

ZADACI

1. Odredite pravu veličinu duži AB[A(10,20,20), B(40,30,-10)].

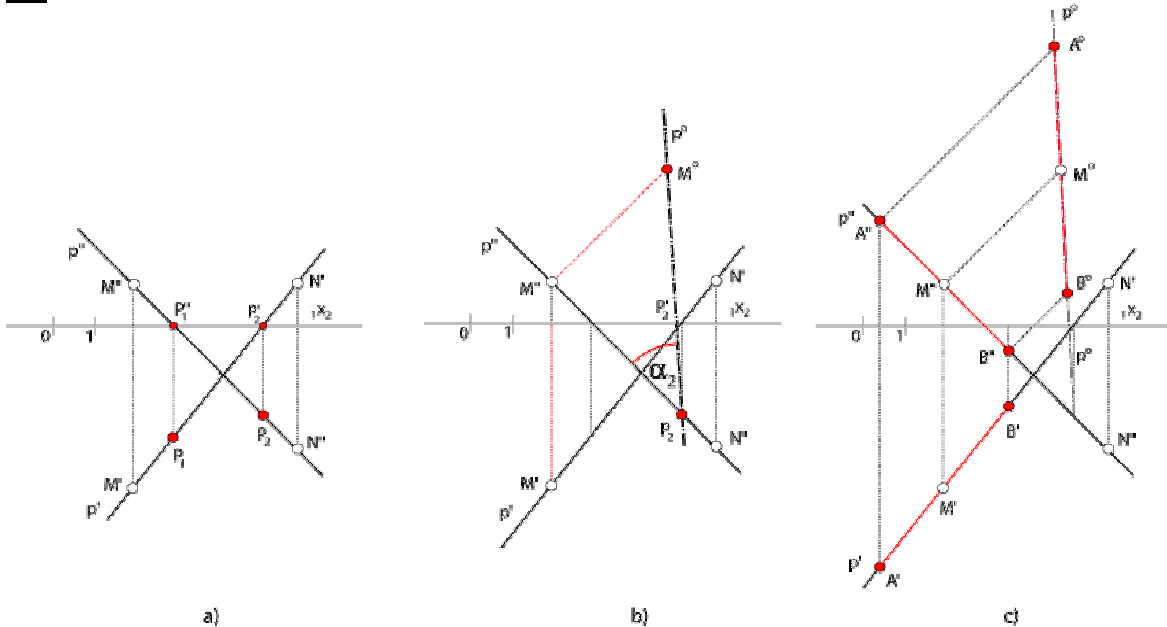
2. Zadana je prava p=MN[M(20,40,10),N(60,-10,-30)].

a) Odredite projekcije prvog i drugog probodišta prave p.

b) Odredite drugi prikloni ugao prave p.

c) Na pravoj p od tačke M nanijeti duž dužine d=30.

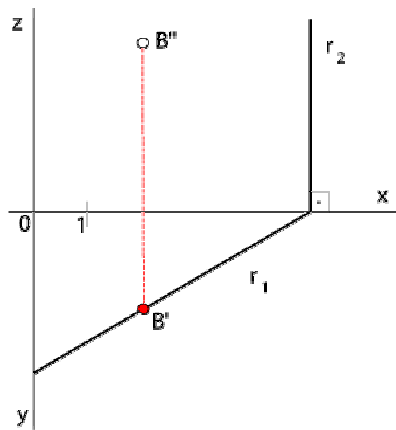
RJ:



3. Odredite tlocrt tačke B(20,?,30), ako ona leži u ravni P(50,30,∞).

Kako nazivamo ravan P? Zašto?

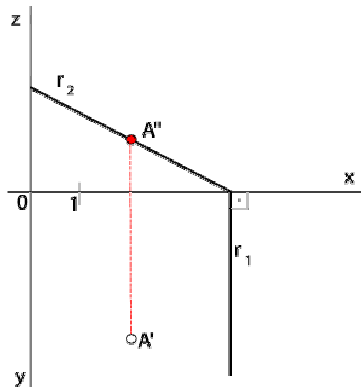
RJ:



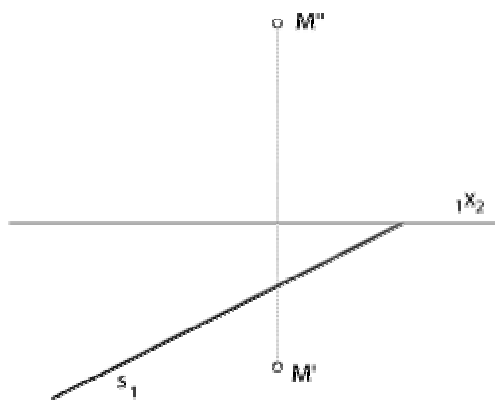
4. Odredite nacrt tačke A(20,30,?), ako ona leži u ravni P(40,∞,20).

Kako nazivamo ravan P? Zašto?

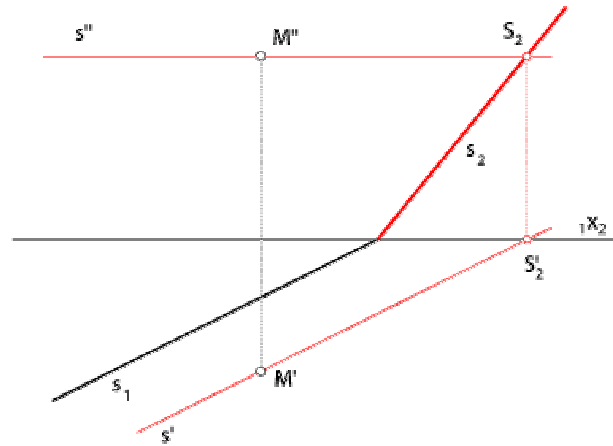
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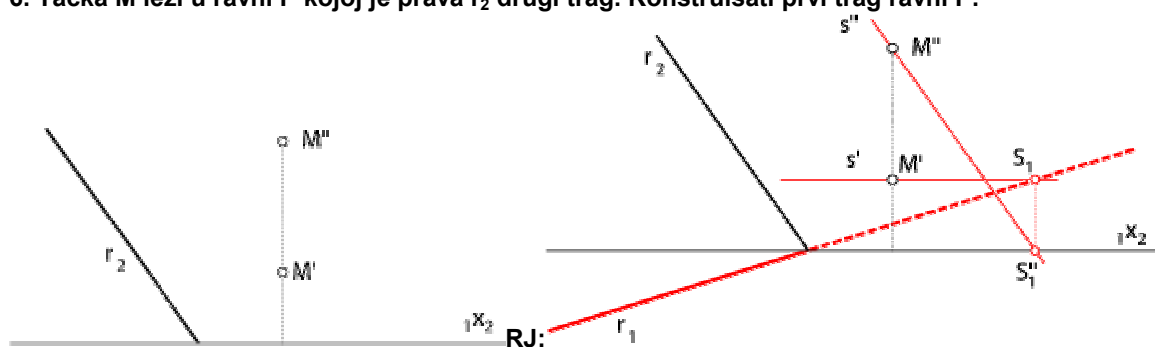
5. Tačka M leži u ravni Σ kojoj je prava s_1 prvi trag. Konstruisati drugi trag ravni Σ .



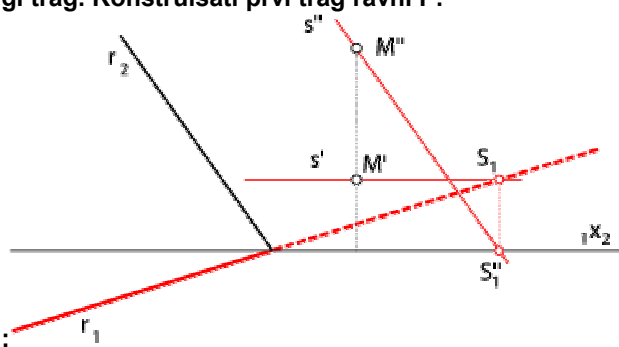
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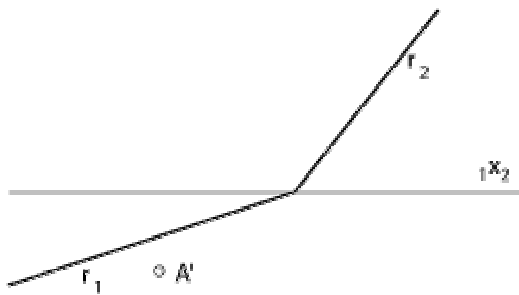
6. Tačka M leži u ravni P kojoj je prava r_2 drugi trag. Konstruisati prvi trag ravni P.



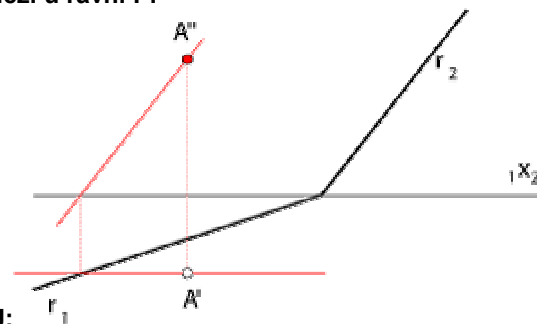
RJ:



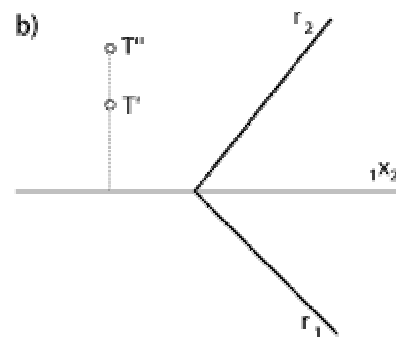
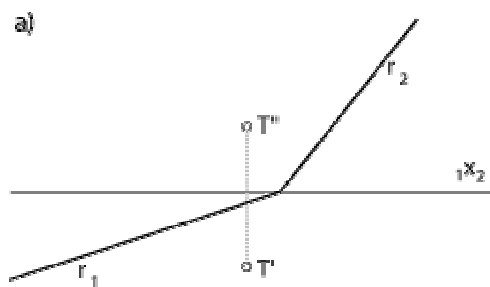
7. Pomoću frontale odredite nacrt tačke A ako ona leži u ravni P.



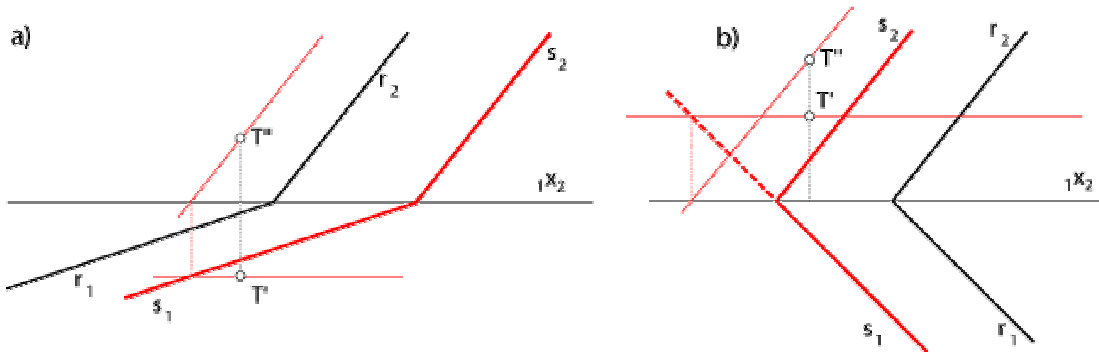
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8. Konstruisati tragove ravni Σ koja sadrži tačku T, a paralelna je s ravni P.

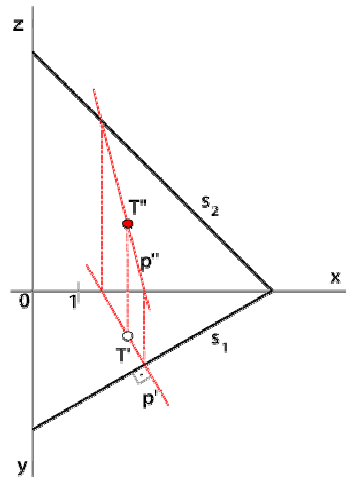


RJ:



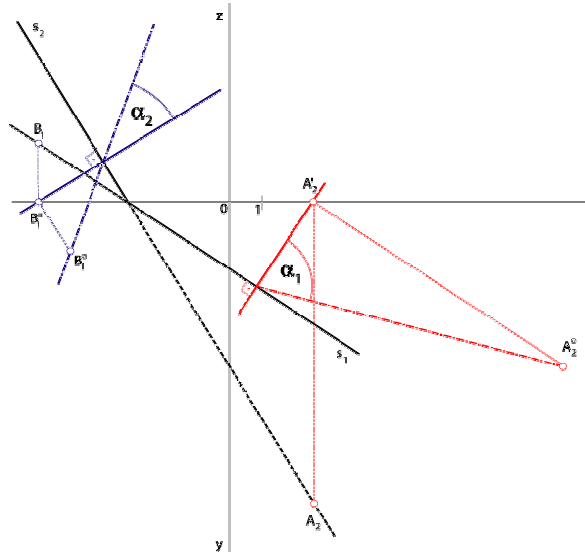
9. Tačka $T(20,10,?)$ leži u ravni $\Sigma(50,30,50)$. Konstruisati nacrt tačke T pomoću njezine nagibnice.

RJ:



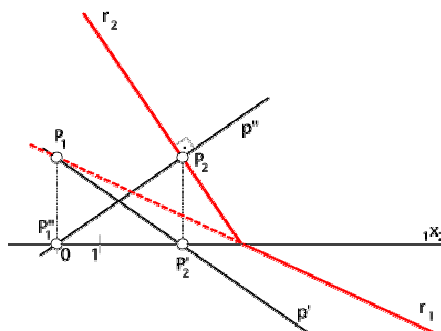
10. Odredite 1. i 2. nagibni ugao ravni $\Sigma(-30,20,-50)$.

RJ:

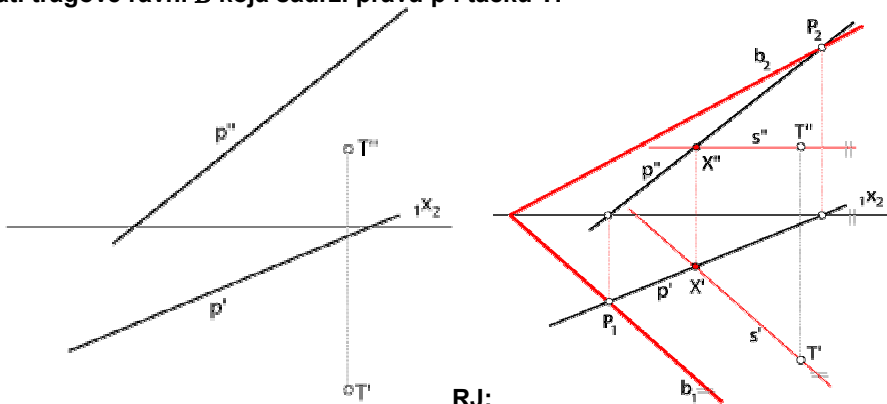


11. Prava $p=P_1P_2[P_1(0,-20,0),P_2(30,0,20)]$ je priklonica ravni P . Konstruisati tragove ravni P .

RJ:



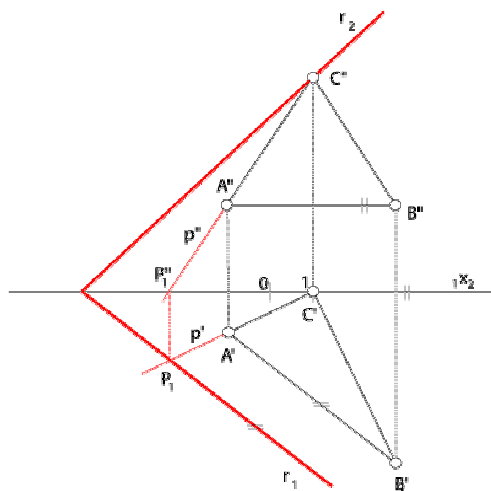
12. Konstruisati tragove ravni B koja sadrži pravu p i tačku T.



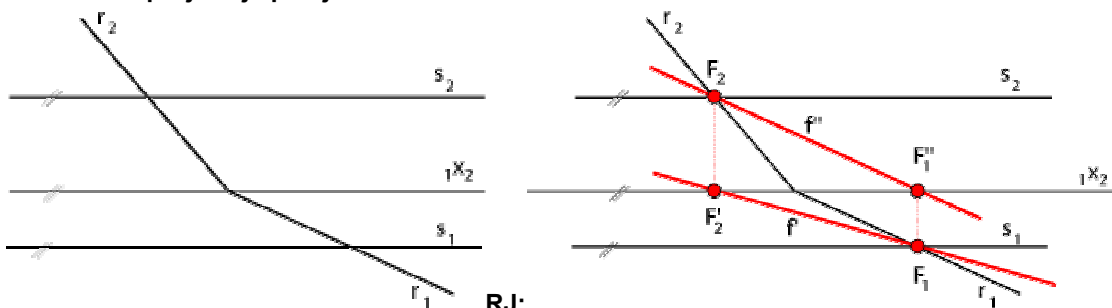
RJ:

13. Konstruisati tragove ravni koja sadrži trougao ABC[A(-10,10,20),B(30,40,20),C(10,0,50)].

RJ:



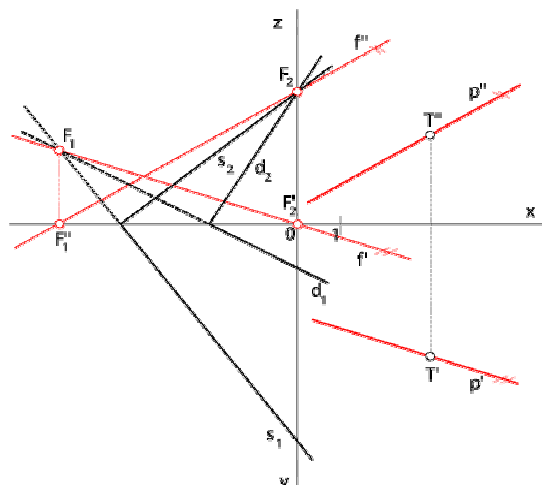
14. Konstruisati projekcije presječnice ravni Σ i P.



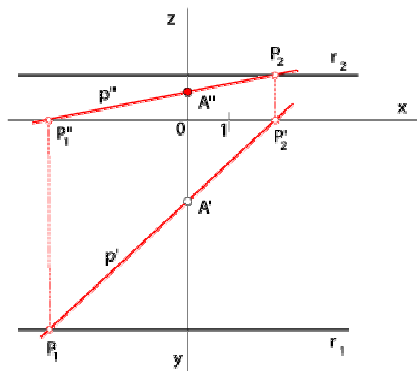
RJ:

15. Konstruisati projekcije prave koji prolazi tačkom T(30,30,20), a paralelna je s ravni $\Sigma(-40,50,30)$ i $\Delta(-20,10,30)$.

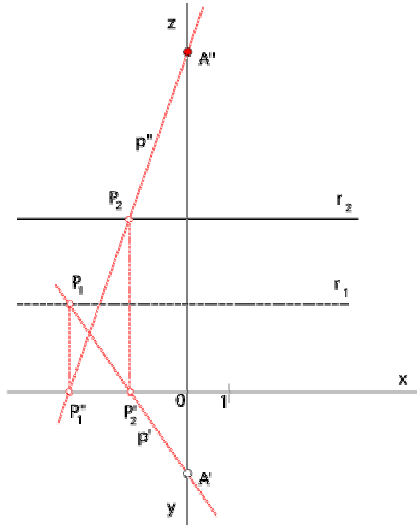
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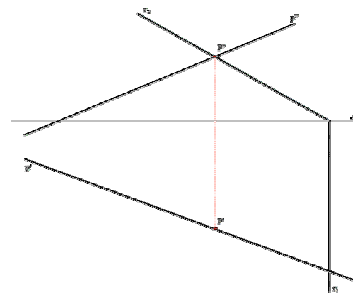
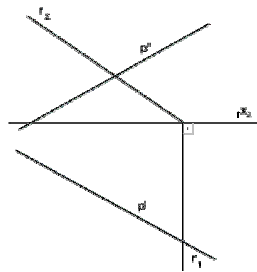
16. Odredite nacrt tačke $A(0,20,?)$, ako ona leži u ravni P.
 a) $P(\infty, 50, 10)$



b) $P(\infty, -20, 40)$

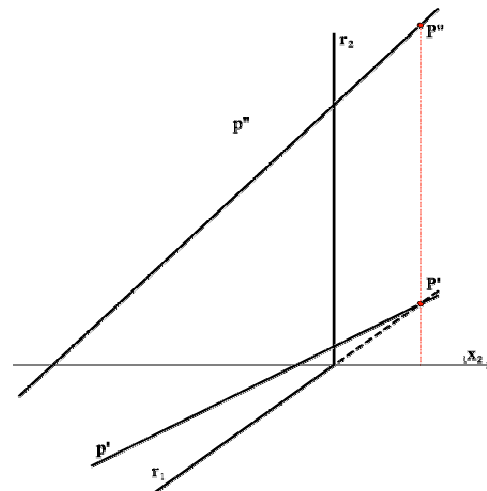
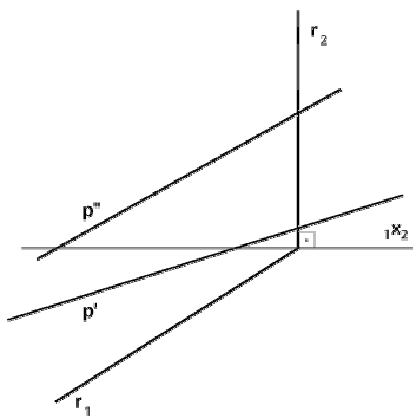


17. Konstruisati projekcije probodišta prave p i ravni P.
 a)



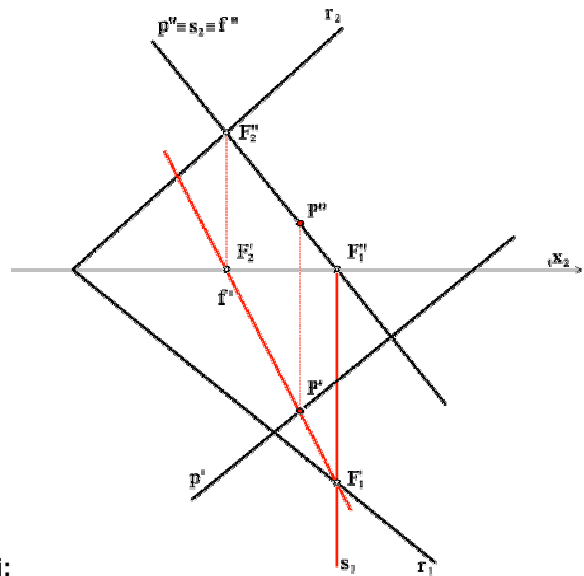
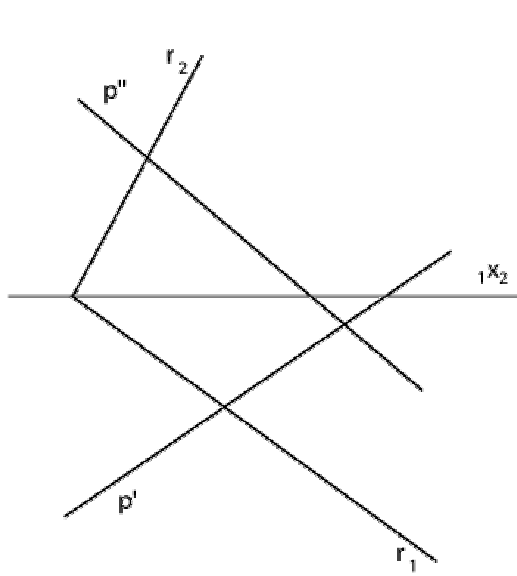
Rj.:

b)



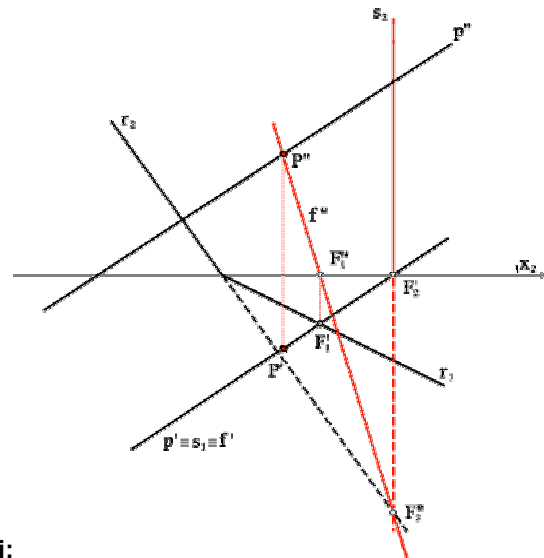
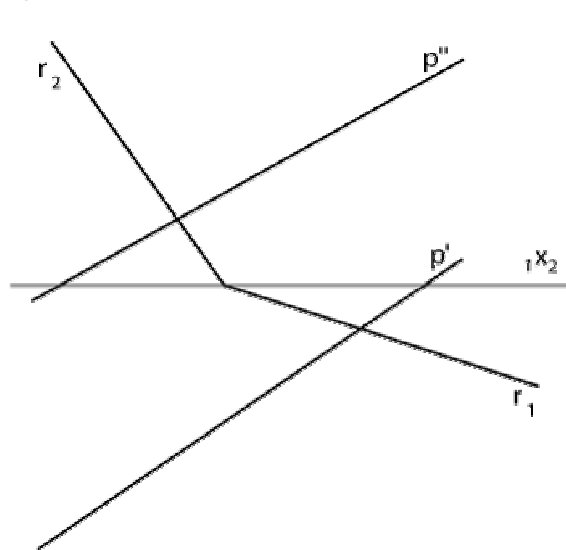
Rj.:

c)



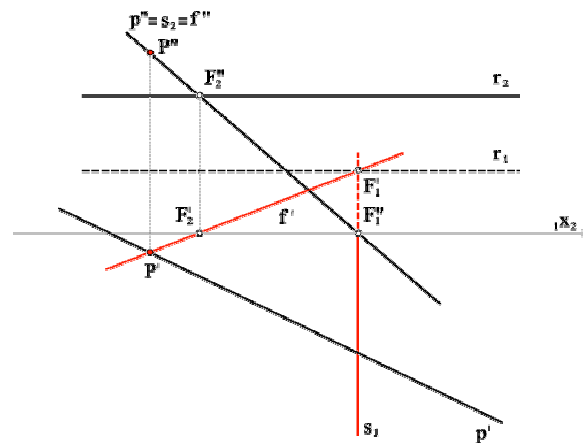
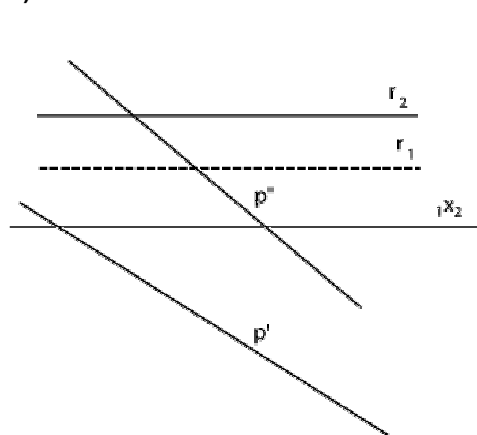
Rj:

d)

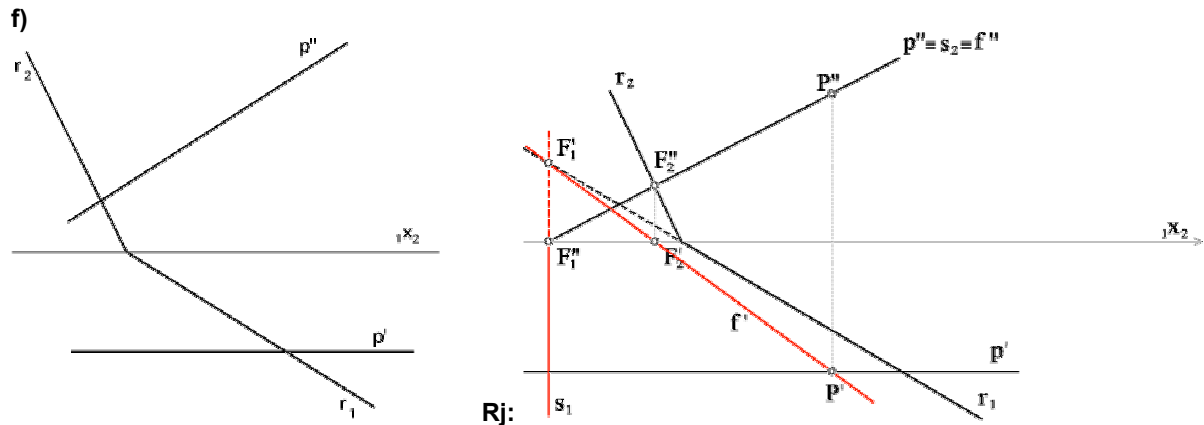


Rj:

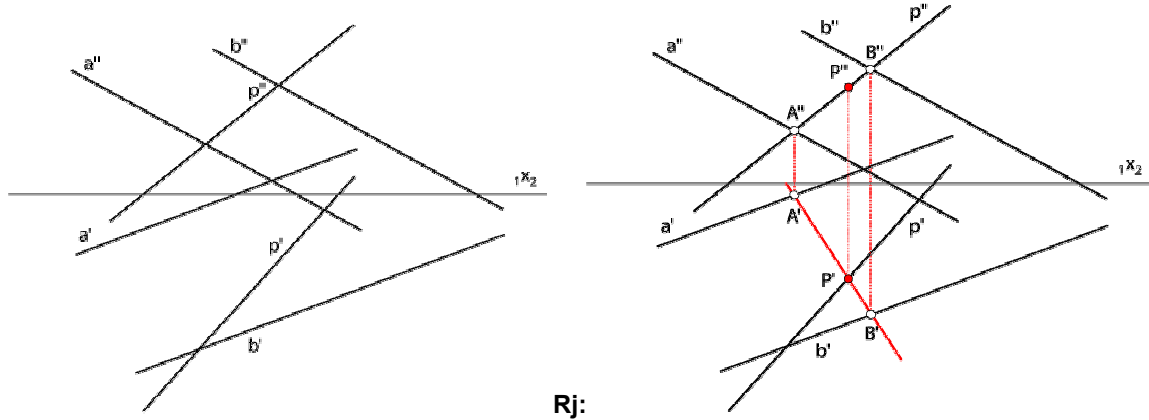
e)



Rj:



18. Konstruisati projekcije probodišta prave p s ravni koja sadrži paralelne pravce a i b . (Zadatak pokušajte riješiti bez upotrebe tragova ravni.)



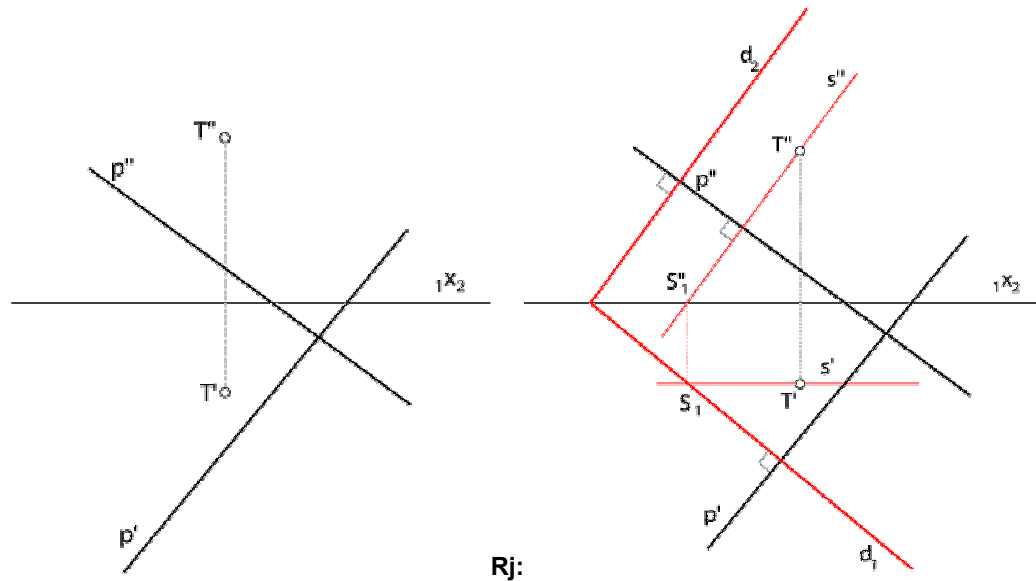
19. Tačka M leži u ravni Σ . Konstruisati projekcije prave koja prolazi tačkom M , a okomita je na ravan Σ , ako je:

a) $M(20,10,20)$, $\Sigma(50,30,?)$

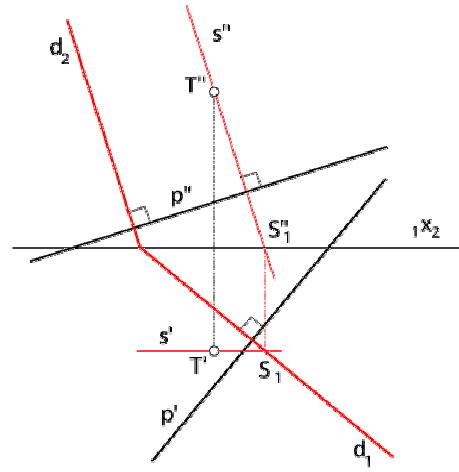
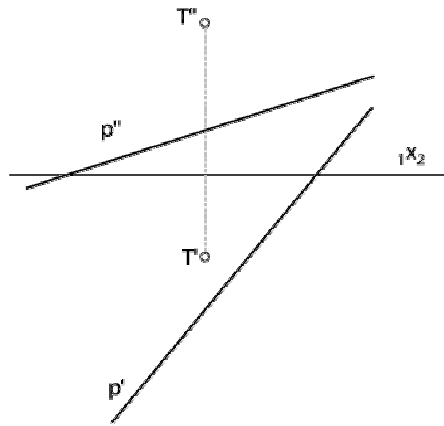
b) $M(50,30,-10)$, $\Sigma(30,-20,?)$

20. Konstruisati tragove ravni Δ koja sadrži tačku T , a okomita je na pravu p .

a)

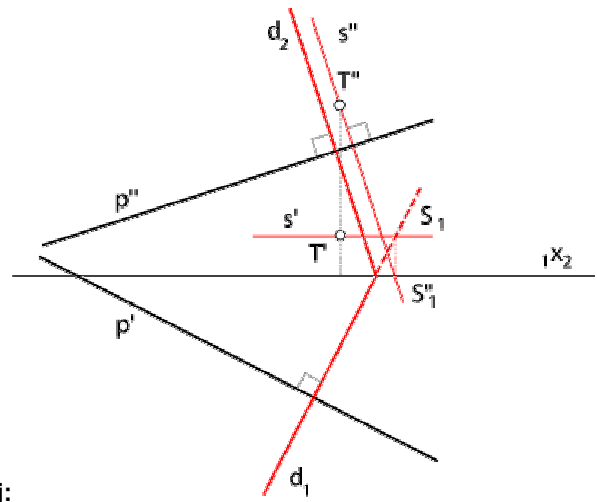
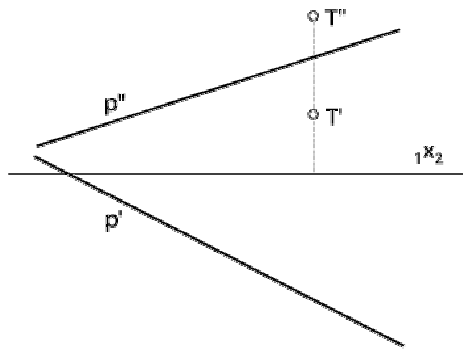


b)



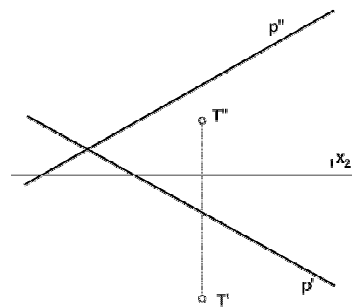
Rj:

c)

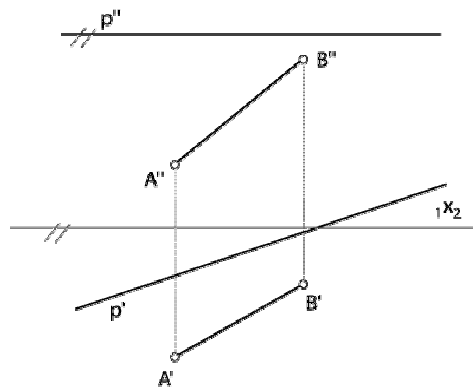


Rj:

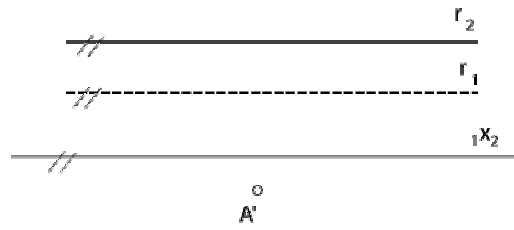
21. Odredite udaljenost tačke T od prave p.



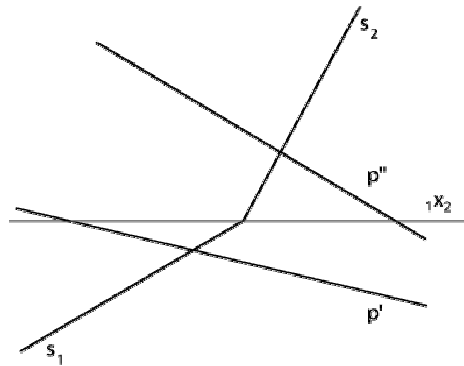
22. Konstruisati projekcije one tačke na pravoj p koja je jednako udaljena od tačaka A i B.



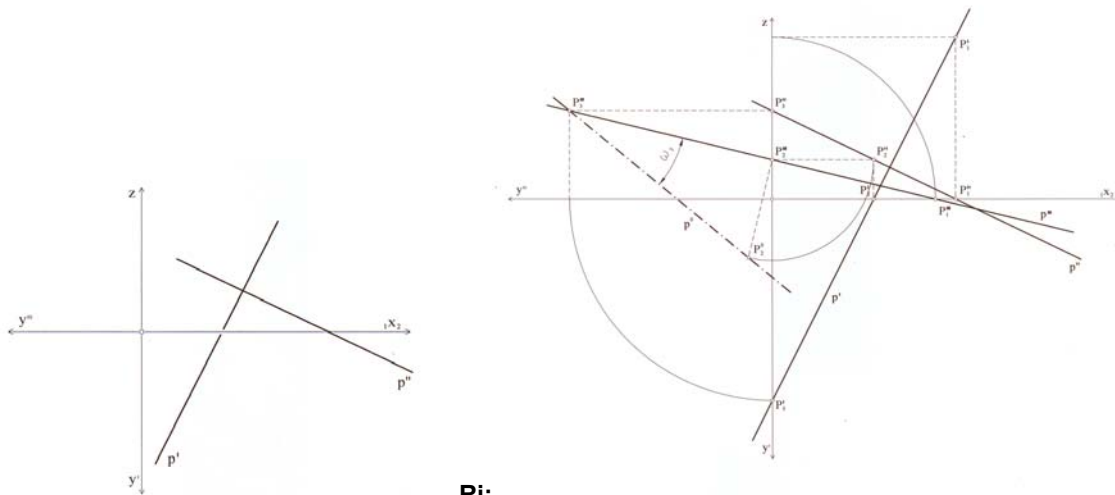
23. Iz tačke $A \in P$ povući okomicu, dužine 40, na ravan P . Zadatak riješite pomoću bokocrta.



24. Konstruisati projekcije onih tačaka na pravoj p koje su od ravni Σ udaljene za 30. Zadatak riješite pomoću transformacije.

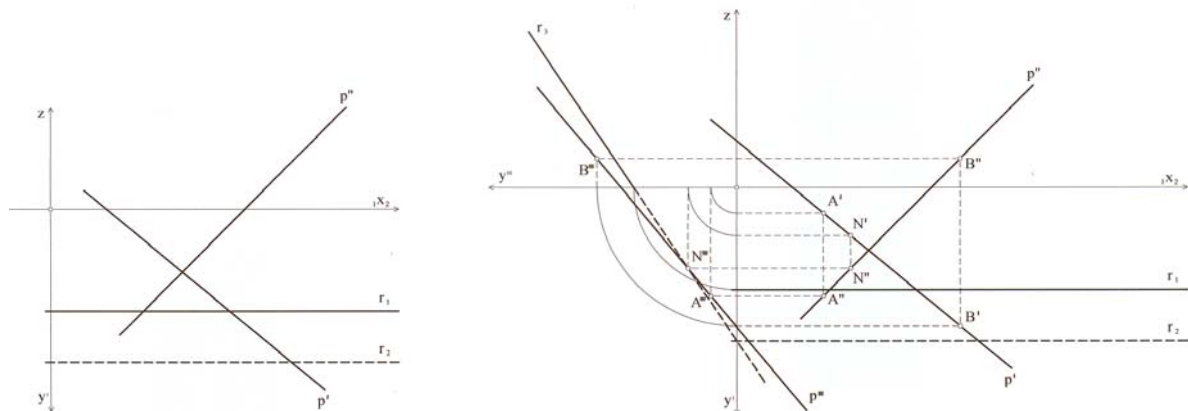


25. Odredite 3. prikloni ugao prave p .



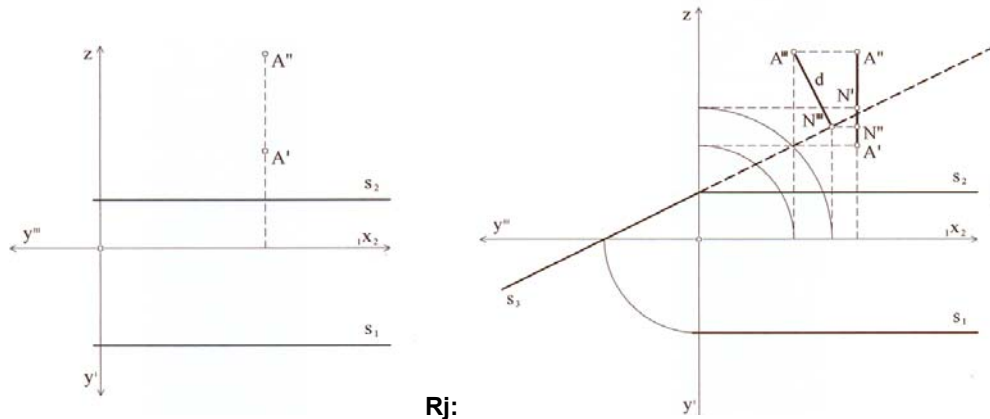
Rj:

26. Odrediti probodište N prave p i ravni P , pomoću bokocrta.



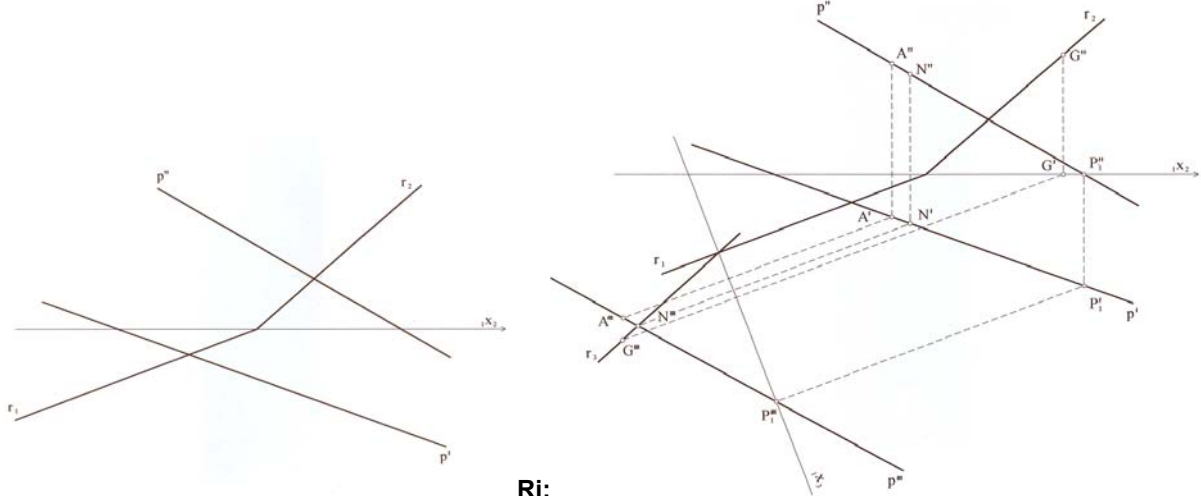
Rj:

27. Odrediti udaljenost d tačke A od ravni Σ .



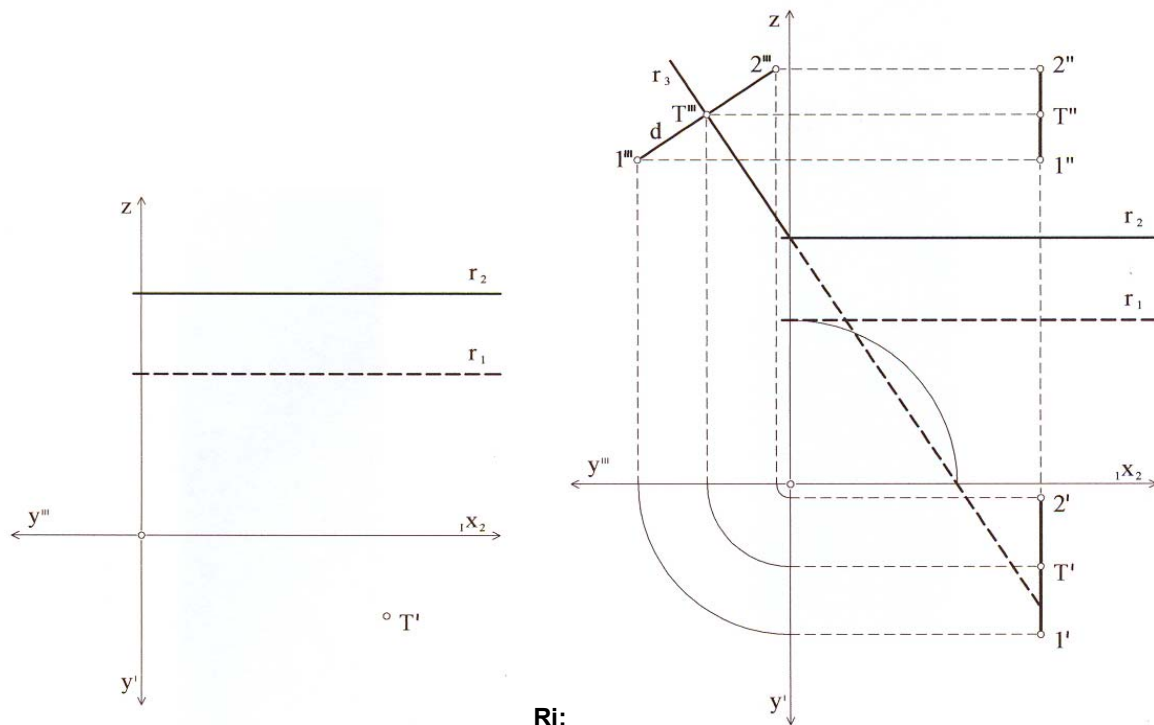
Rj:

28. Odrediti probodište N prave p i ravni P pomoću transformacije.



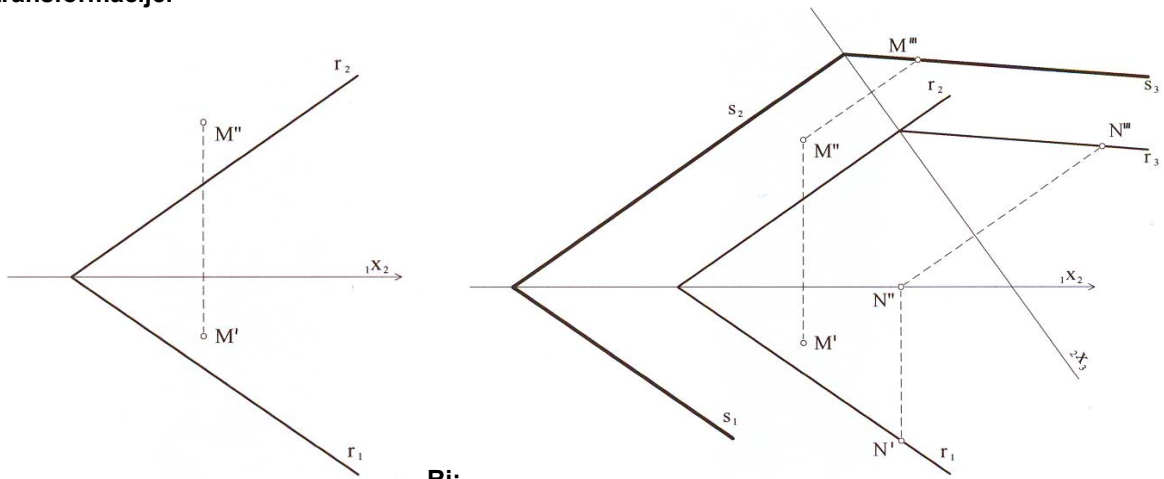
Rj:

29. Iz tačke $T \in P$ povući okomicu na ravan P dužine $d = 1$ cm.



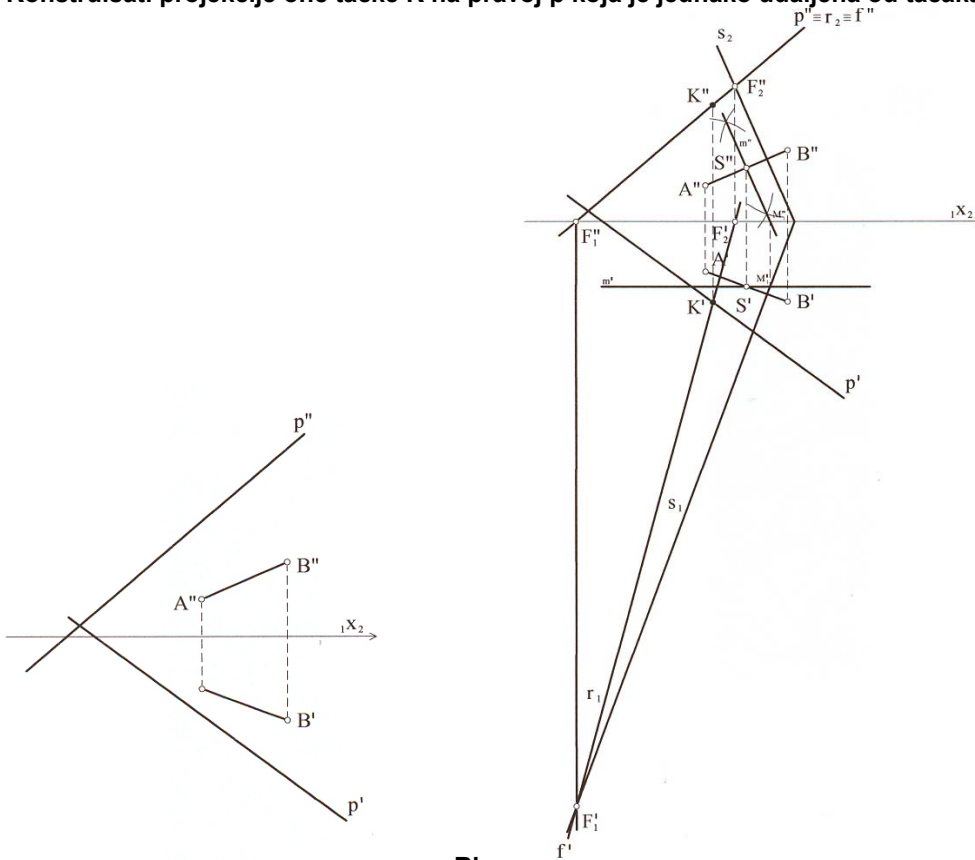
Rj:

30. Tačkom M postaviti ravan Σ koja je paralelna sa zadanom ravni P. Zadatak riješiti pomoću transformacije.



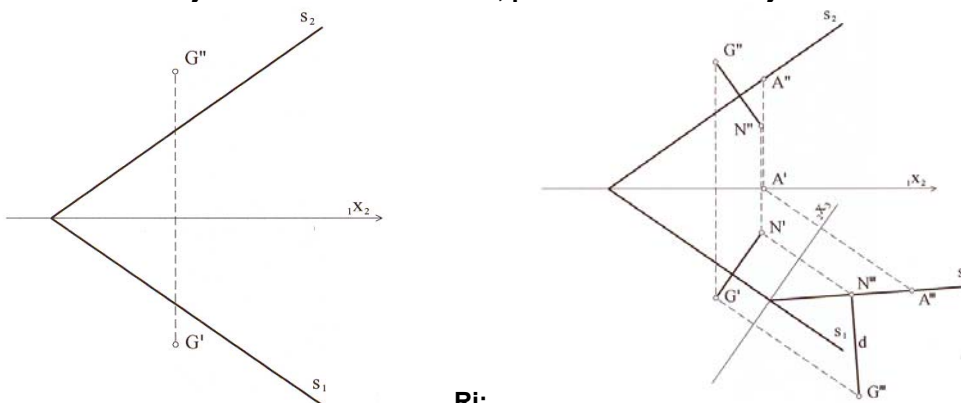
Rj:

31. Konstruisati projekcije one tačke K na pravoj p koja je jednako udaljena od tačaka A i B.



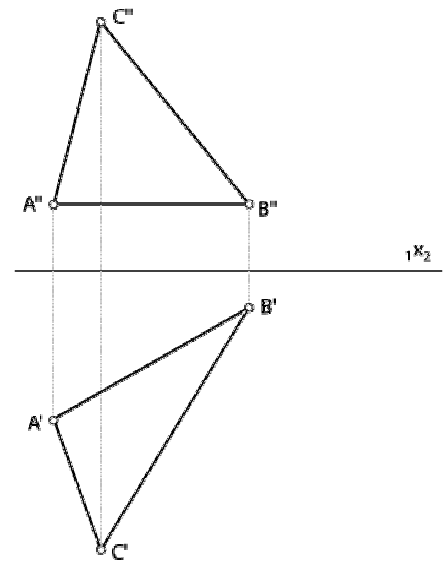
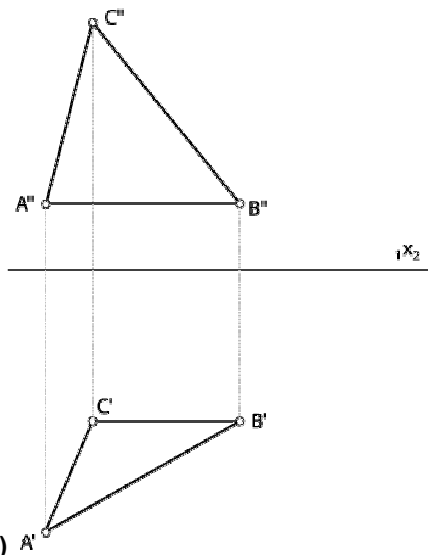
Rj:

32. Odrediti udaljenost tačke G od ravni Σ , pomoću transformacije.



Rj:

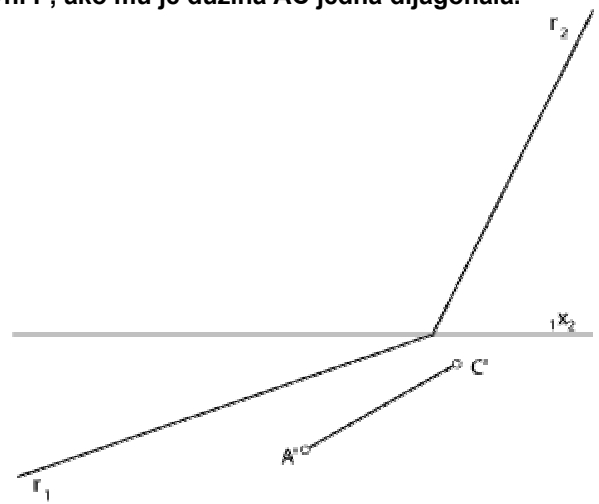
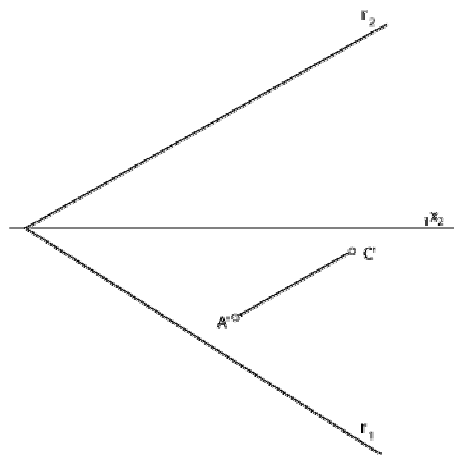
33. Konstruisati pravu veličinu trougla ABC.



a)

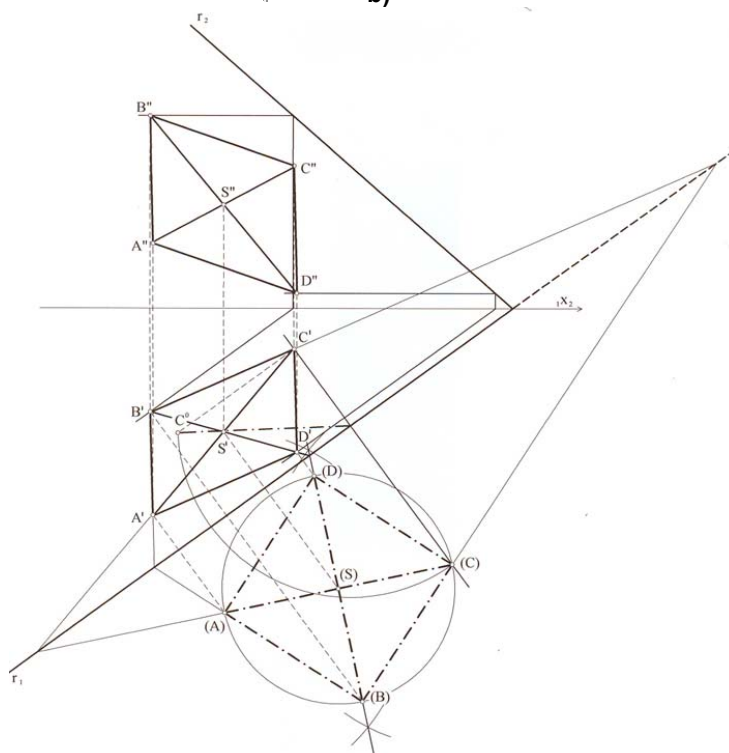
b)

34. Konstruisati projekcije kvadrata koji leži u ravni P, ako mu je dužina AC jedna dijagonala.



a)

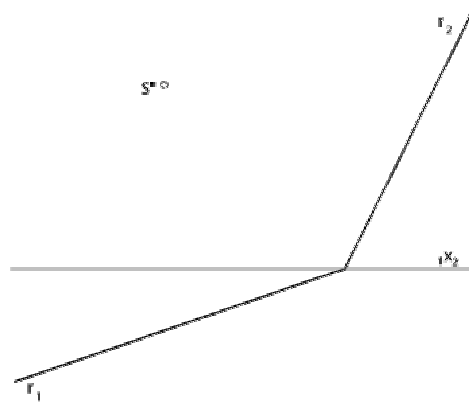
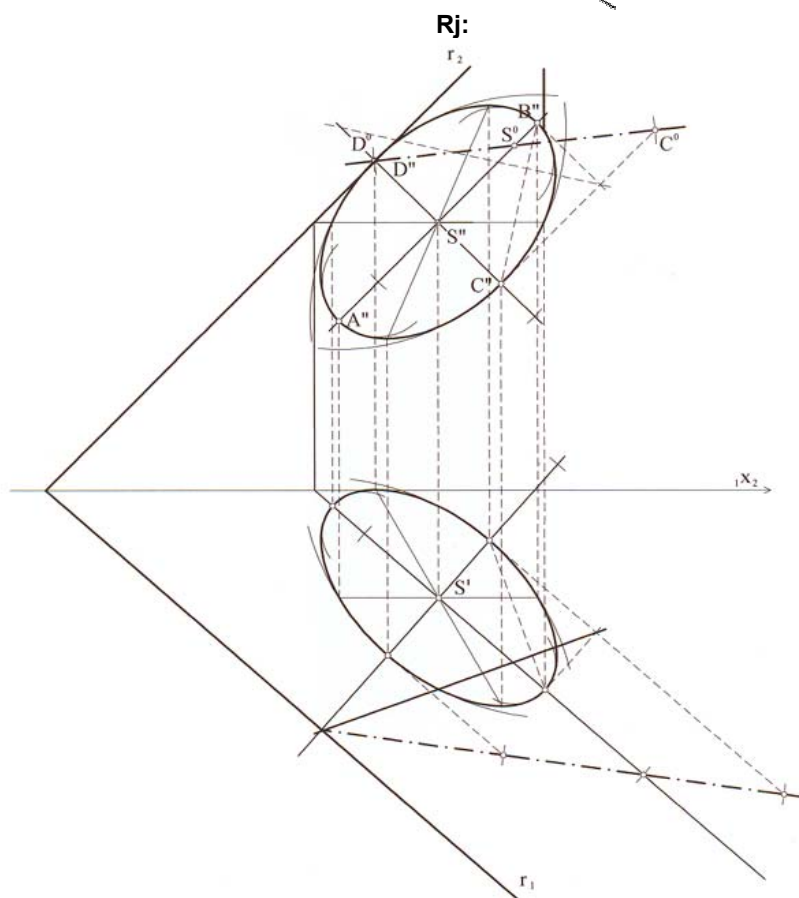
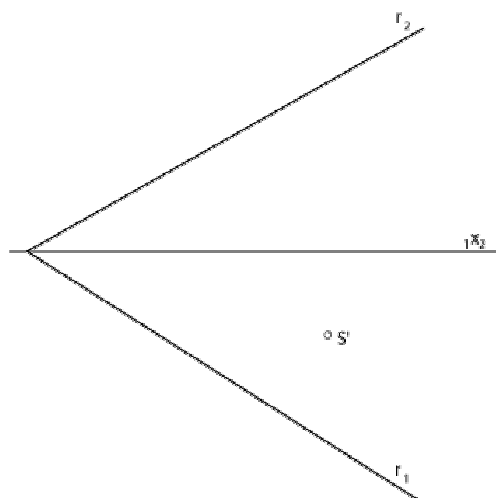
b)



c)

35. Konstruisati projekcije kružnice koja leži u ravni P, tačka S joj je centar, a poluprečnik $r=20$.

a)



b)