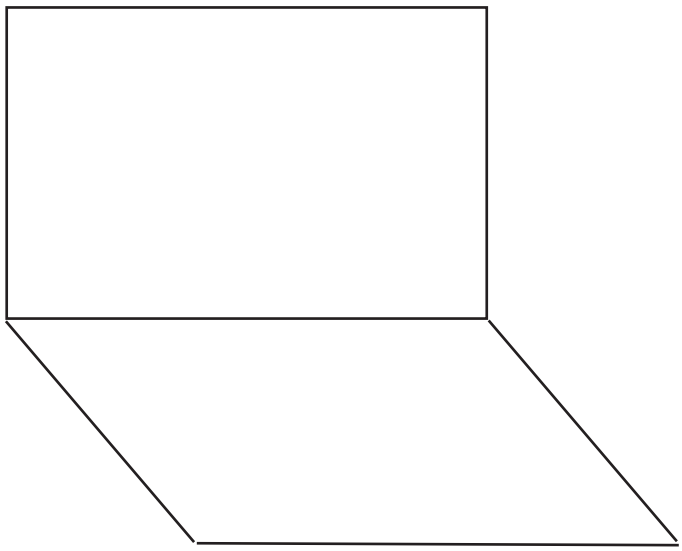
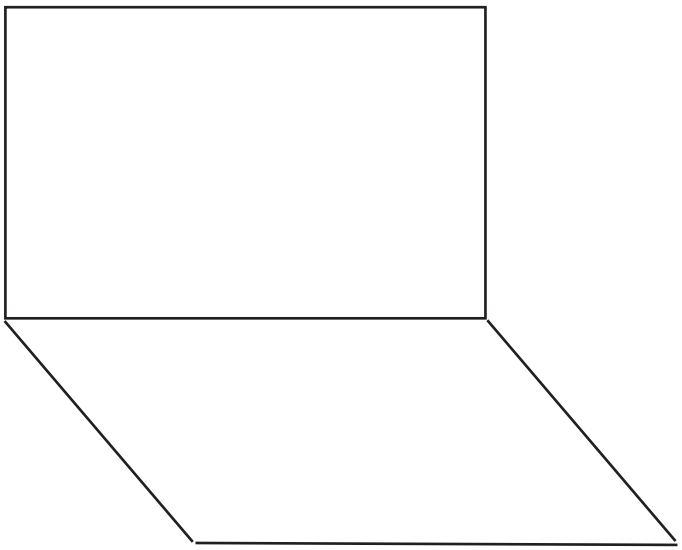
FORMAS DE DEFINIR UN PLANO

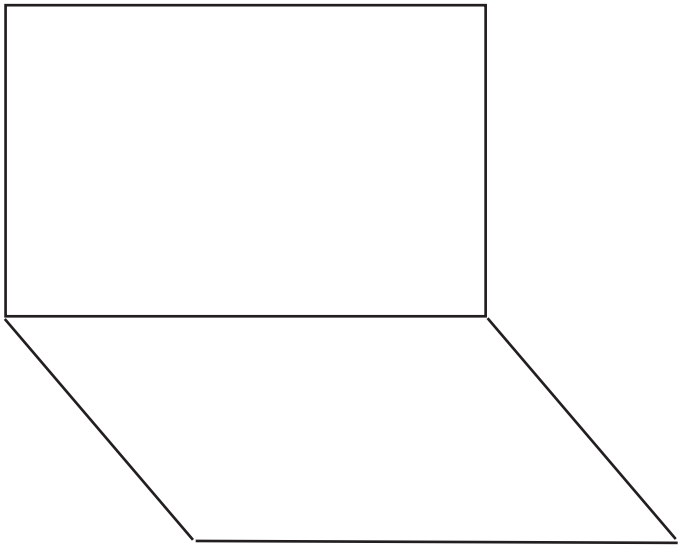
1. Por dos rectas que se cortan



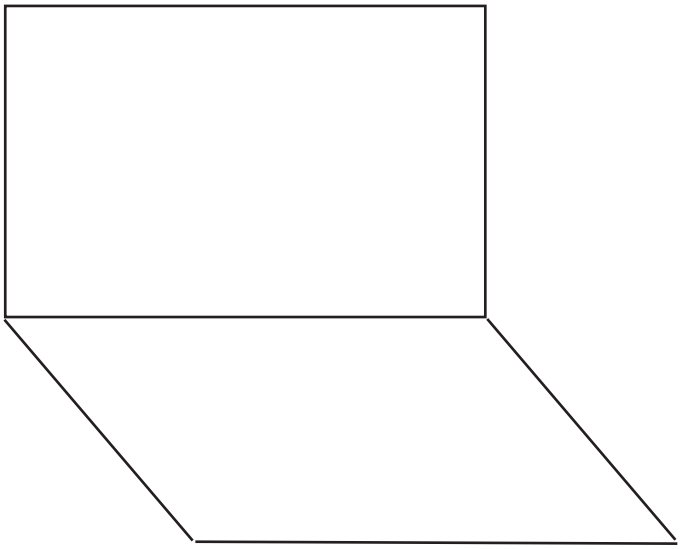
2. Por dos rectas paralelas



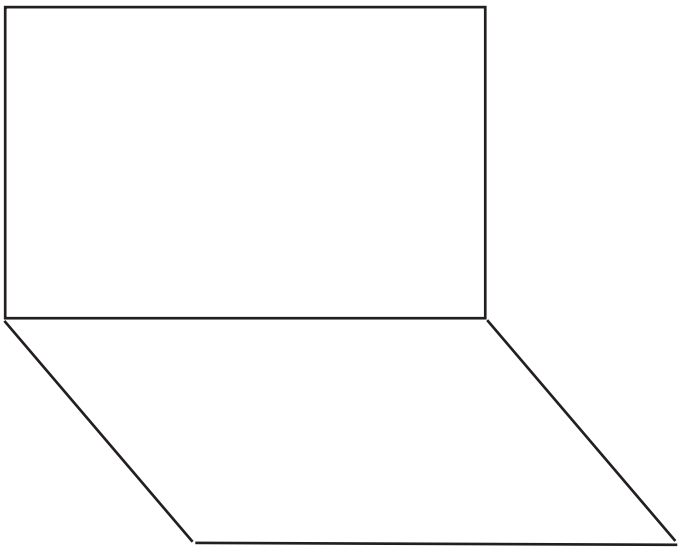
3. Por una recta y un punto



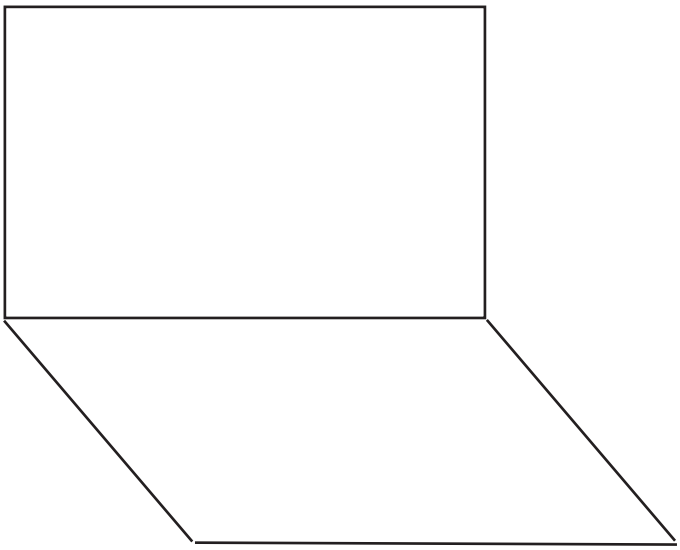
4. Por tres puntos no alineados



5. Por una recta de máxima pendiente



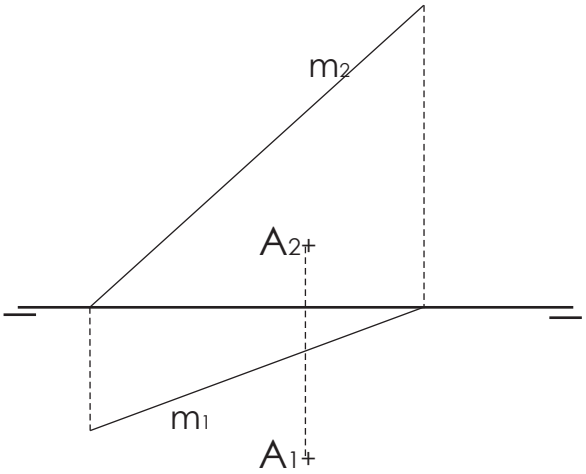
6. Por una recta de máxima inclinación



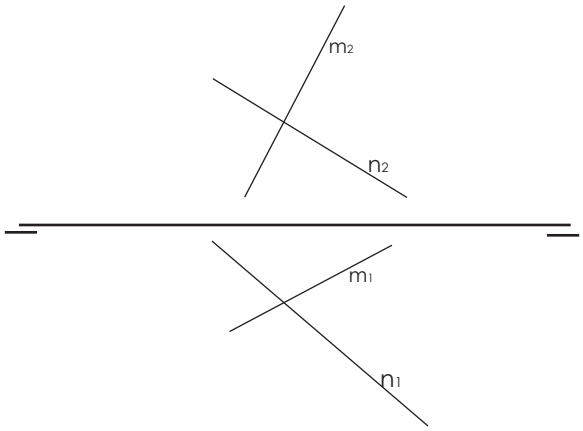
5.DETERMINACIÓN DUN PLANO

5.1. Determinar as trazas dun plano definido por tres puntos non aliñados.
A (25,10,5), B (32,7,25) y C (45,15,10)

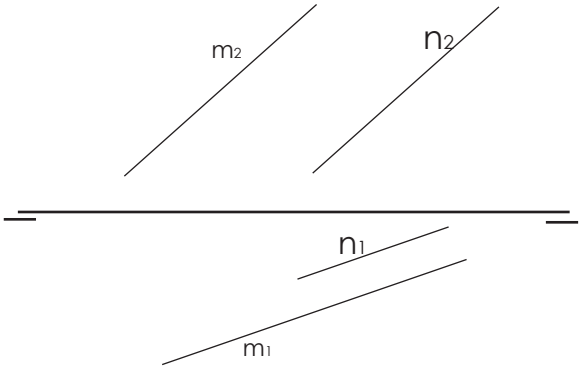
5.2. Determinar as trazas dun plano definido pola recta e o punto dados.



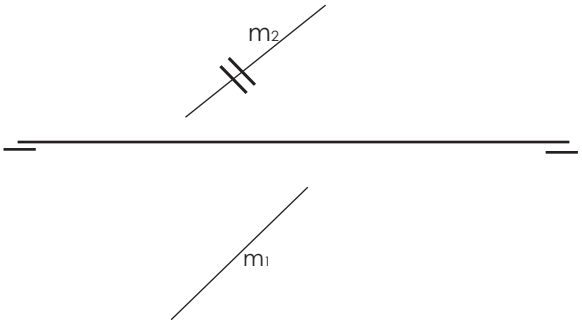
5.3. Determinar as trazas do plano que contén ás rectas m e n.



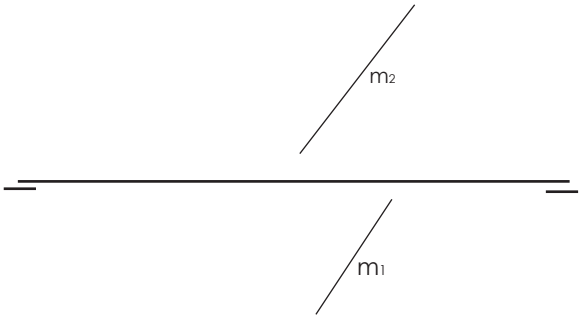
5.4. Determinar as trazas do plano definido polas rectas m e n, que son paralelas.



5.5. Determinar as proxeccións da recta horizontal de cota 25, que pertenza ao plano determinado pola recta de máxima inclinación m.

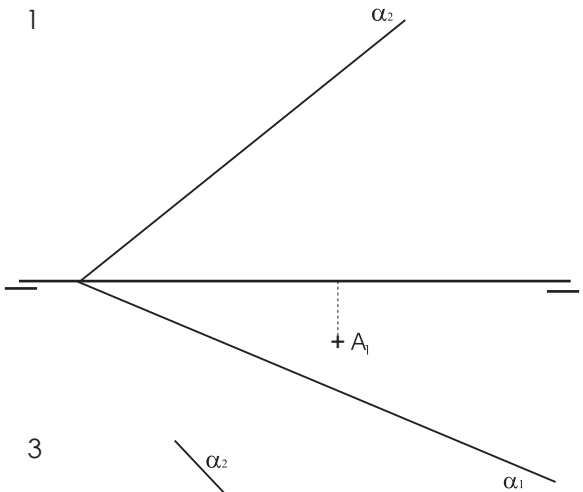


5.6. Determinar as trazas do plano definido pola súa recta de máxima pendente.

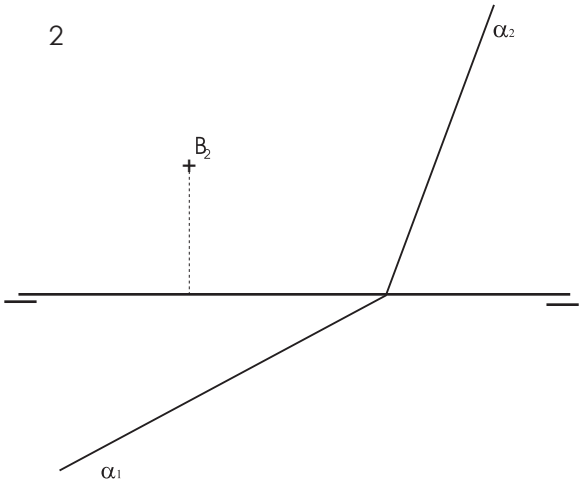


Achar a proxección que falta:

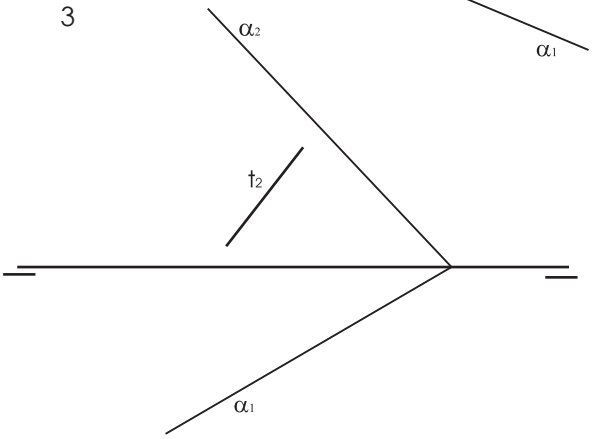
1



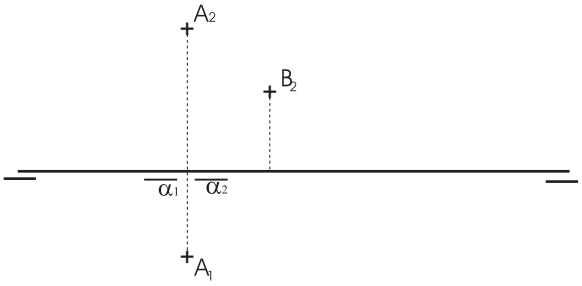
2



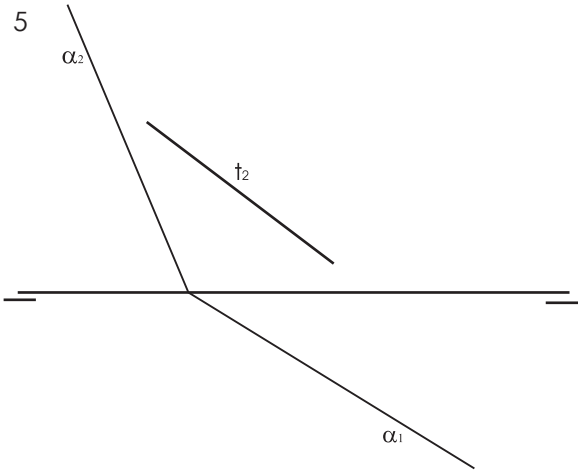
3



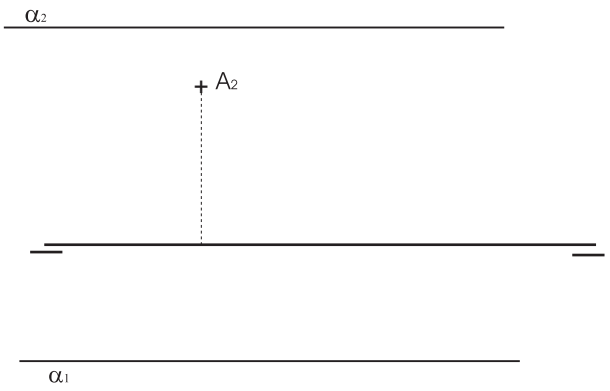
4



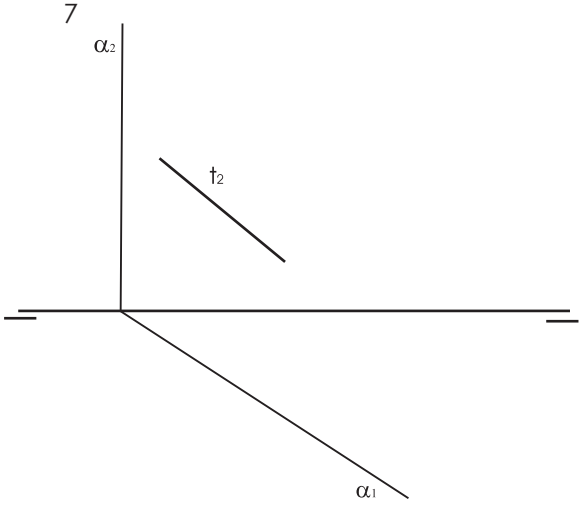
5



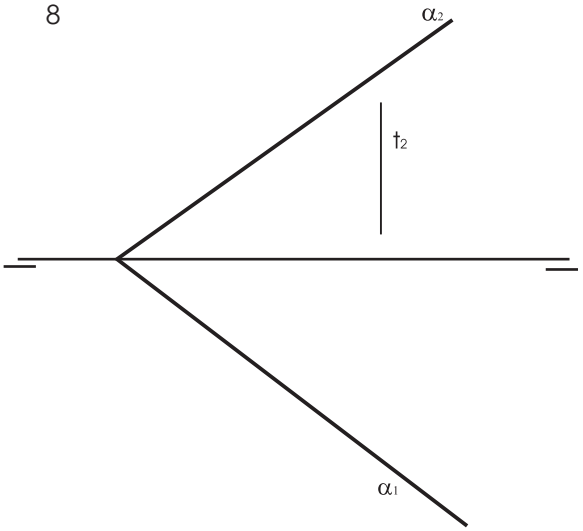
6



7

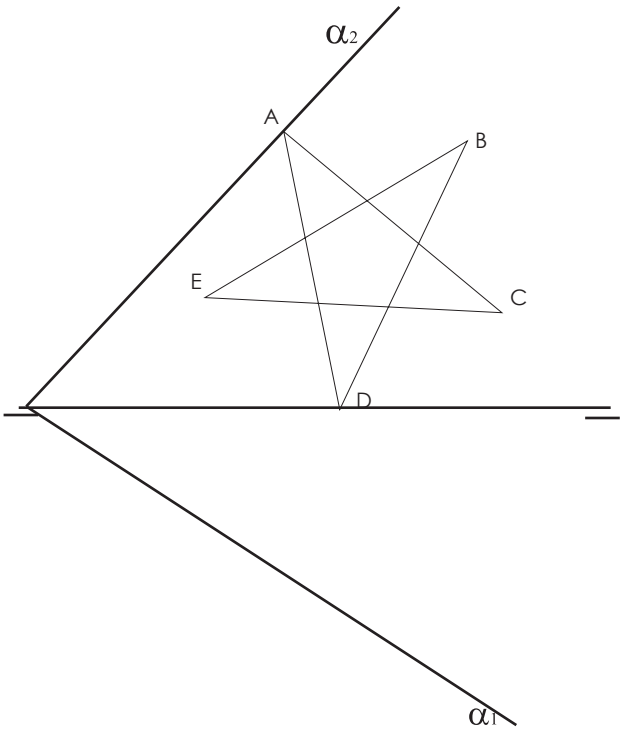


8

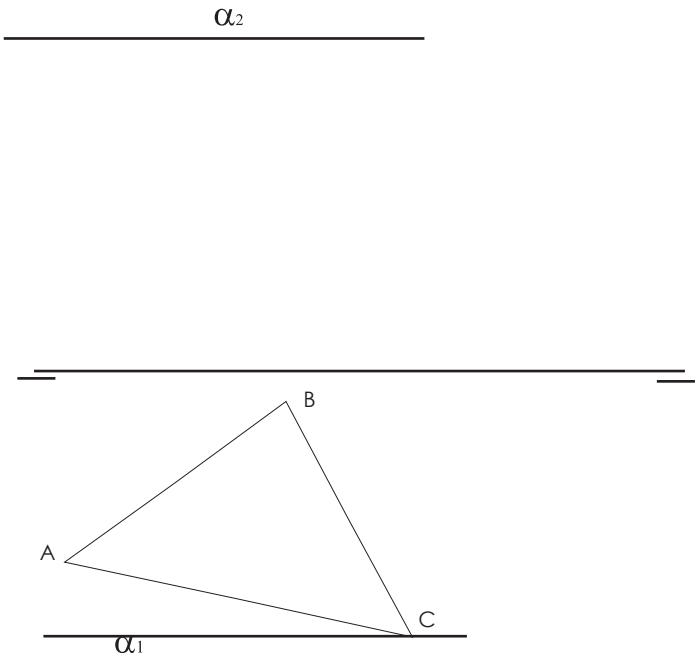


6. PROXECCIÓNS DE FIGURAS PLANAS

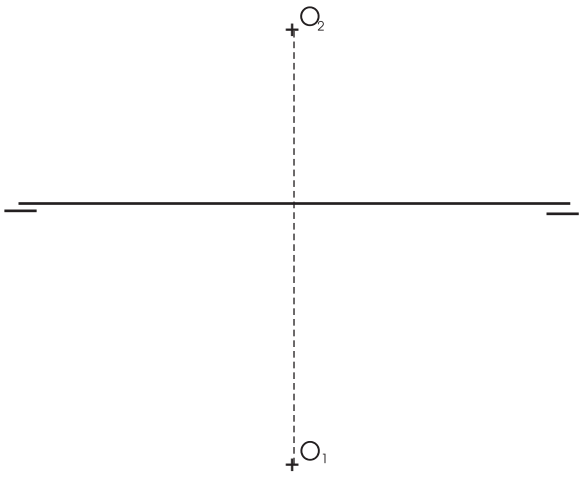
6.1. Debuxar a proxección horizontal do polígono estrelado.



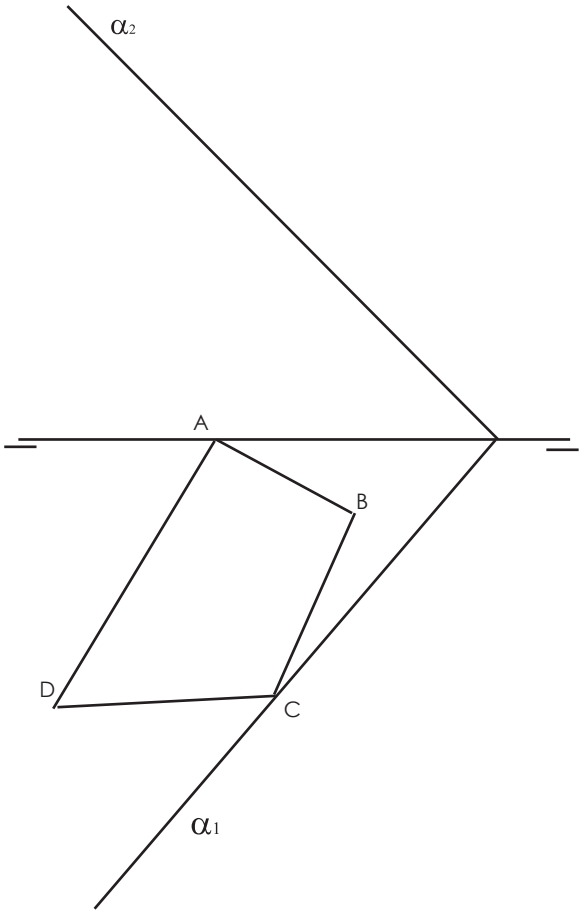
6.2. Debuxar a prox. vertical do triángulo e a prox. de perfil.



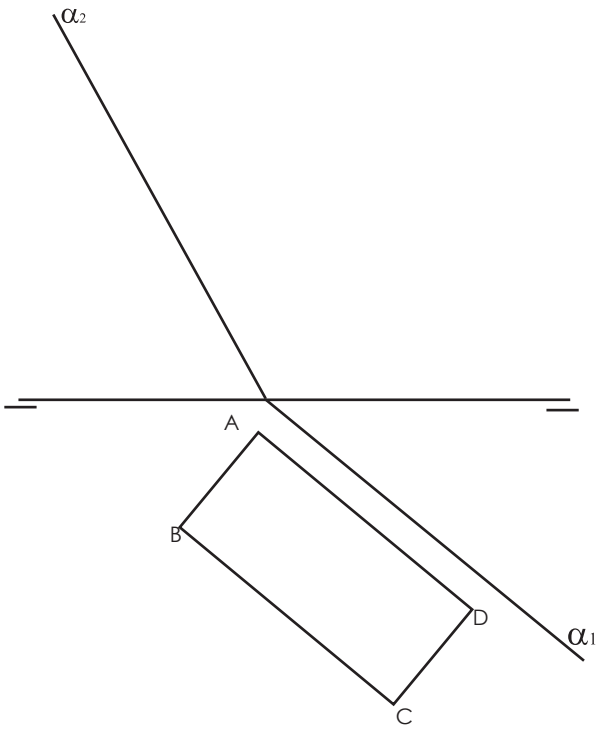
6.3. Debuxar as proxeccións da circunferencia de centro 0 e radio 20 contida nun plano paralelo a P.H.



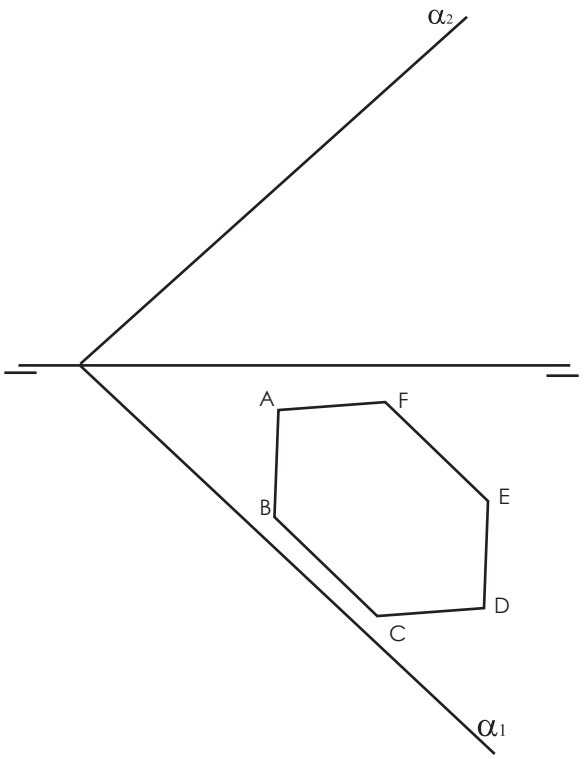
6.4. Debuxar a proxección vertical do cuadrilátero contido no plano.



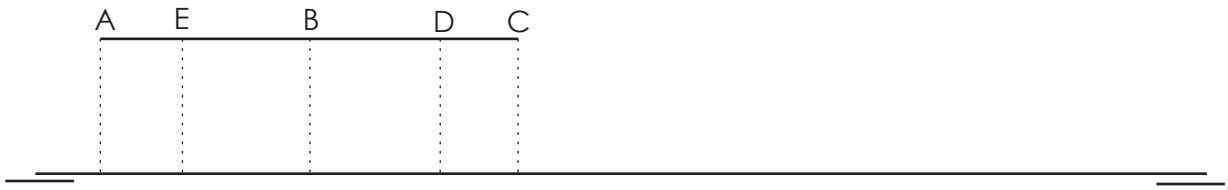
6.5. Determinar a proxección vertical do cuadrilátero contido no plano dado.



6.6. Determinar a proxección vertical do hexágono contido no plano e a verdadeira magnitude.



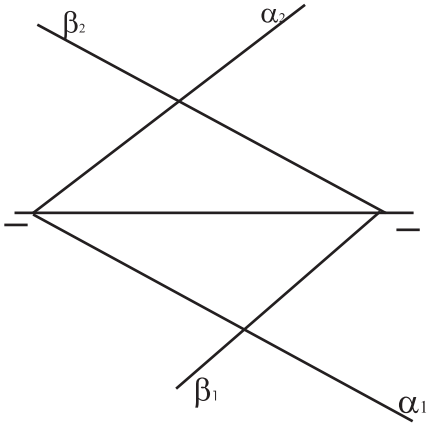
6.6. Dada a proxección vertical dun pentágono regular determinar a proxección horizontal e de perfil da figura, sabendo que:
- O lado ED é paralelo a P.V.
- O afastamento do lado ED é de 75 mm.



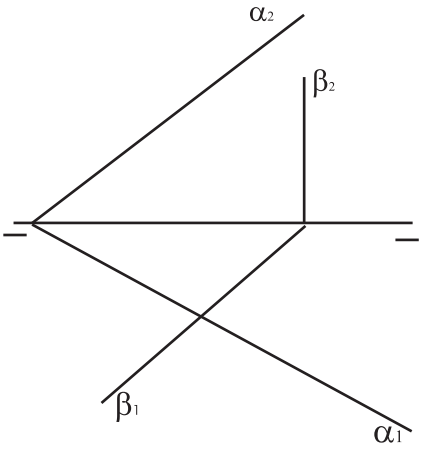
7. INTERSECCIÓN DE PLANOS

Hallar la recta intersección y decir el tipo de planos

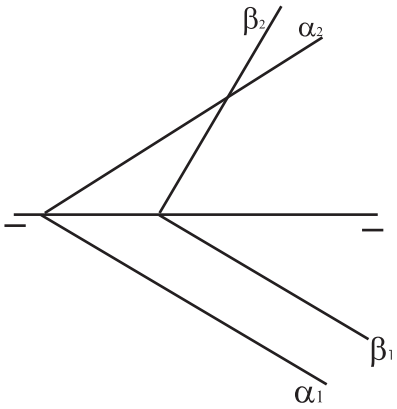
7.1



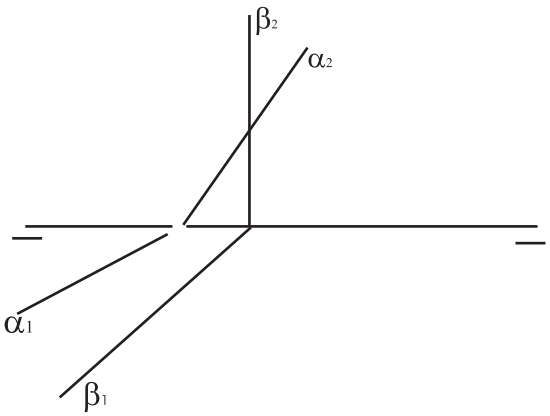
7.2.



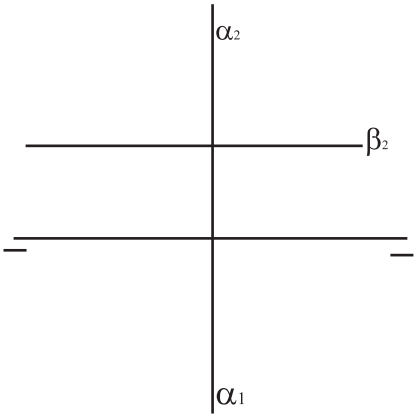
7.3.



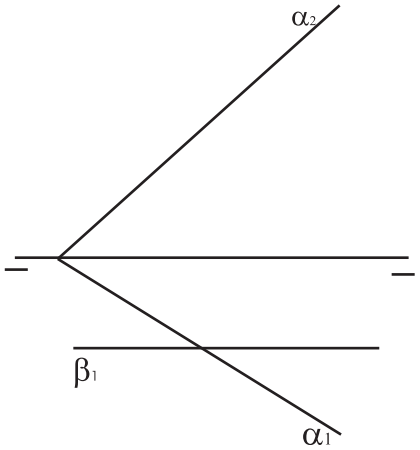
7.4



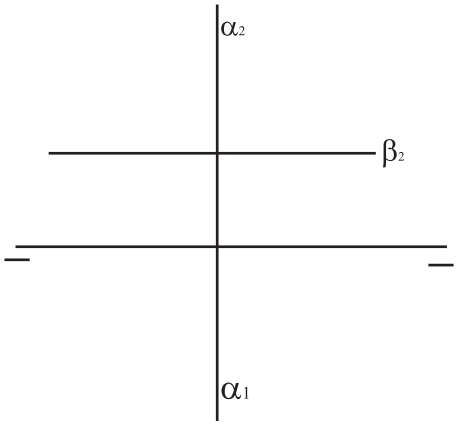
7.5.



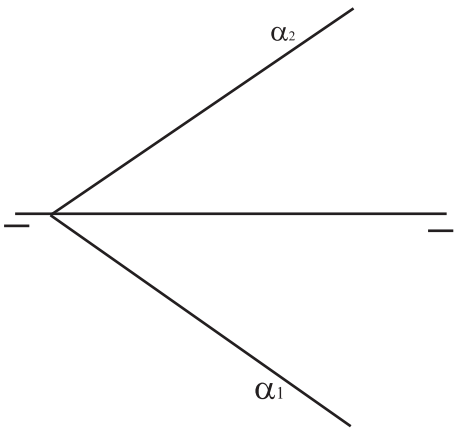
7.6.



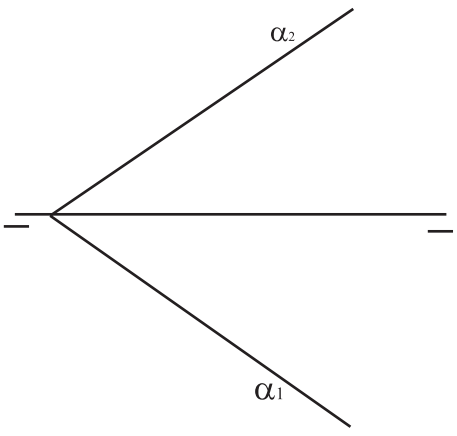
7.7



7.8. Plano oblícuo con un plano horizontal de cota 16.

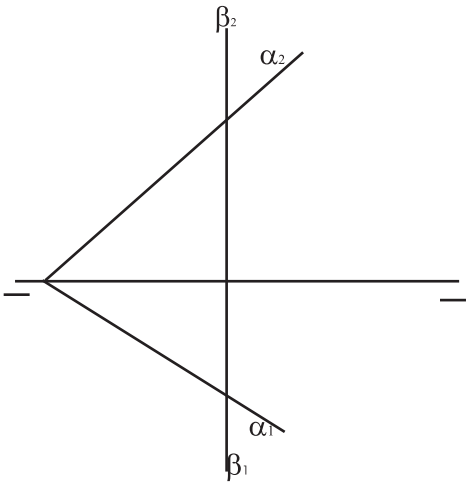


7.9.Plano oblícuo con outro paralelo a L.T. que teñan como intersección unha recta de perfil.

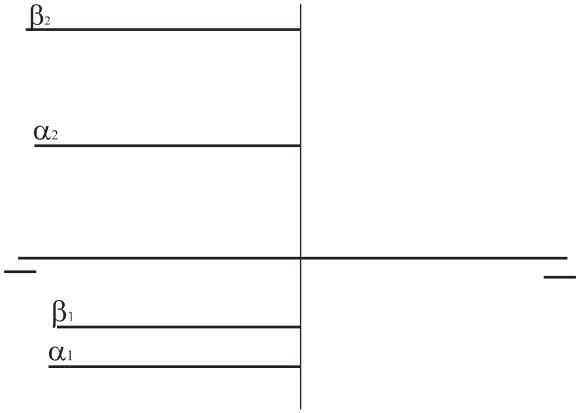


8. INTERSECCIÓN DE PLANOS

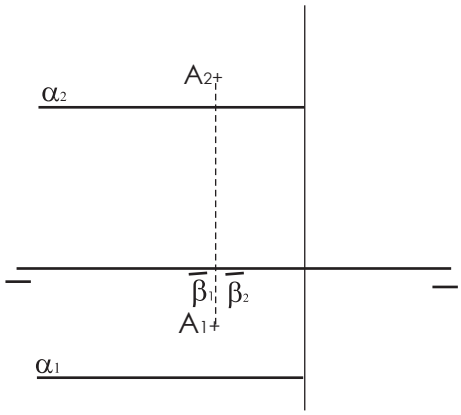
8.1.



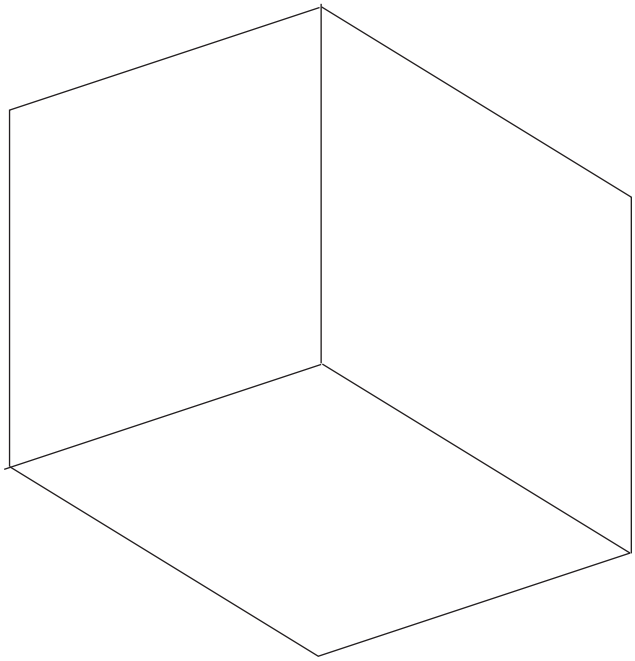
8.2.



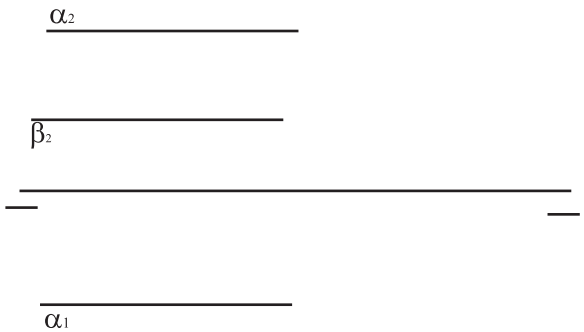
8.3.



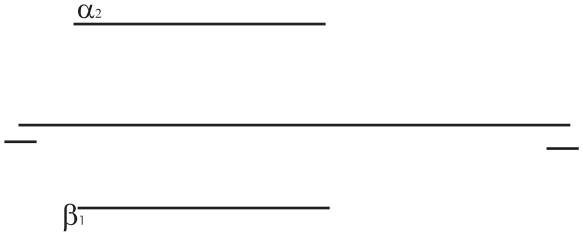
Debuxar en 3D o problema 8.2



8.4.



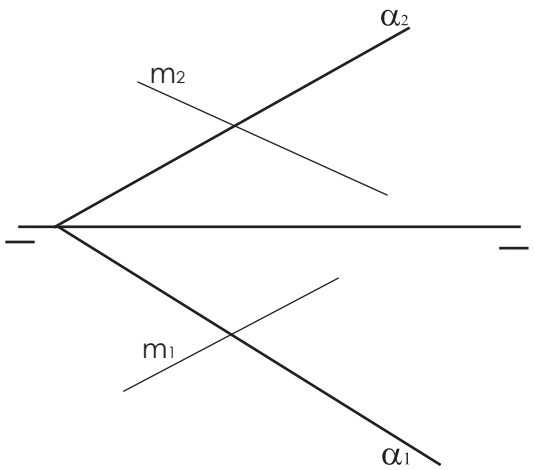
8.5.



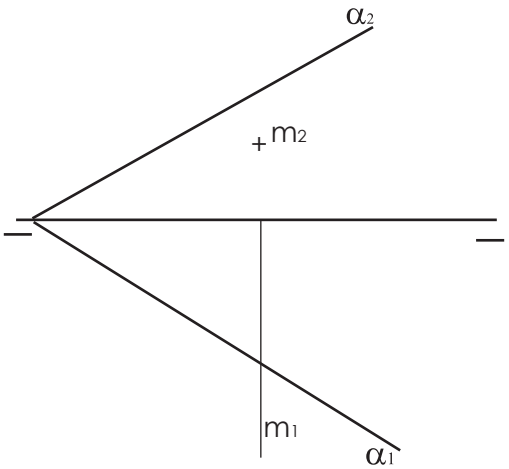
9. INTERSECCIÓN ENTRE RECTAS E PLANOS

Hallar la intersección entre el plano y la recta dados. Indicar qué tipo son.

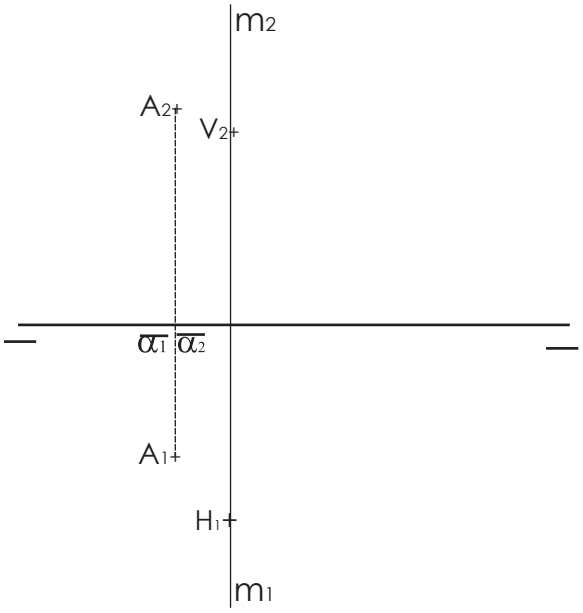
9.1.



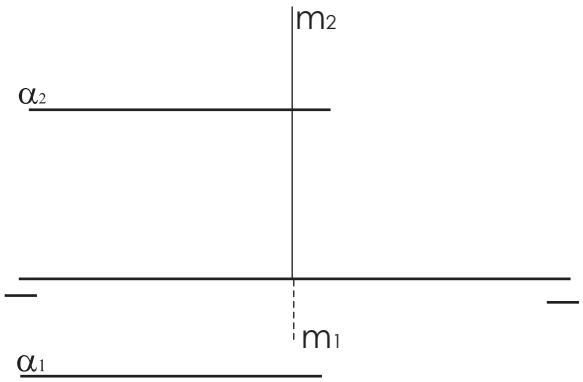
9.2.



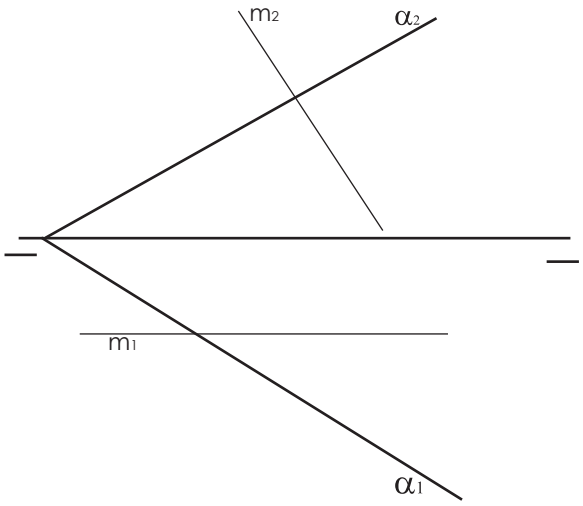
9.3.



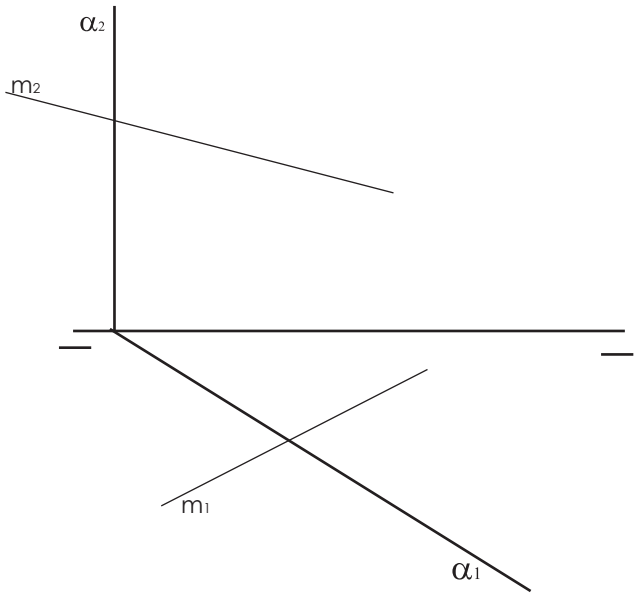
9.4.



9.5.

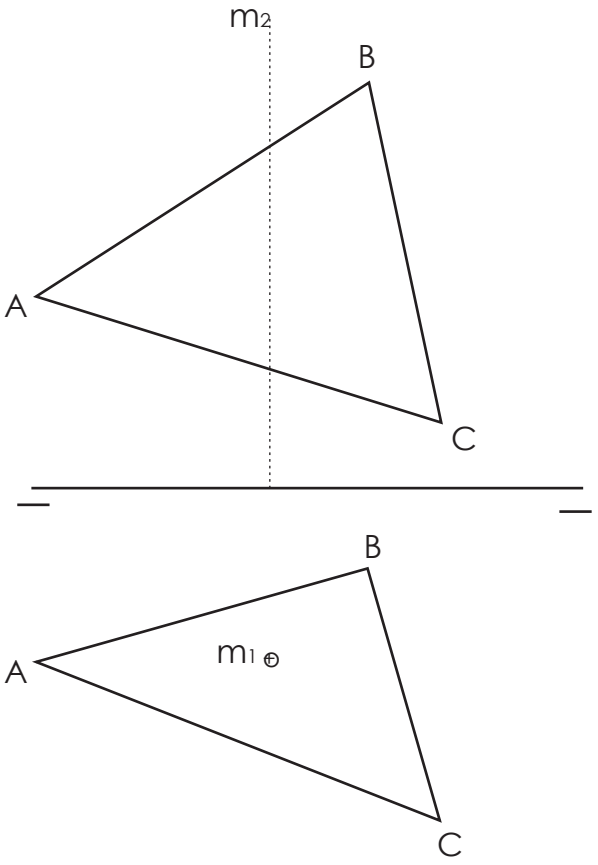


9.6.

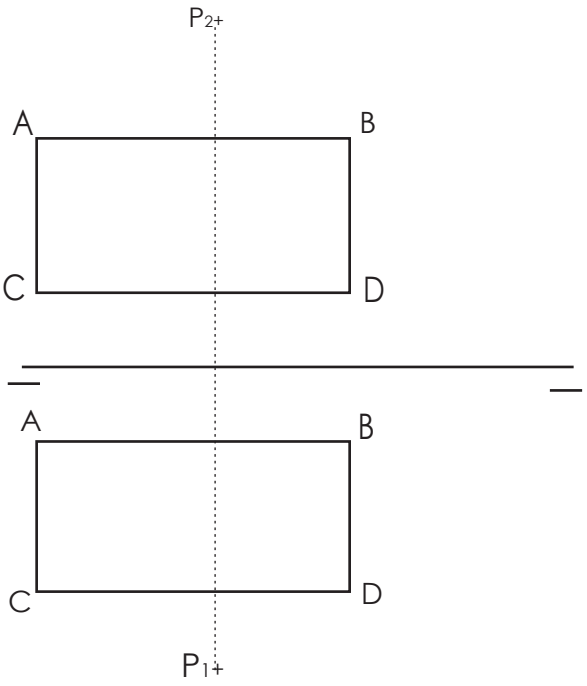


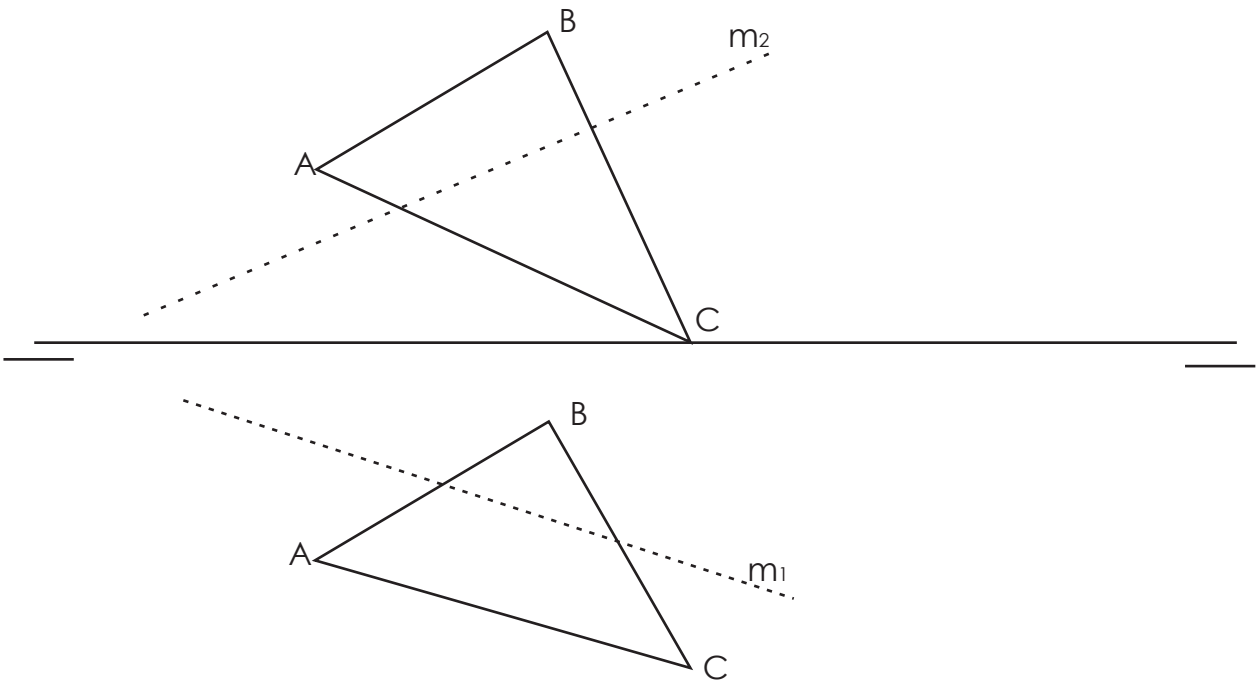
10. INTERSECCIÓN ENTRE RECTAS E POLÍGONOS

10.1. Achar o punto de intersección entre o triángulo e a recta m e determinar a visibilidade da recta



10.2.O punto P pertence a unha recta que pasa por L.t. Achar a intersección entre a recta e o rectángulo. Determinar a visibilidade da recta.

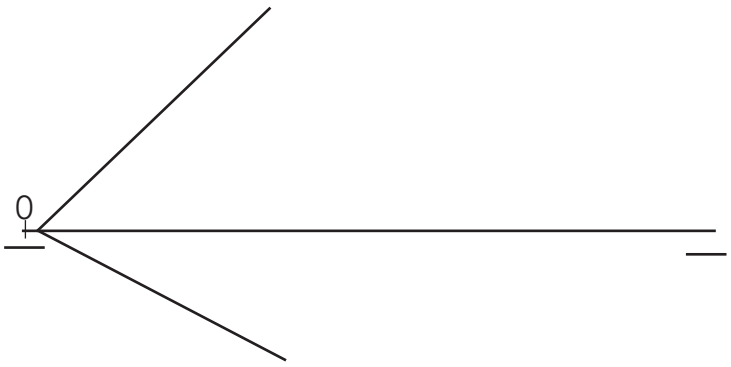




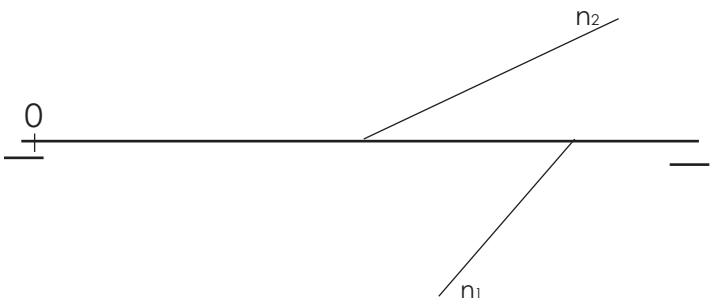
10.3. Achar a intersección entre a recta e o triángulo. Determinar a visibilidade da recta

12. PARALELISMO

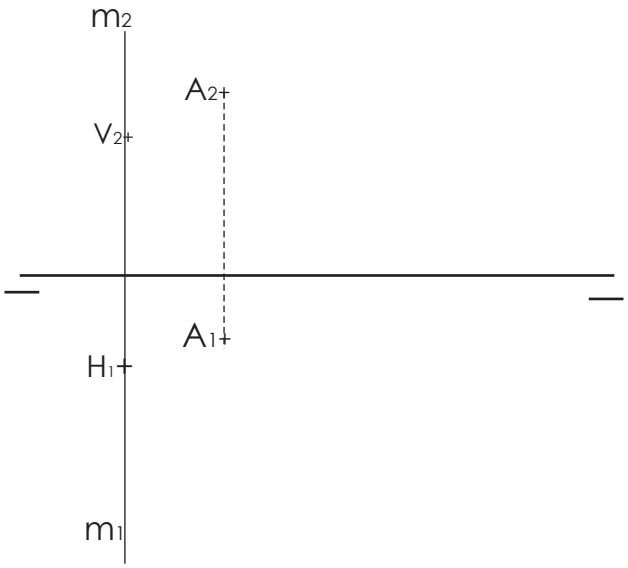
12.1. Determinar o plano que pasa polo punto A e é paralelo ao plano dado. A (70,10,15)



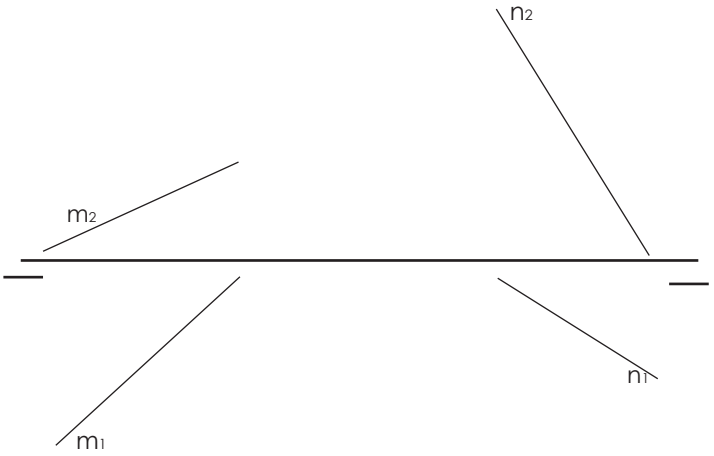
12.2. Debuxar o plano que contén ao punto M e é paralelo ao definido pola l.m.M (25,10,15)



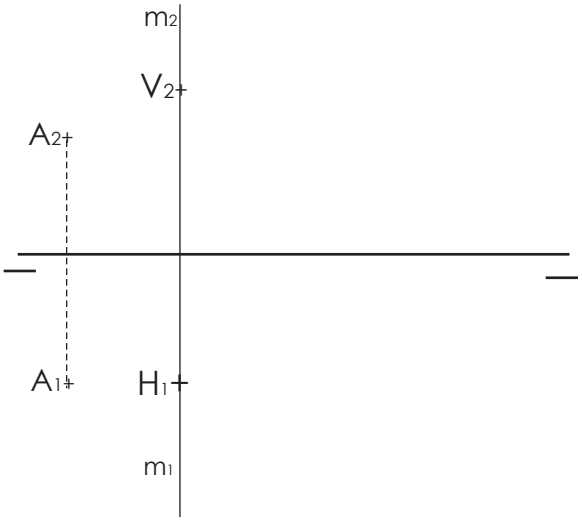
12.3.Trazar polo punto A unha recta que sexa paralela á recta de perfil m.

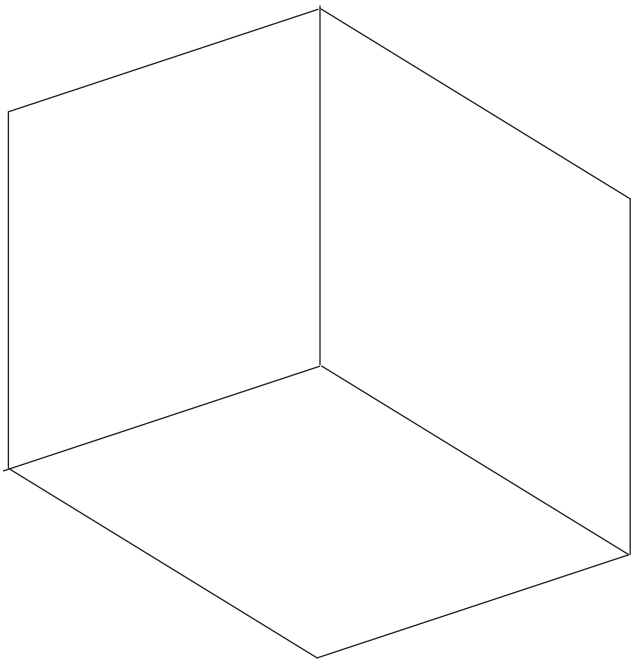


12.4. Debuxar o plano que conteña á recta m e sexa paralelo á recta n.

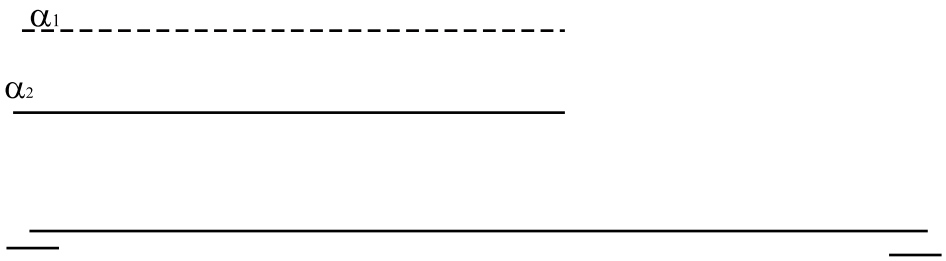


12.5. Representar o plano que contén ao punto A e sexa paralelo á recta de perfil m.

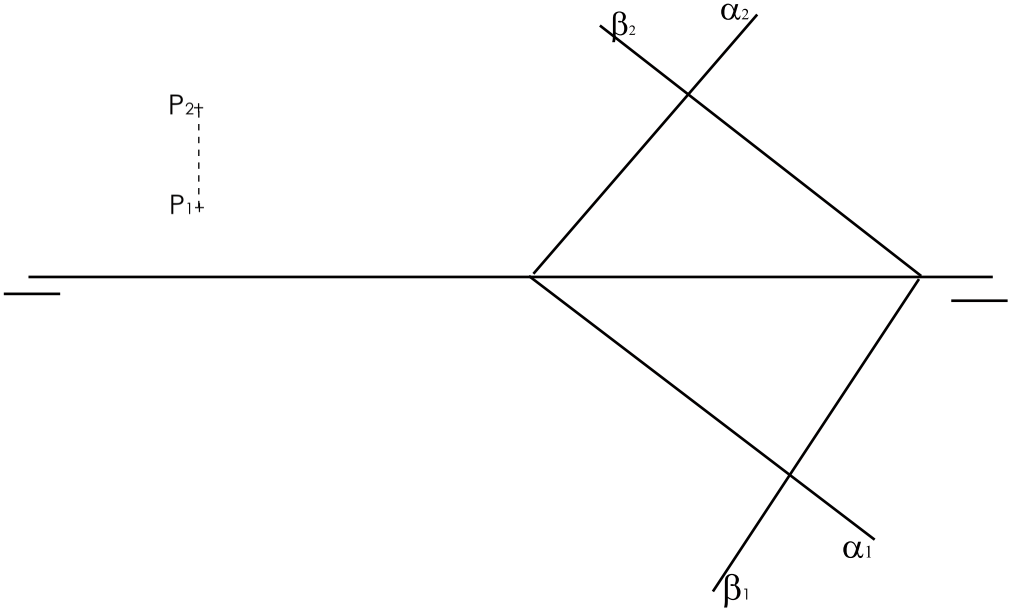




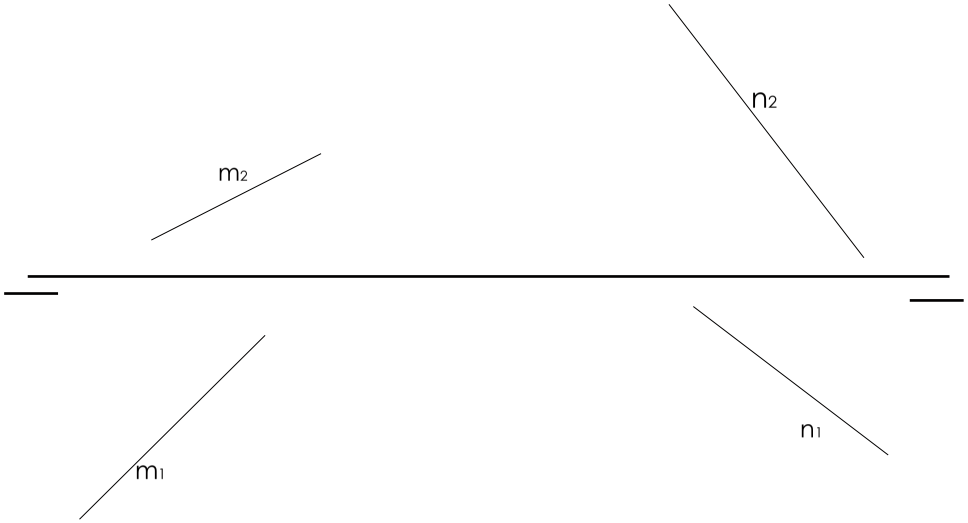
13.1. Representar o plano que pasa por L.T., e é paralelo ao plano dado.



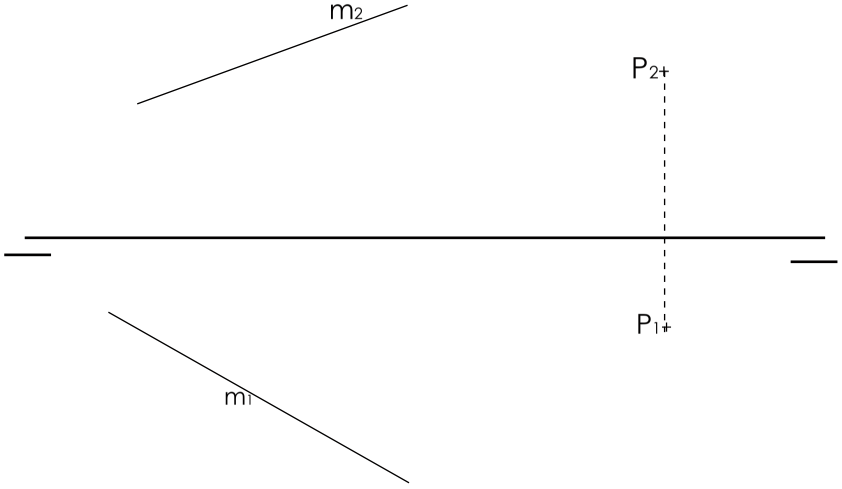
13.2. determinar a visibilidade da recta que pasa polo punto P, e é paralela á intersección dos planos dados.



13.3. Debuxar as trazas do plano que, contendo á recta m, é paralelo á recta n.

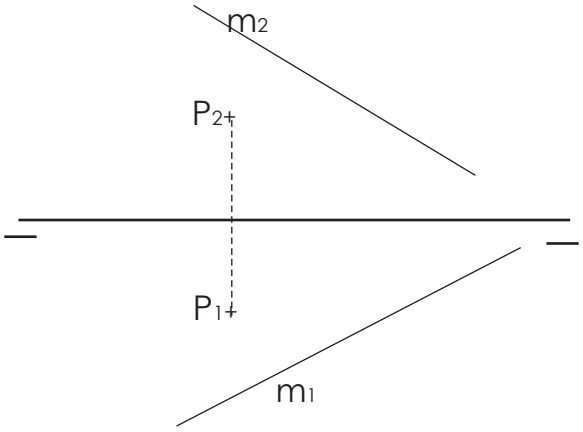


13.4. Trazar un plano que pase polo punto P, e que sexa paralelo á recta m.

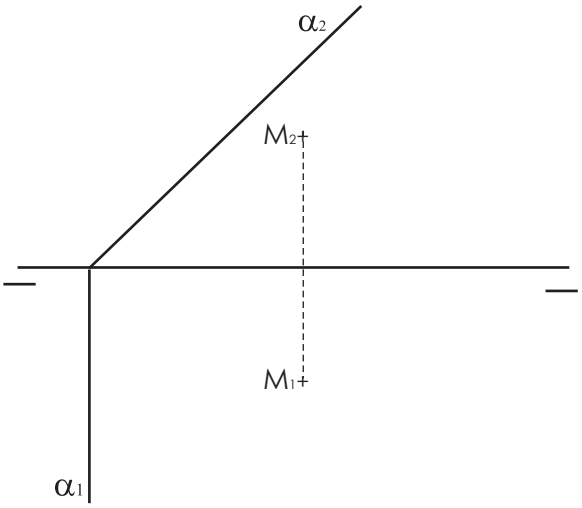


14. PERPENDICULARIDADE

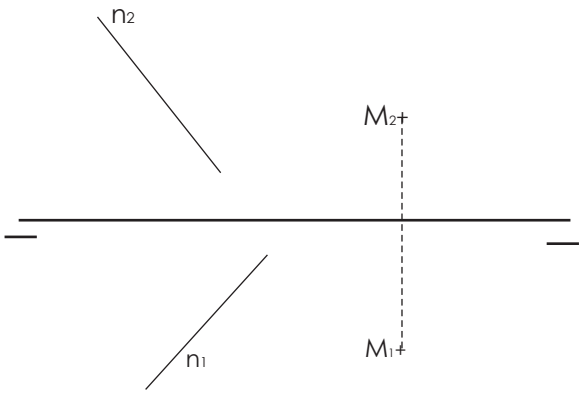
14.1. Trazar un plano perpendicular á recta m, que pase polo punto P.



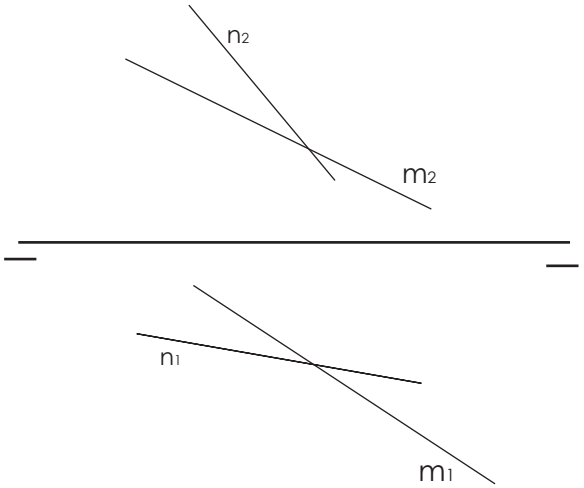
14.2. Trazar polo punto M unha recta perpendicular ao plano dado.



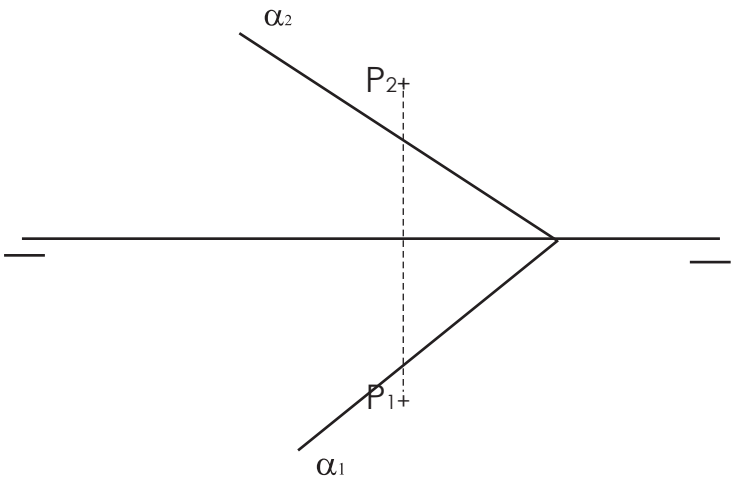
14.3. Representar a l.m.p. que pasa polo punto M, no plano perpendicular á recta n.



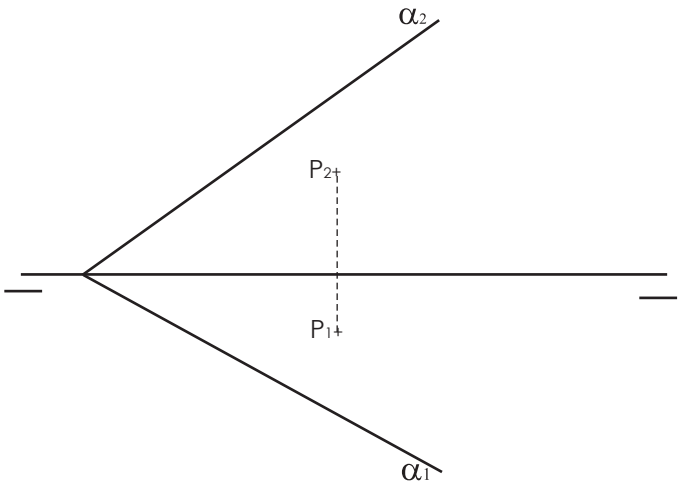
14.4. Determinar as proxeccións da recta perpendicular ao plano definido polas rectas m e n que pasa polo punto de intersección de ambas rectas.



14.5. Calcular as proxeccións do punto do plano máis próximo ao punto P.

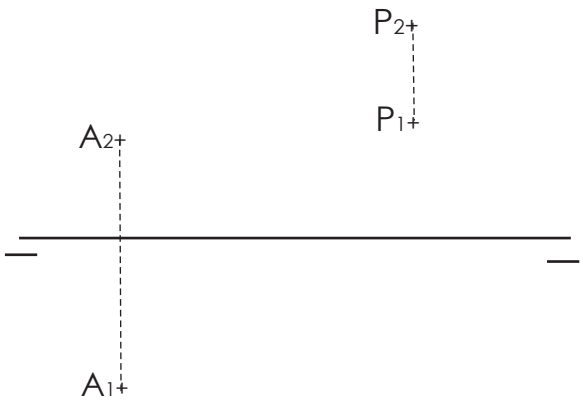


14.6. Trazar un plano perpendicular ao dado, que pase polo punto P.

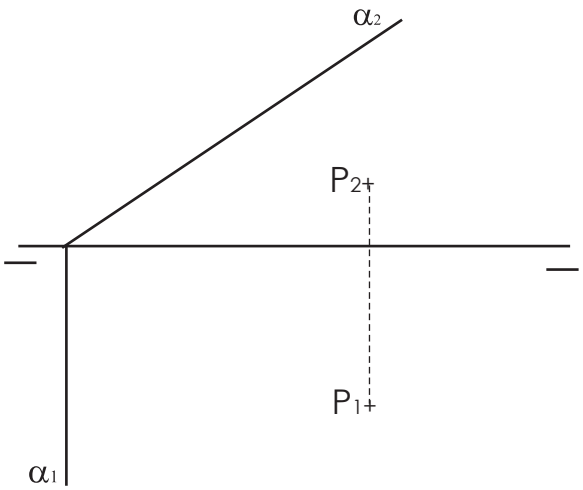


15. DISTANCIAS

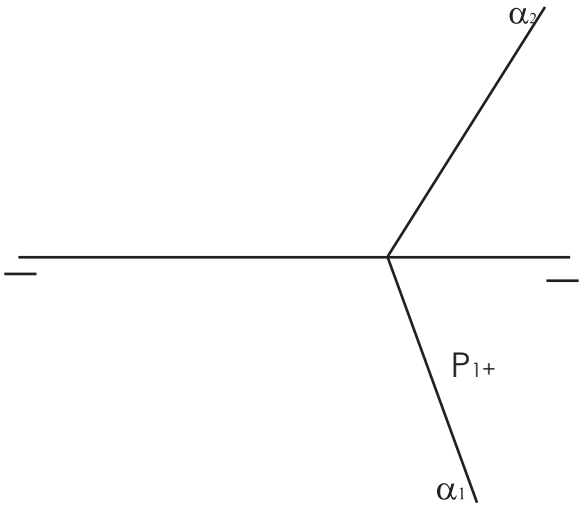
15.1. Determinar e expresar en mm. a distancia en v.m. entre os puntos A e P.



15.2. Calcular gráficamente a distancia entre o punto P e o plano.

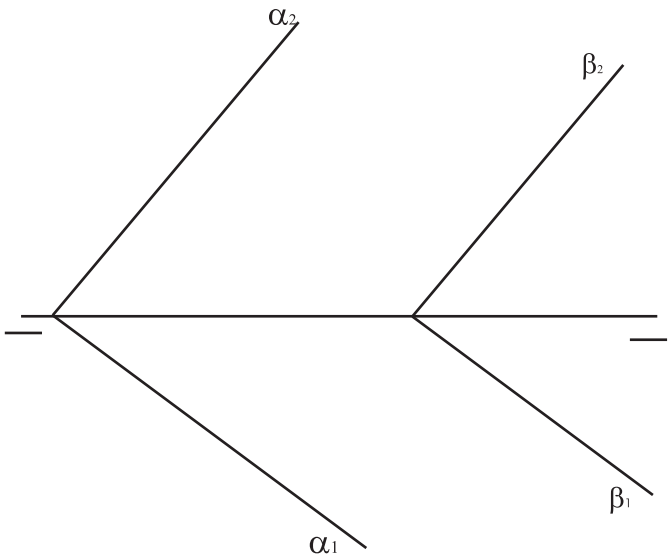


15.3. Calcular as proxeccións do punto que d dista 52 mm do plano dado, de maneira que o punto P deste plano sexa o máis próximo ao punto buscado.



15.4. Representar o plano que se atope a igual distancia dos punto A e P.

15.5. Calcular a distancia, en proxeccións e en v.m. entre os planos paralelos dados.



15.6. Representar o plano paralelo ao dado, que diste del 22 mm. (Dos dous planos posibles elexir o que queda á dereita).