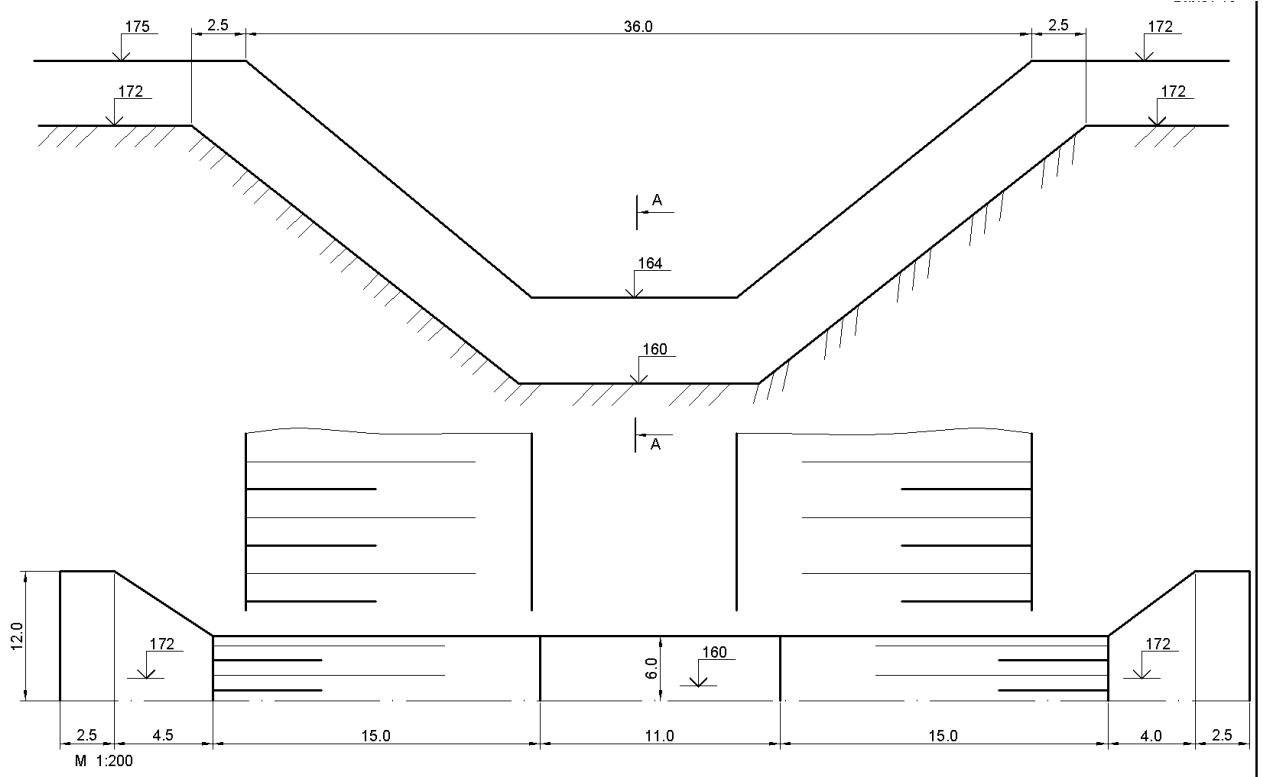
6-variant



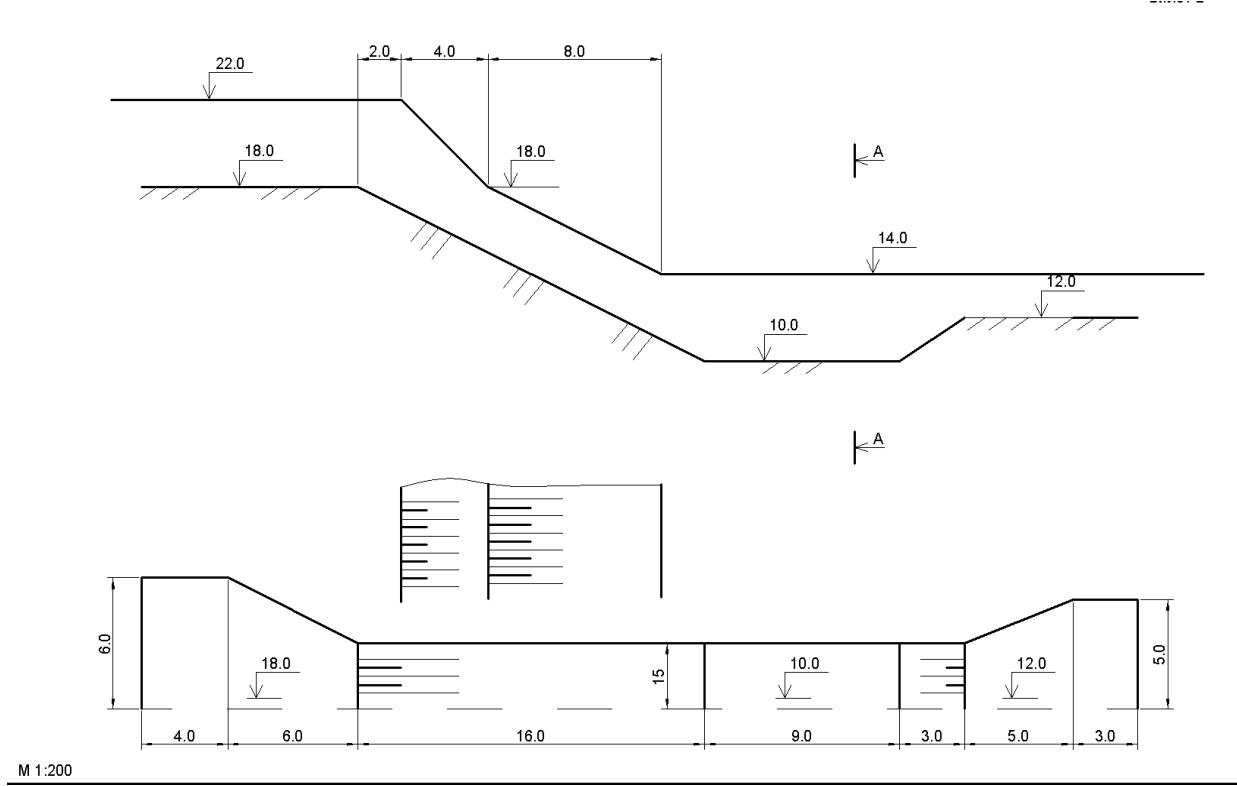
8-variant



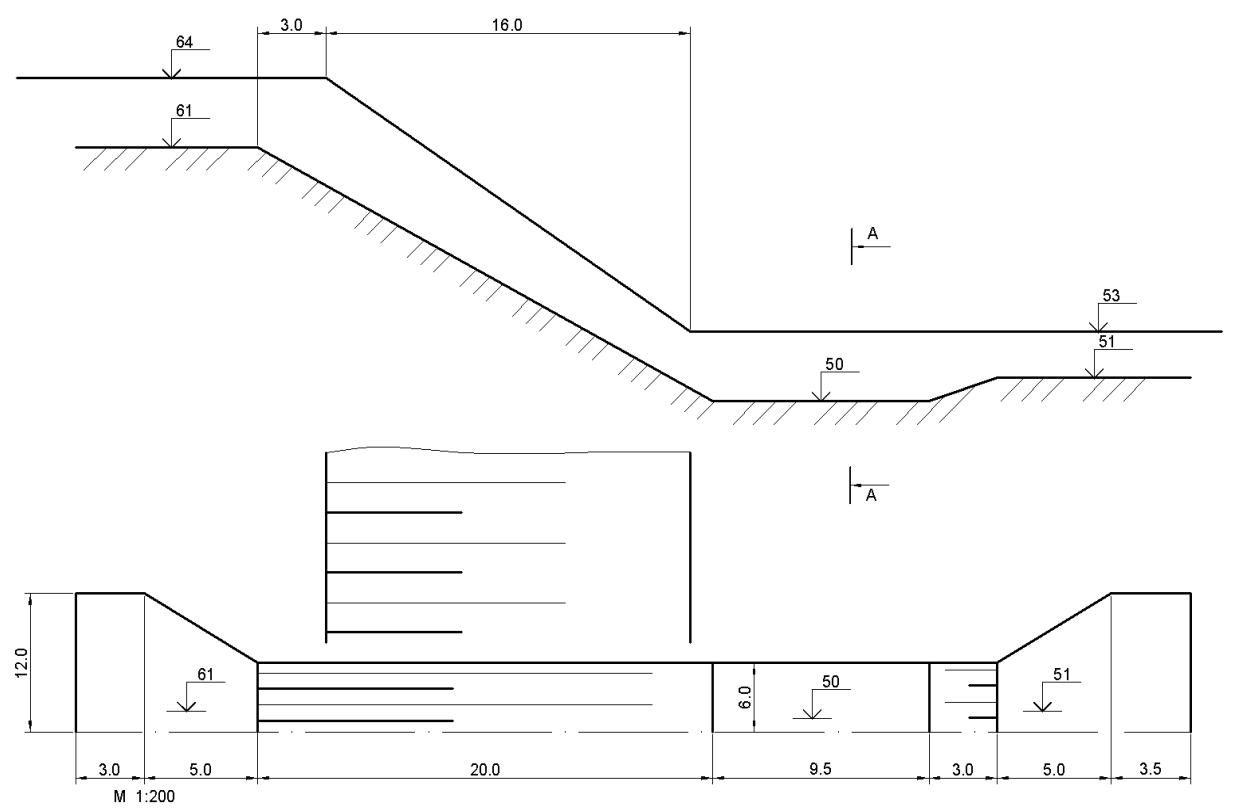
9-variant



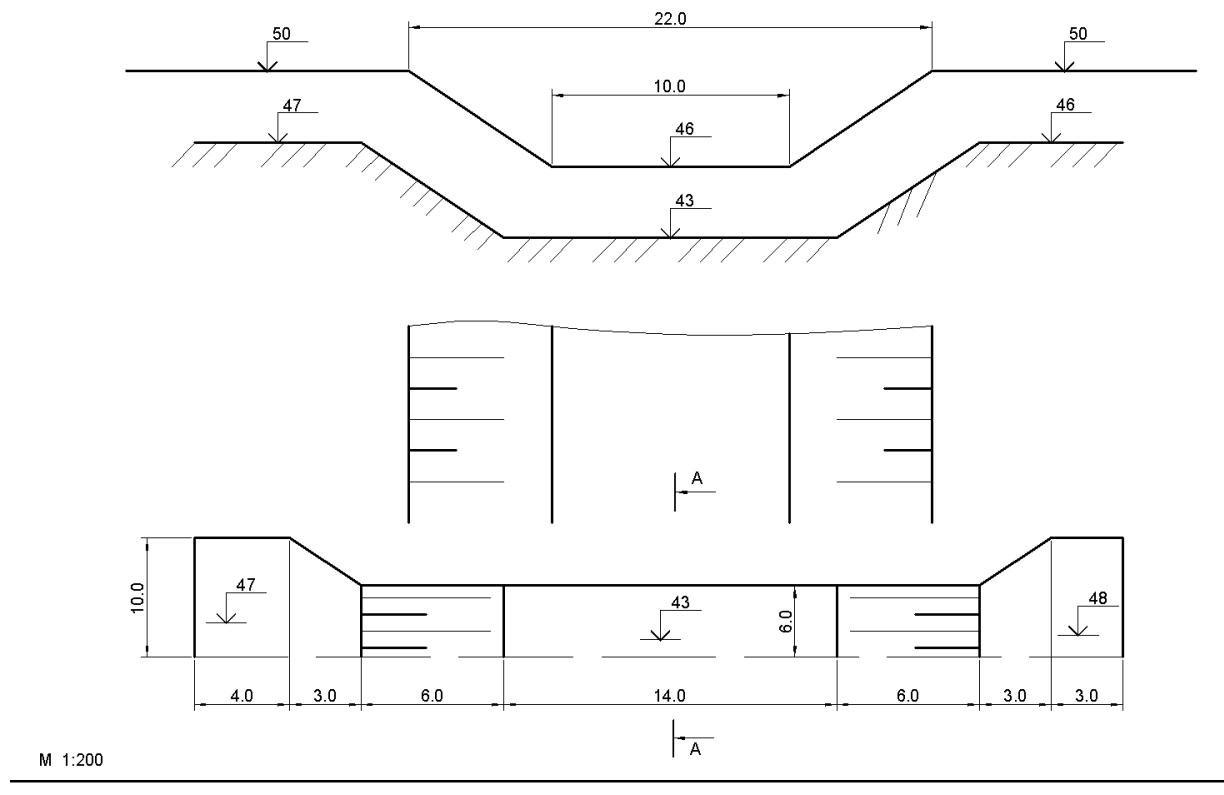
10-variant



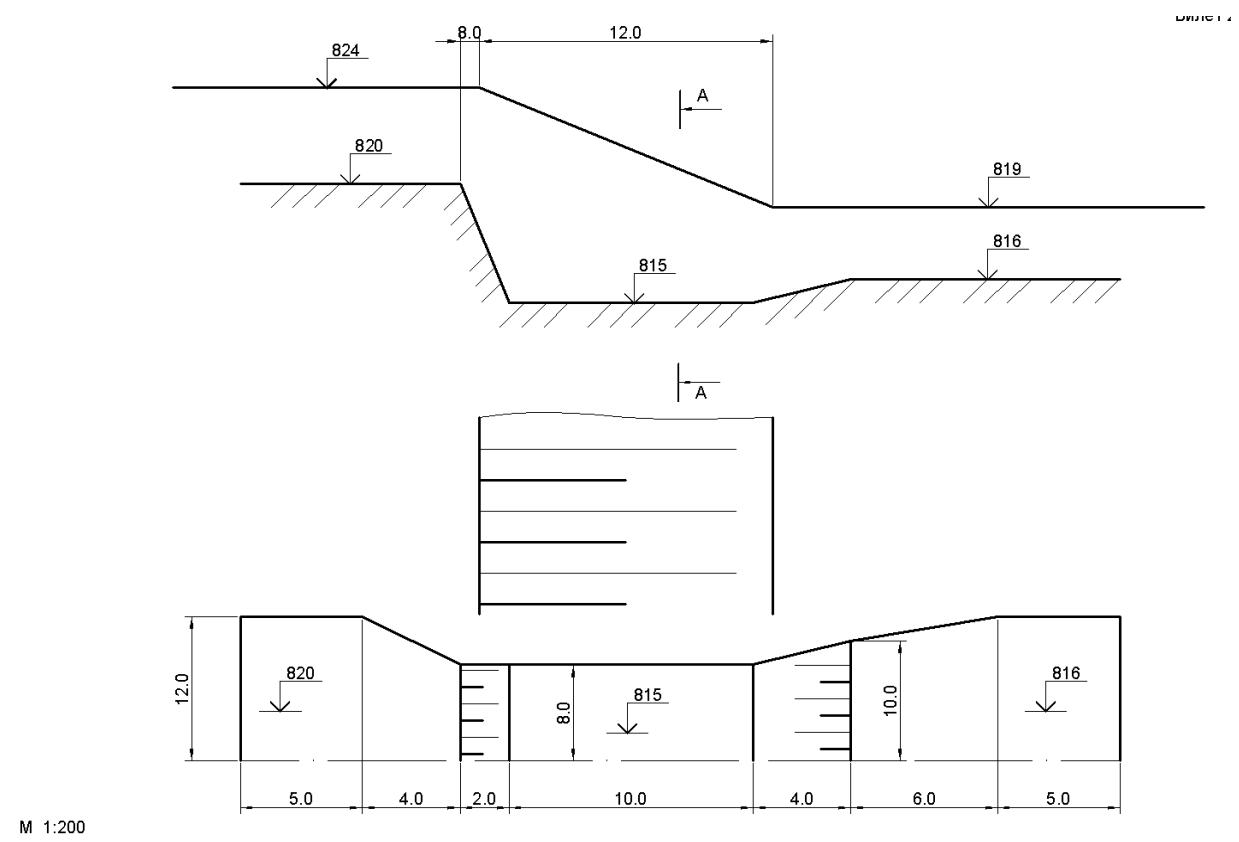
11-variant



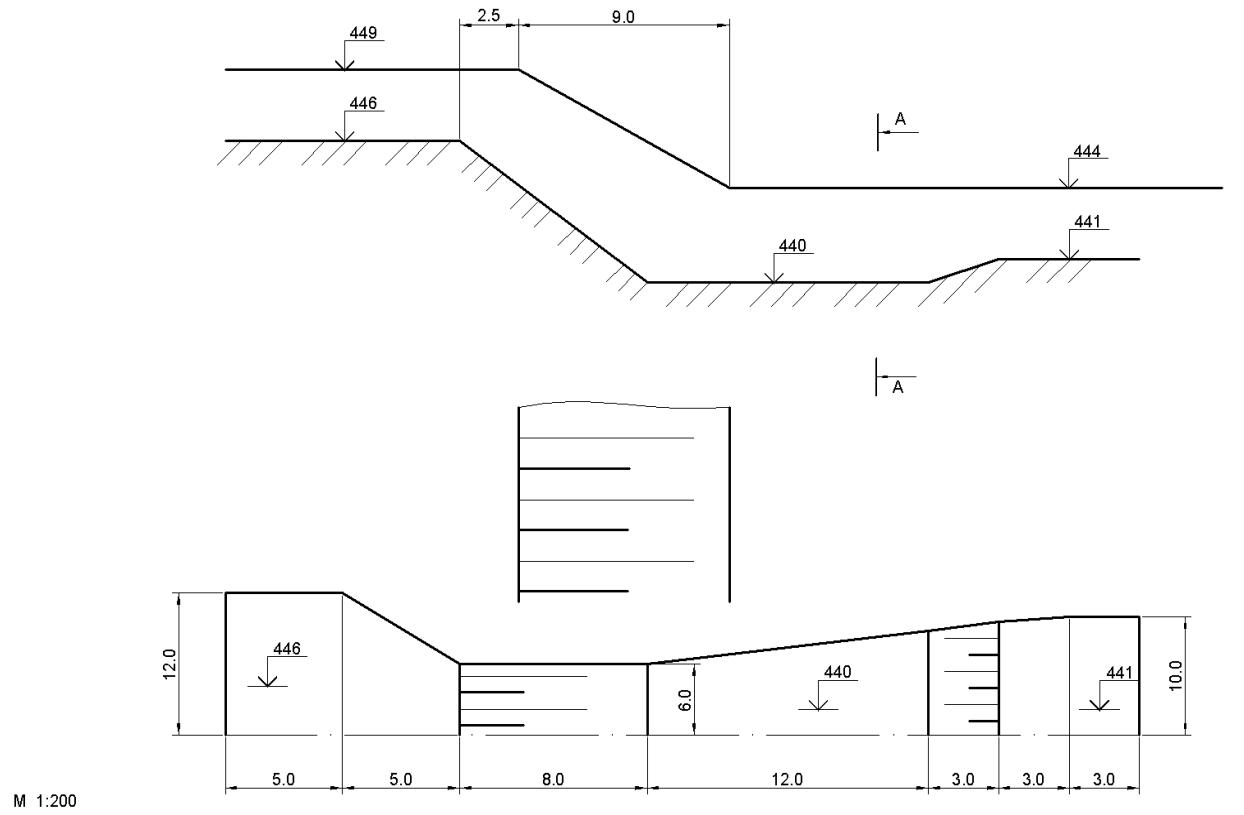
12-variant



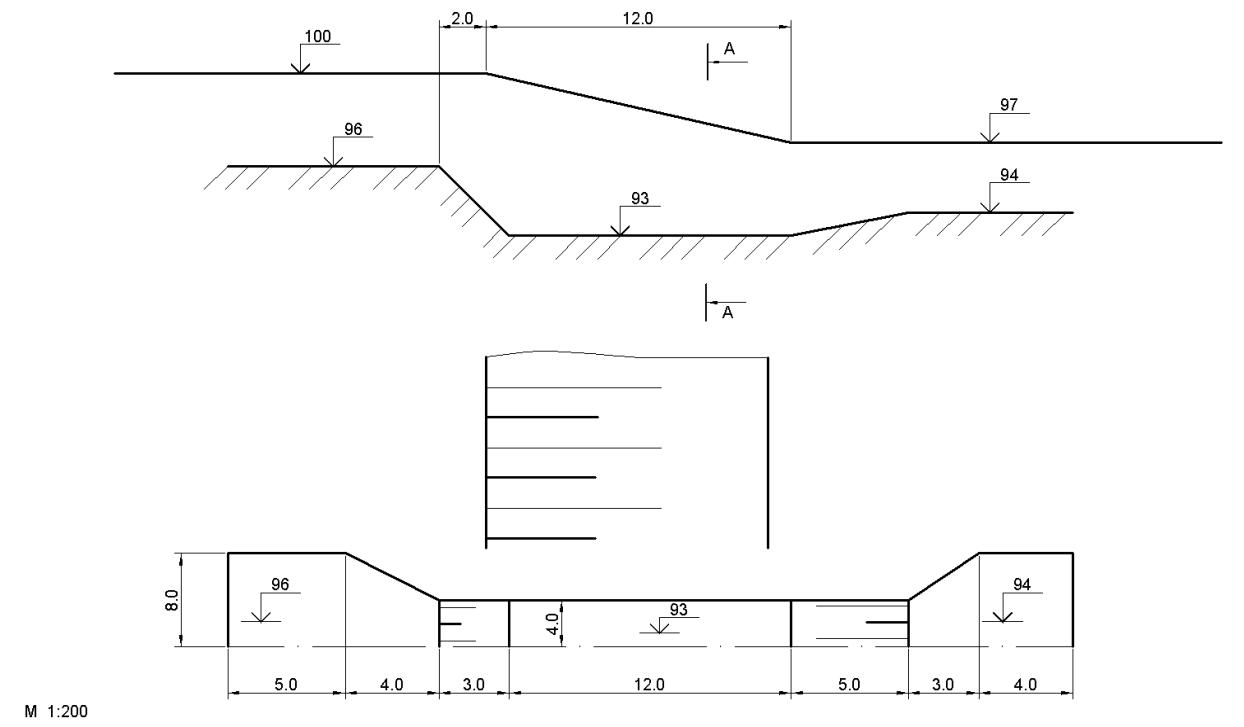
13-variant



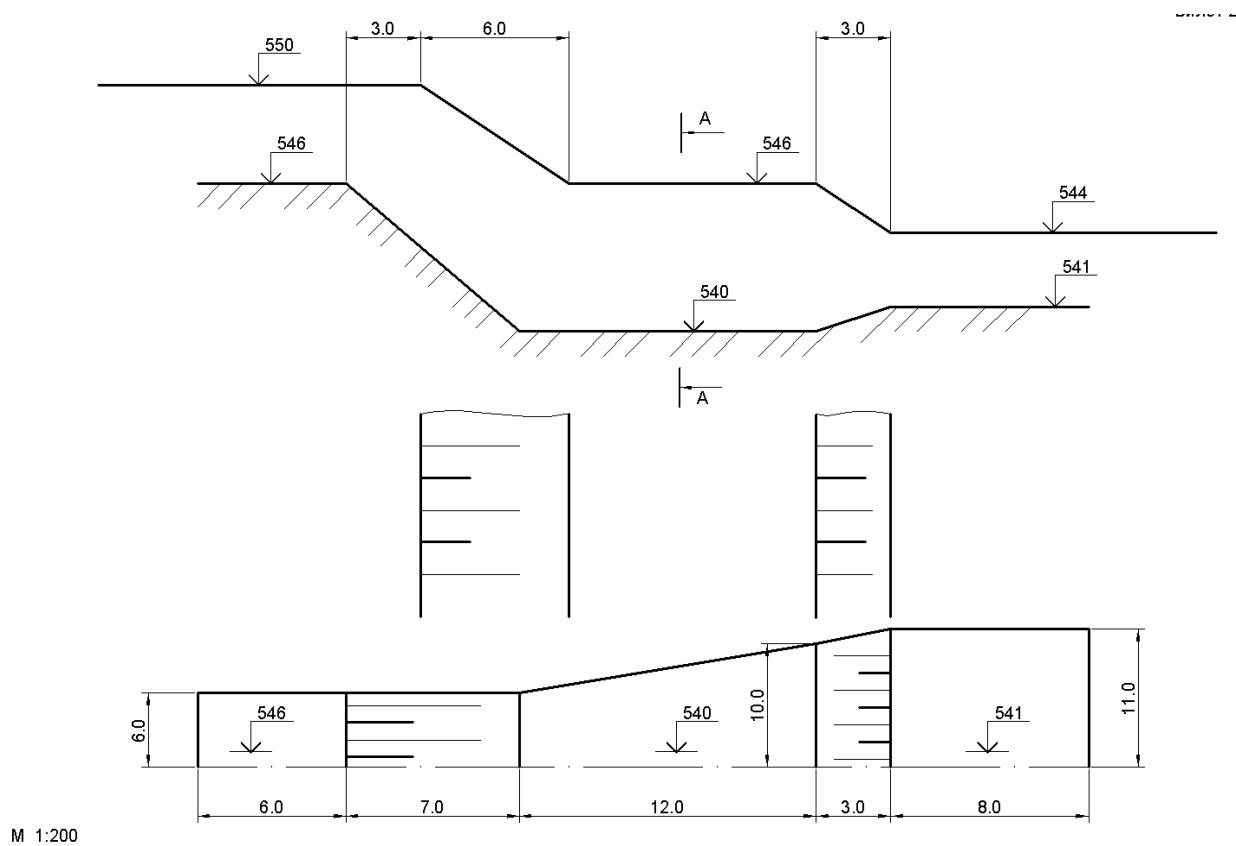
14-variant



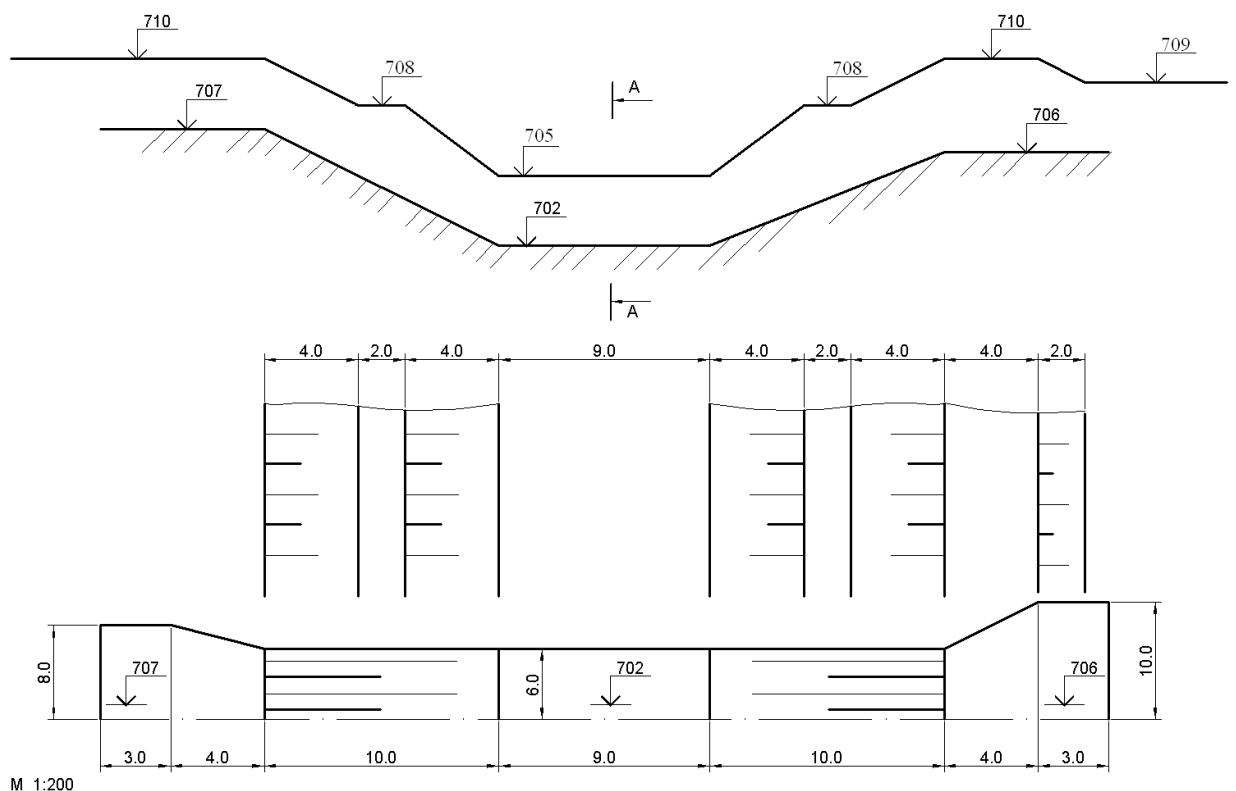
15-variant



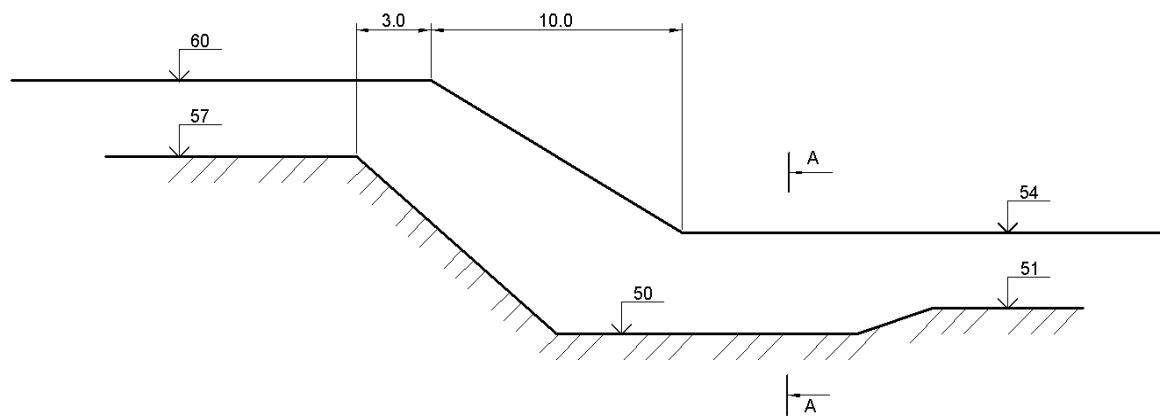
16-variant



17-variant

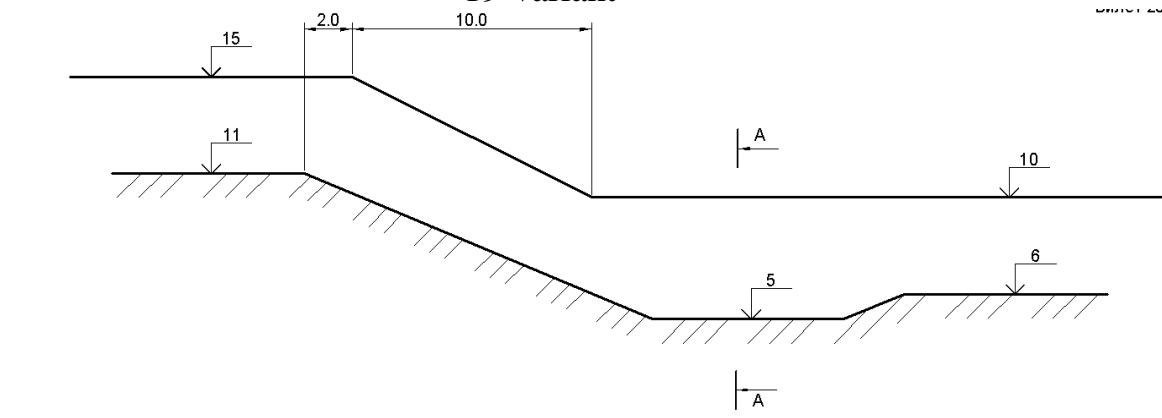


18-variant



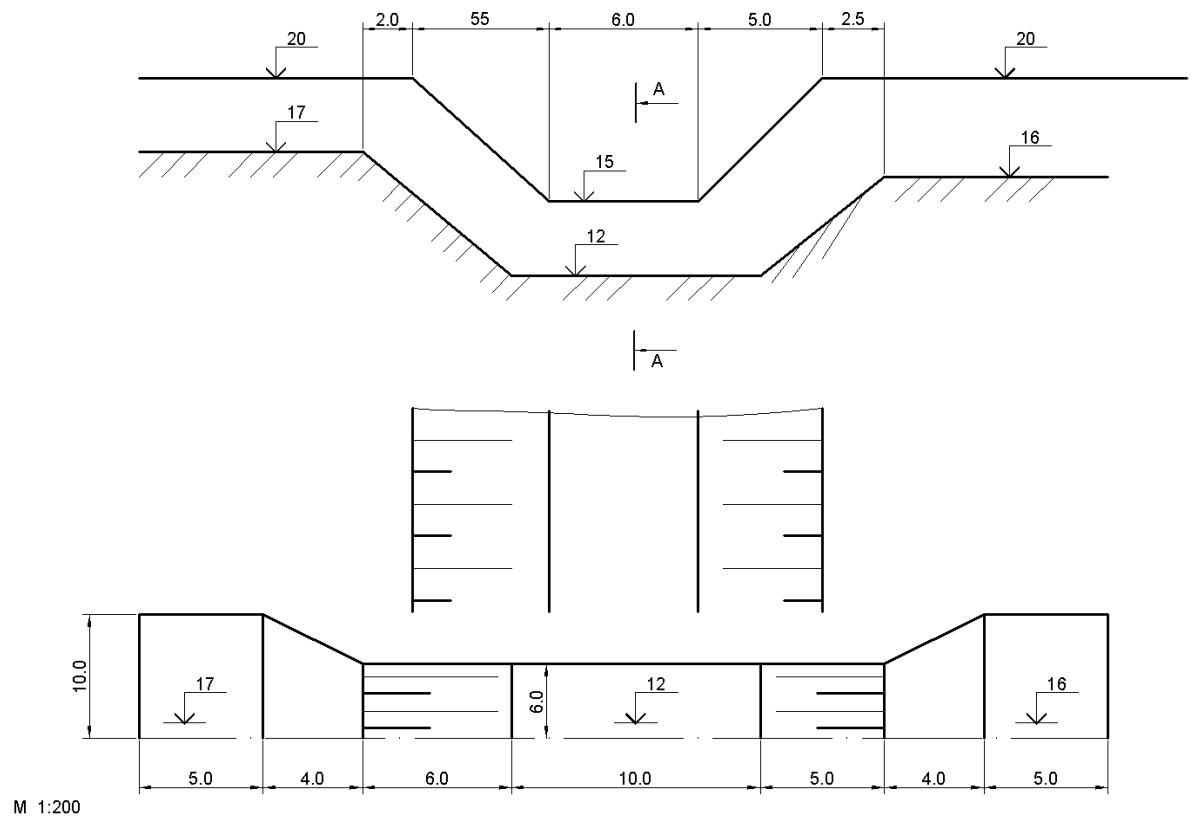
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19-variant

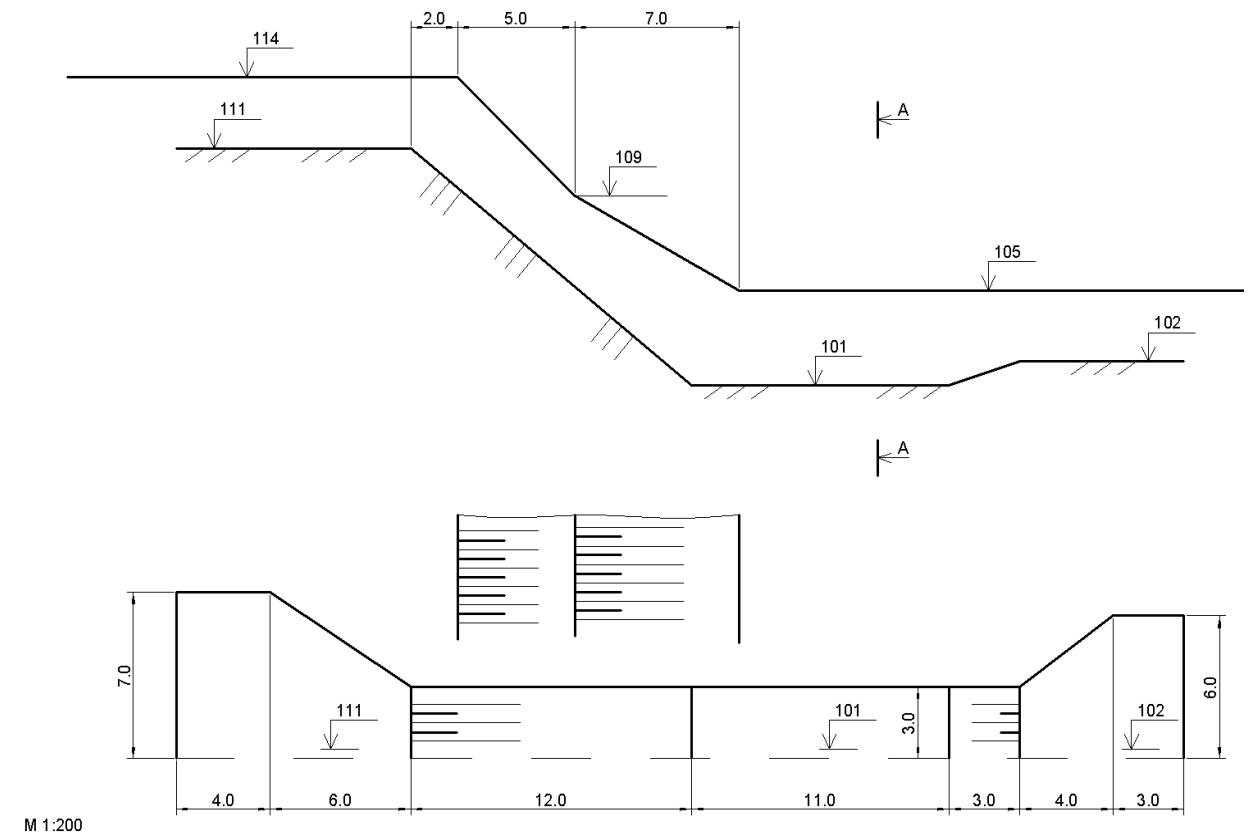


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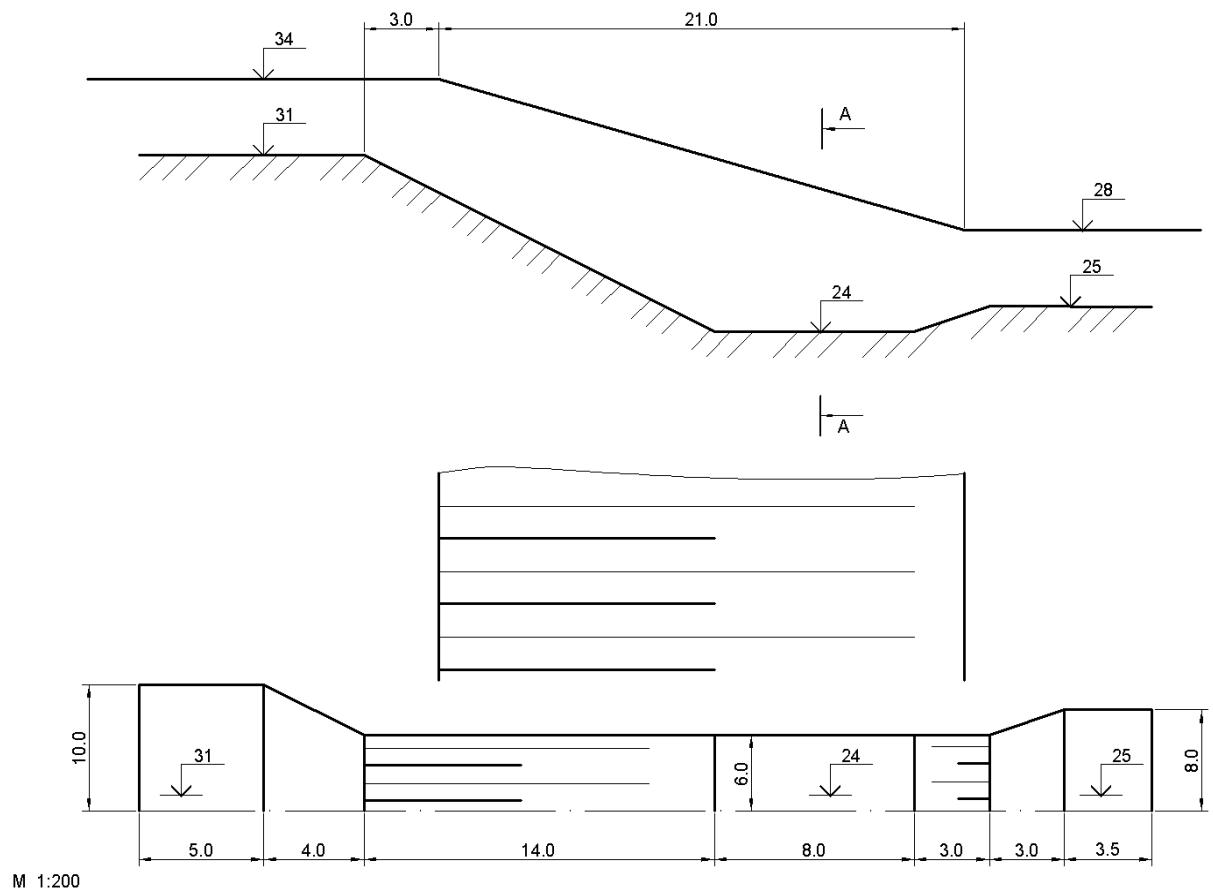
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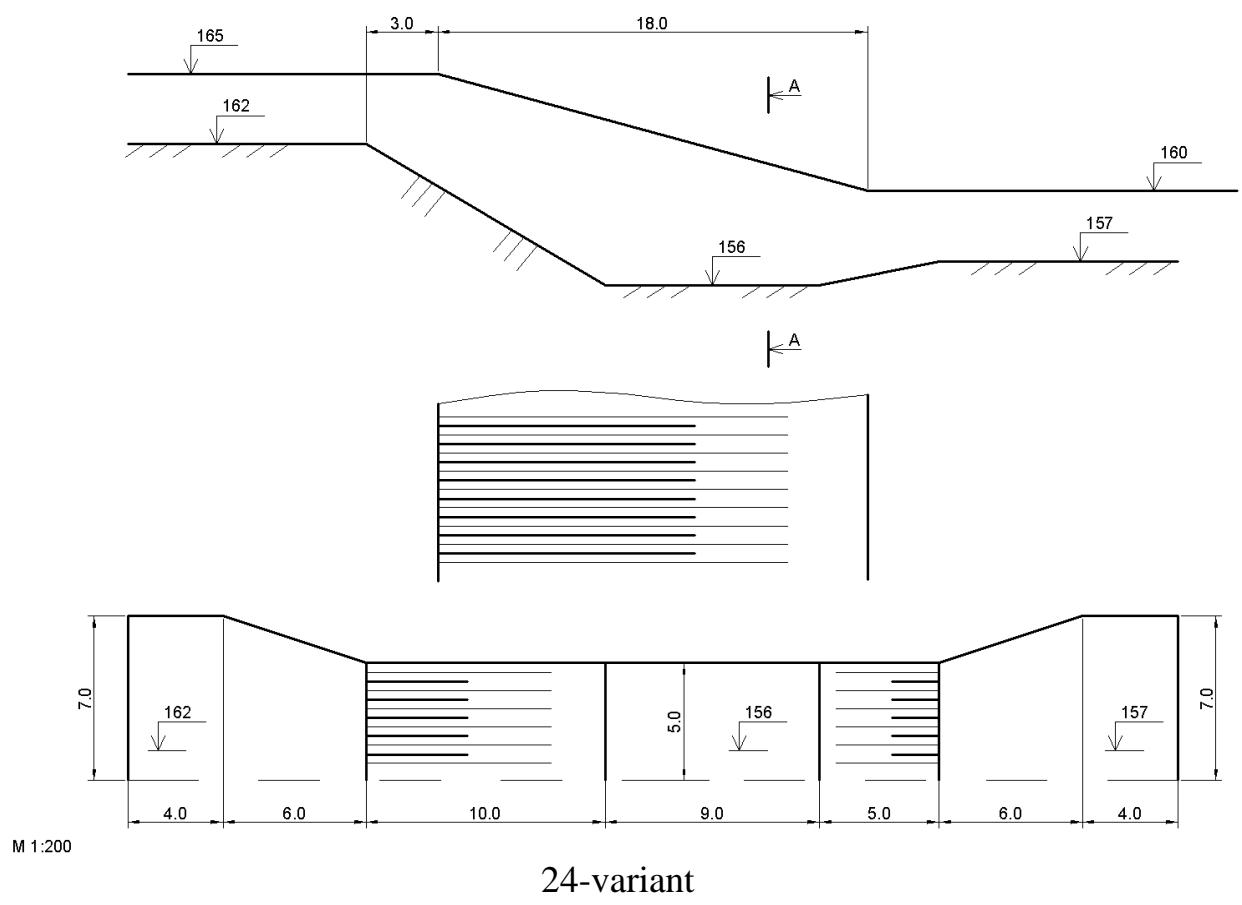
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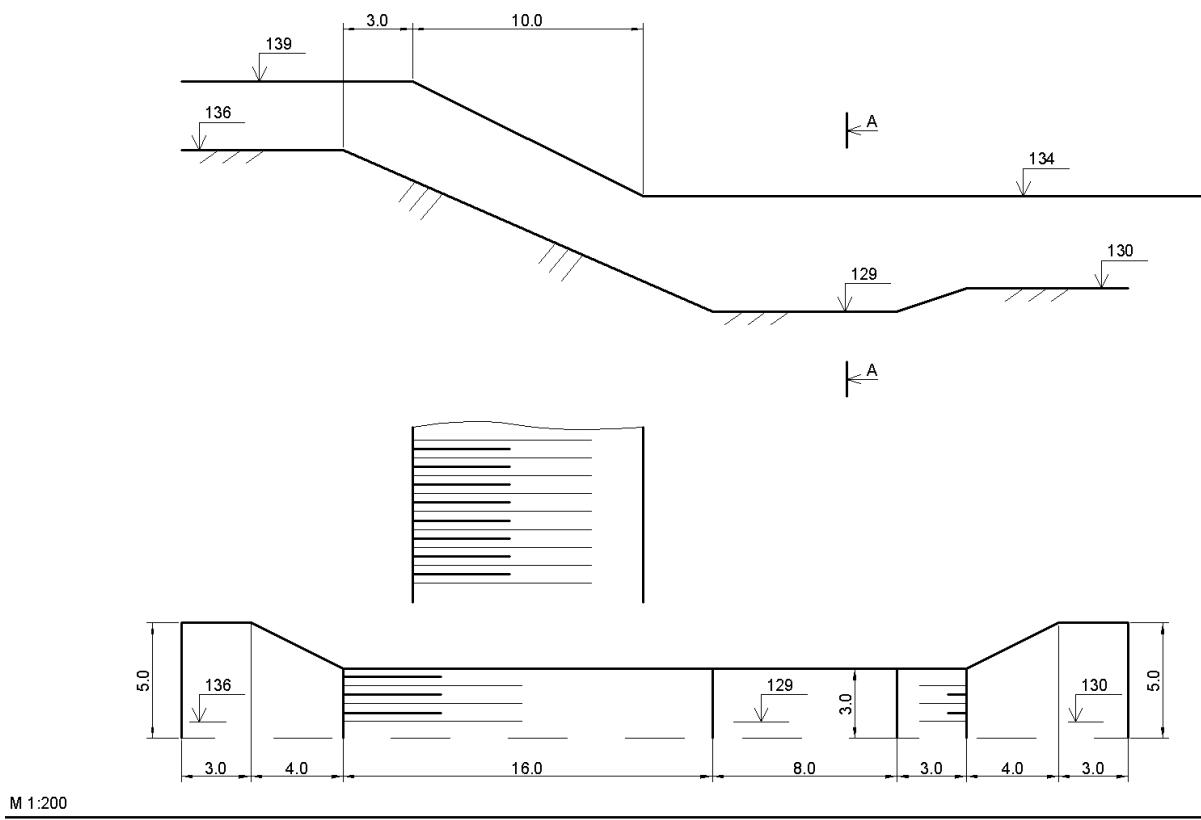
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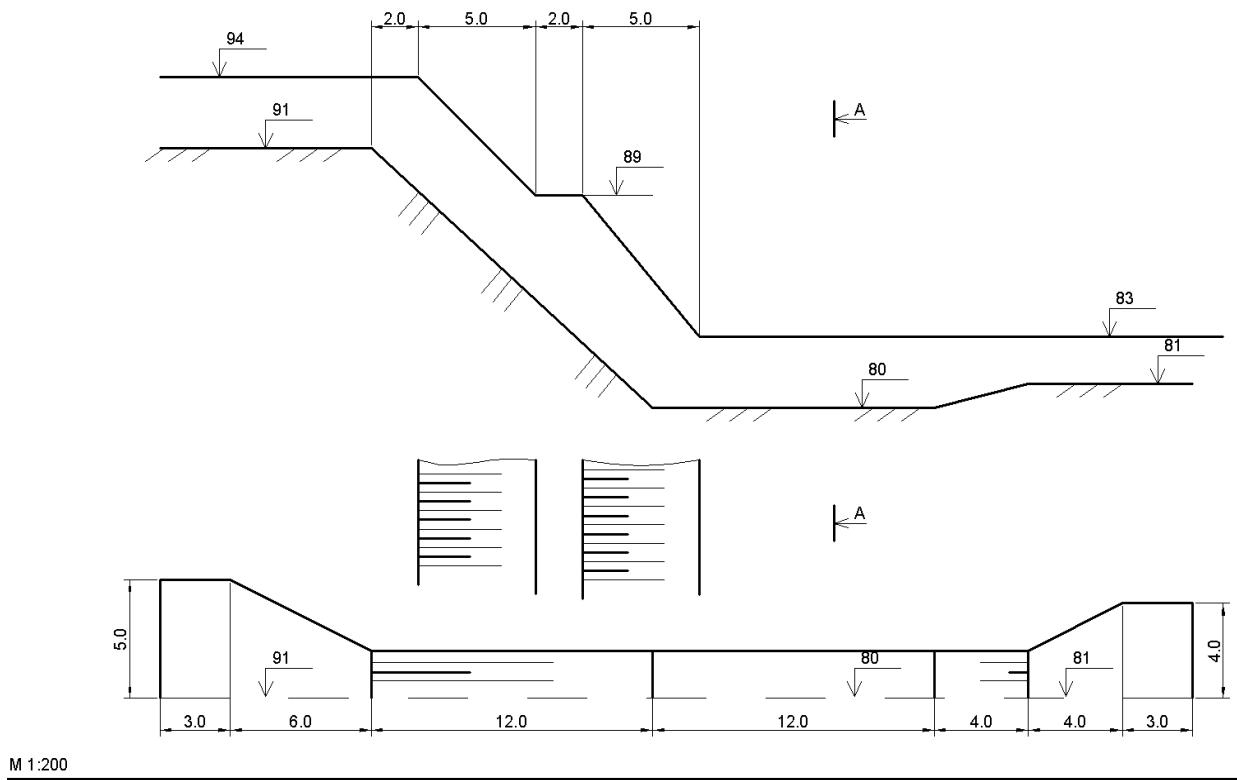
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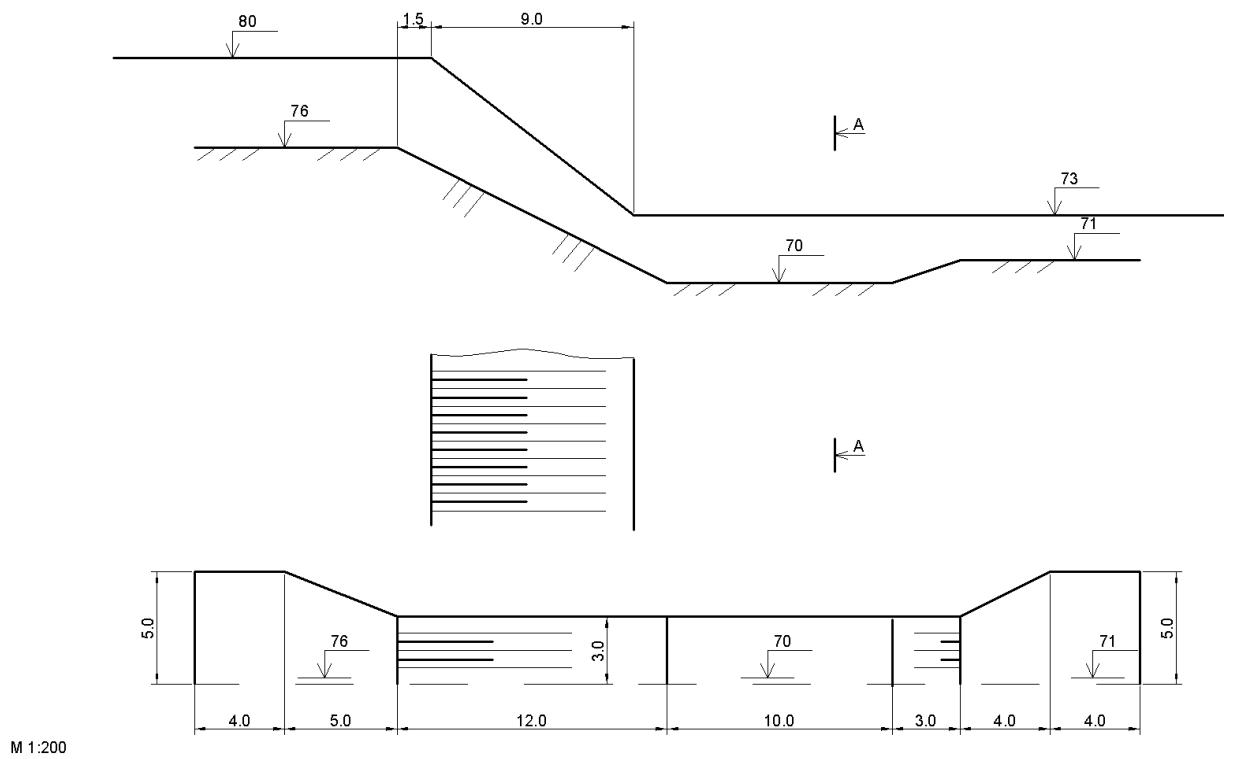
24-variant



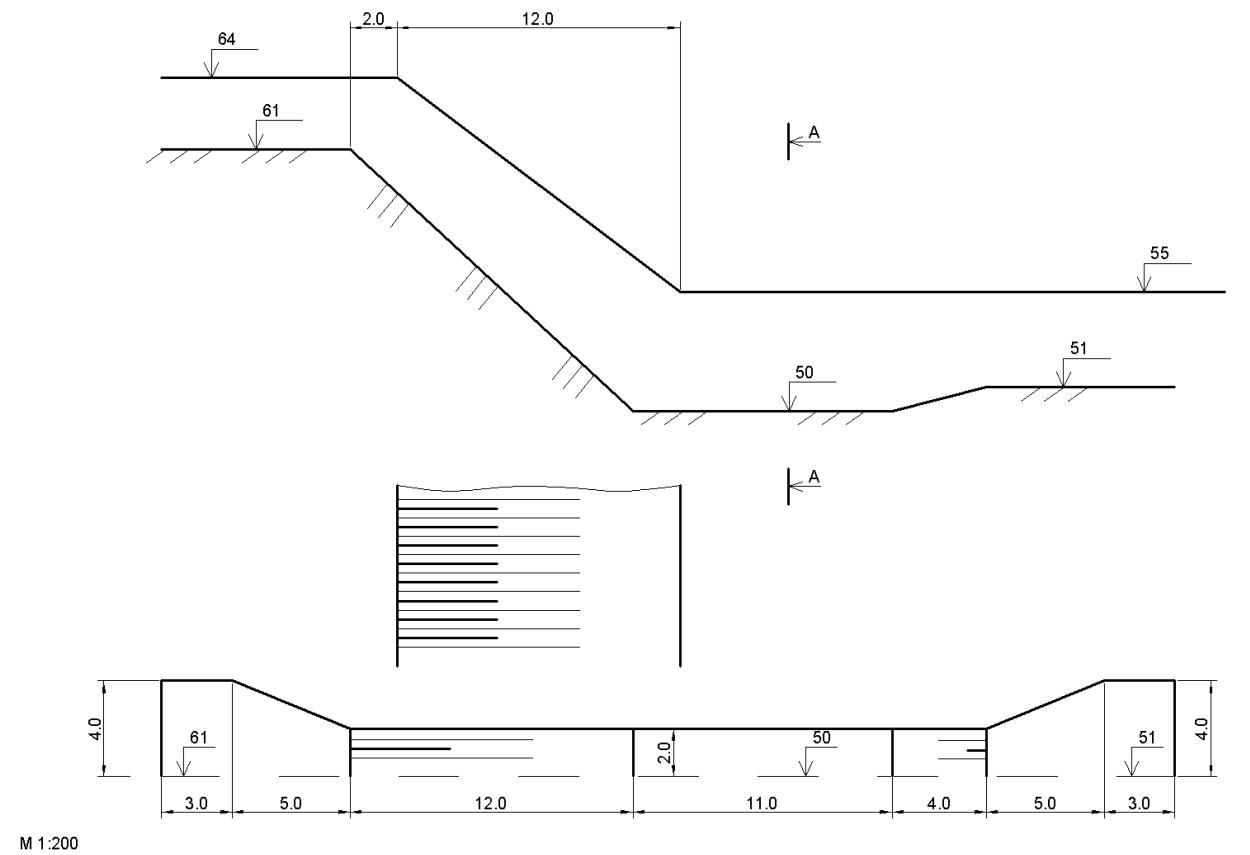
25-variant



26-variant



27-variant



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1. Соловьев С. А. и др. „Задачник по черчению и перспективе“ Москва „Высшая школа“ 1988
2. Urishev A. E. va b. „Muhandislik grafikasi“ fanidan topshiriqlar to‘plami (2-qism)

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