

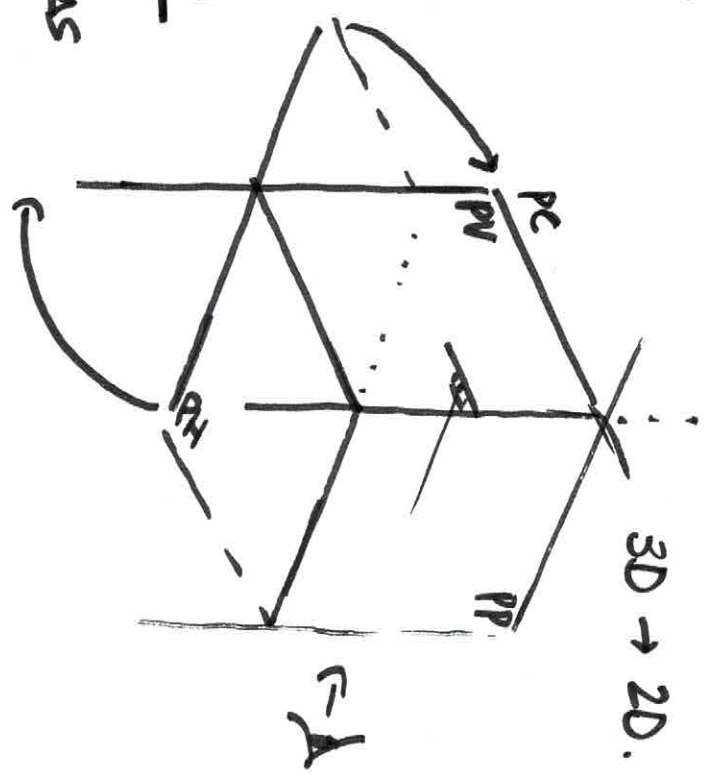
* ELEMENTOS

- PUNTOS
- RECTAS
- PLANOS
- FIGURAS

DIÉDRICO

CONVENCIONAL.
(DIRECTO)

ORTOGONAL. \perp
3D \rightarrow 2D.

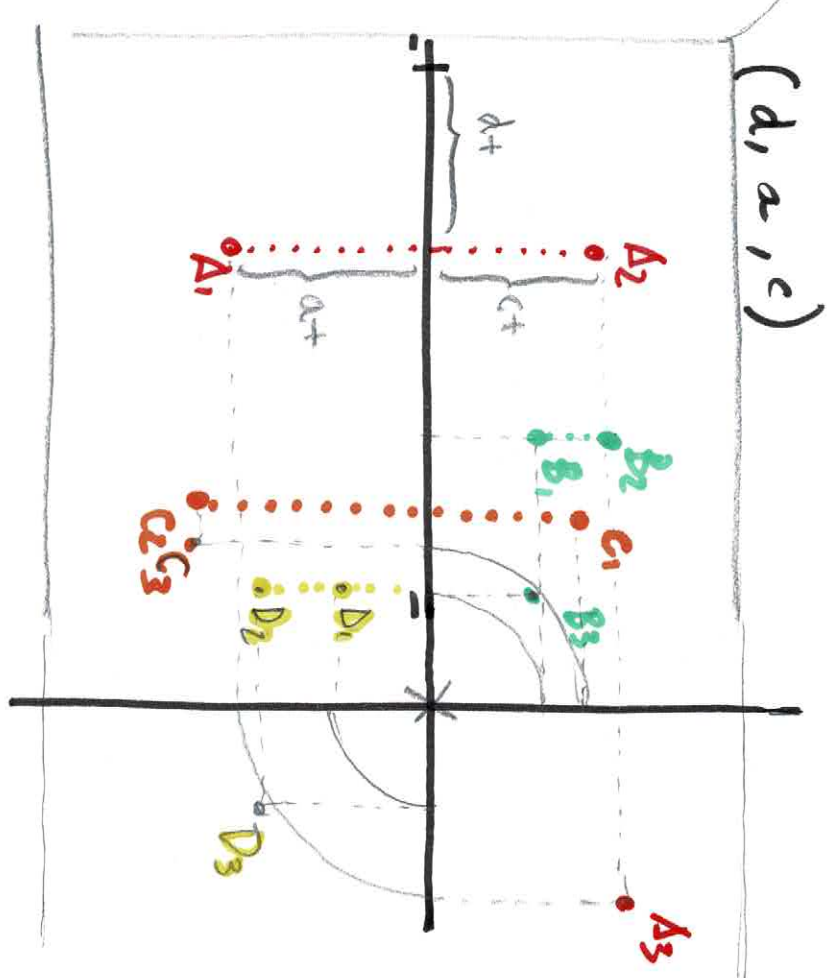
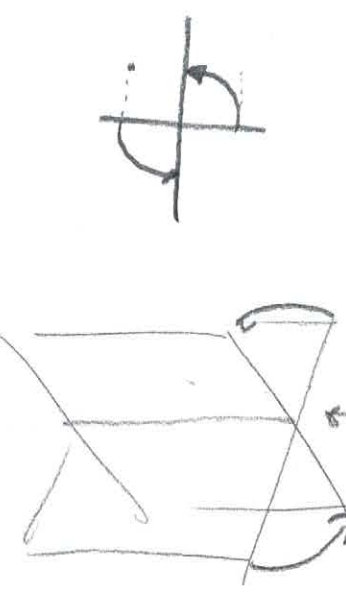
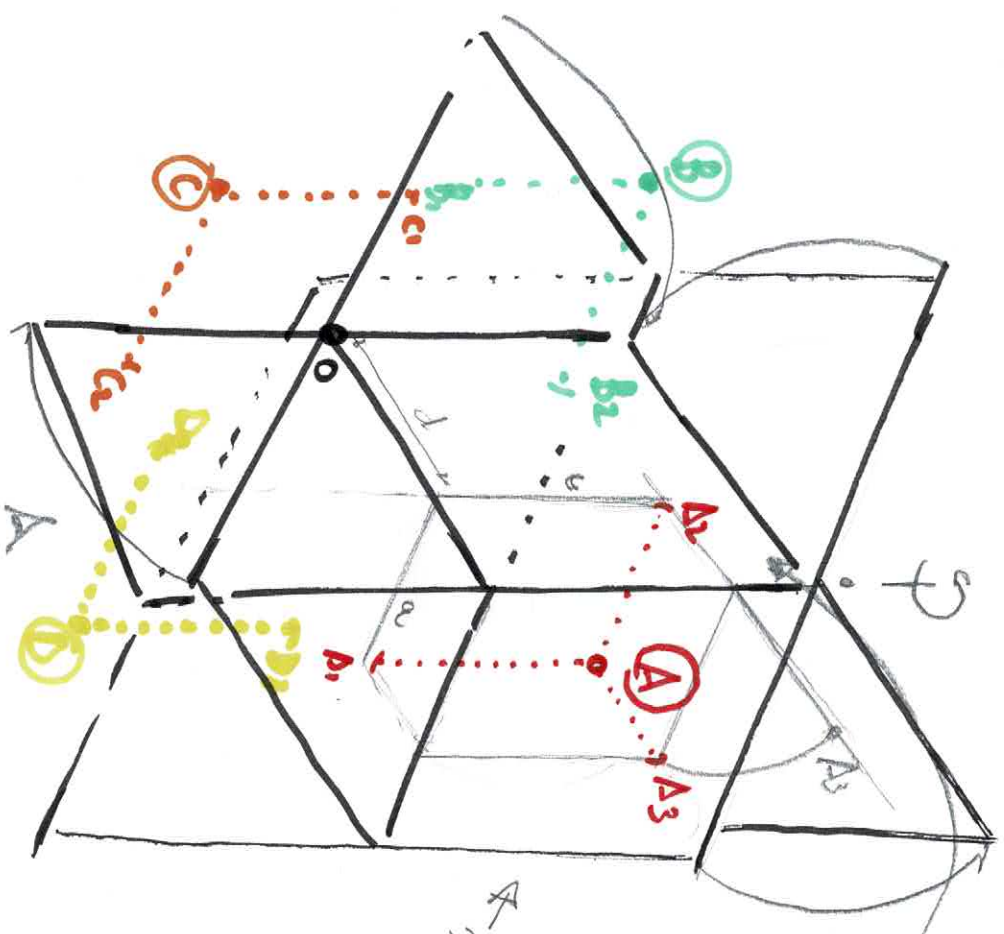


* NORMALIZACIÓN

- VISTAS
- CORTES
- ACOTACIÓN

* MÉTODOS OPERATIVOS

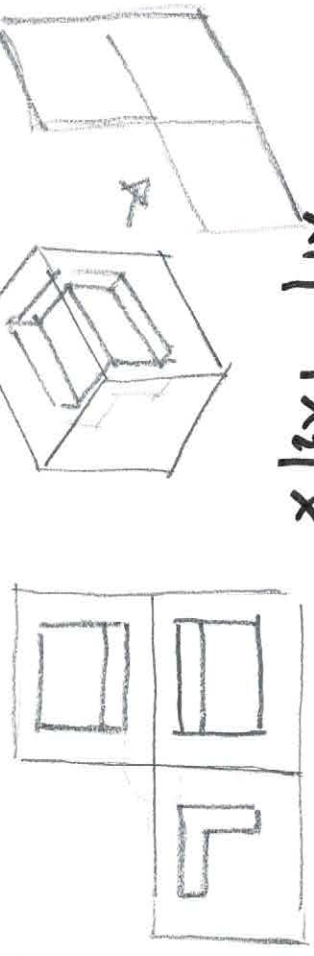
- * INTERSECCIONES
- RELACIONES
- GIROS
- ABATIMIENTOS
- CAMBIOS DE PLANO



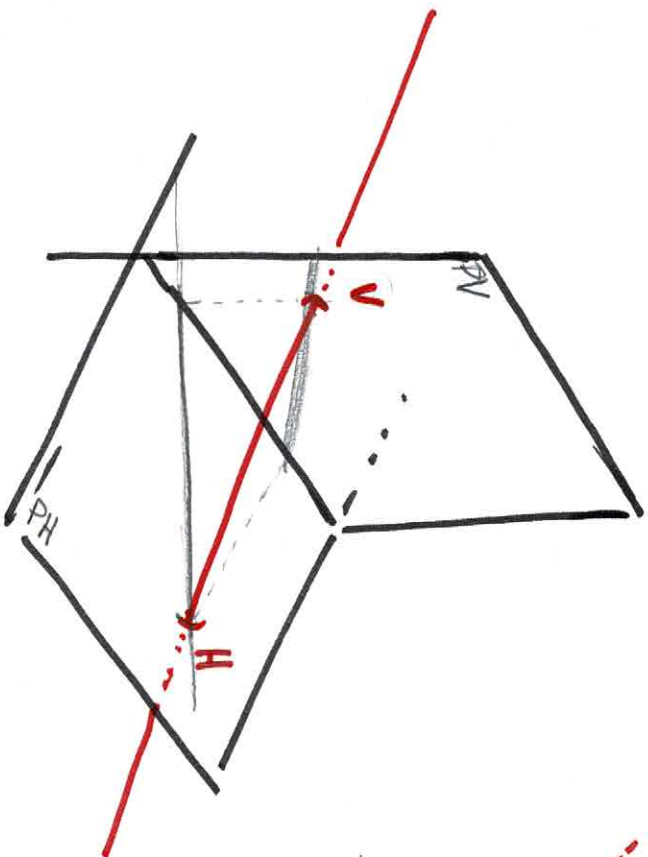
1° 2° 3° 4°

x_2	x_1	x_1	x_2
x_1	x_2	x_2	x_1

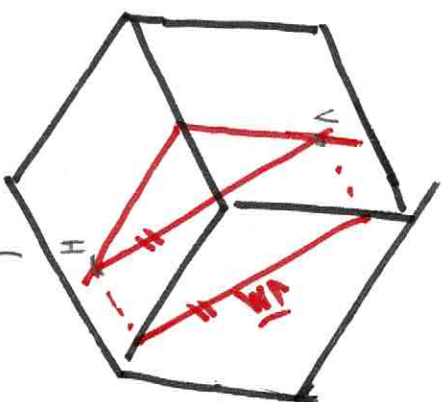
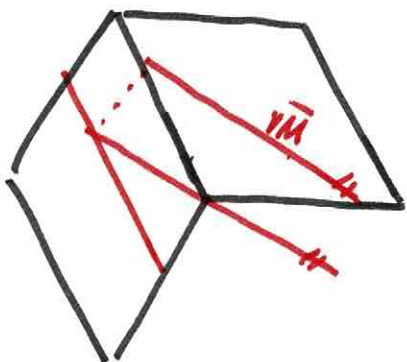
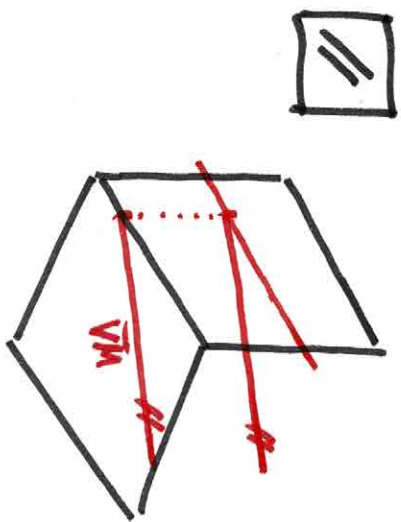
LA COTA SE MANTIENE
ALEJAMIENTO GIRA.



RECTAS

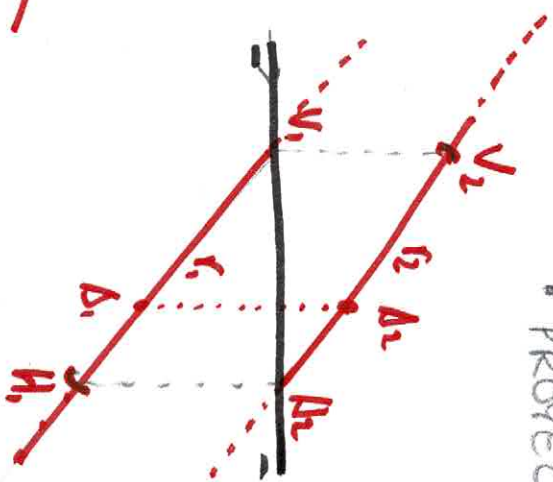


RECTAS NOTABLES

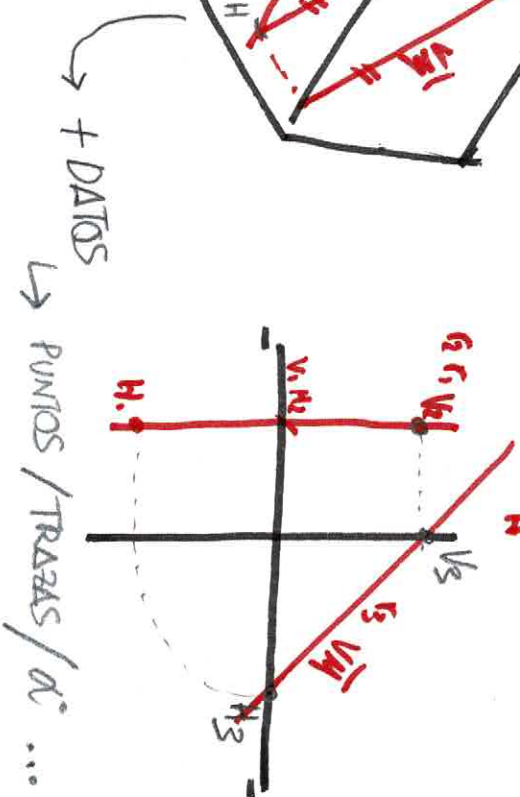
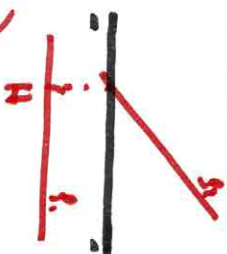
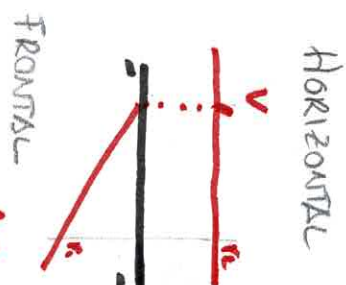


VM

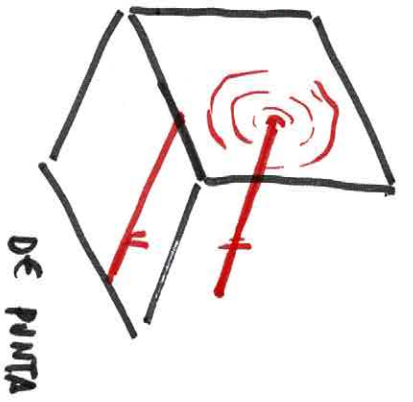
- TRAZAS
- PROYECCIONES



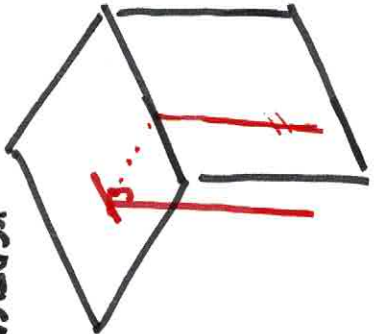
OBLICUA / CUALQUIERA.



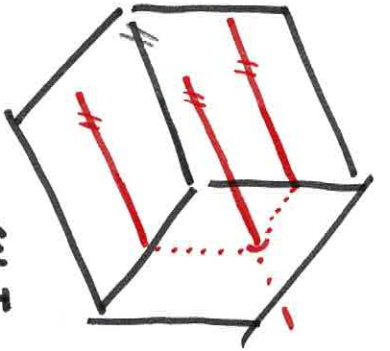
F



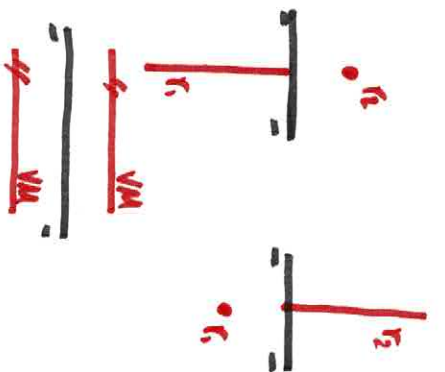
DE PUNTA



VERTICAL

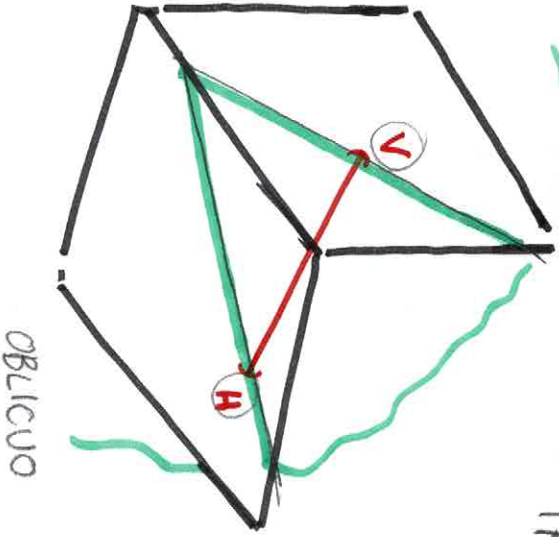


//L.T.

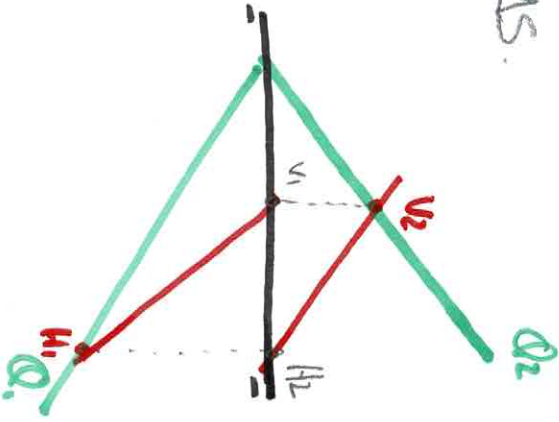


PLANOS = SUPERFICIE PLANA

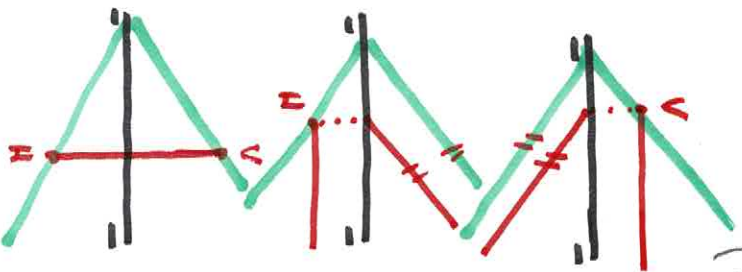
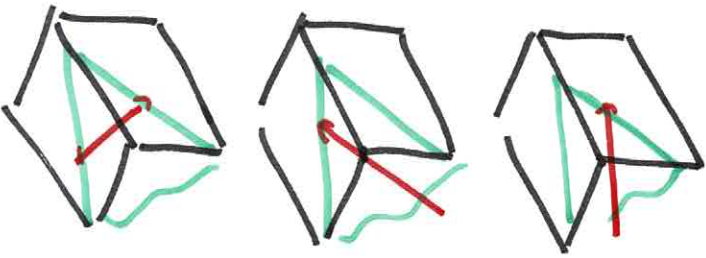
TRAZAS.



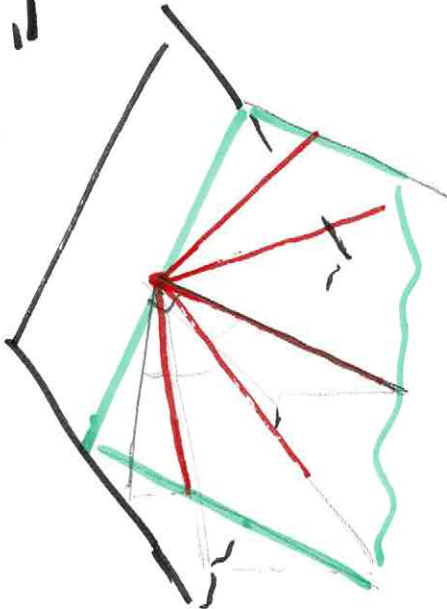
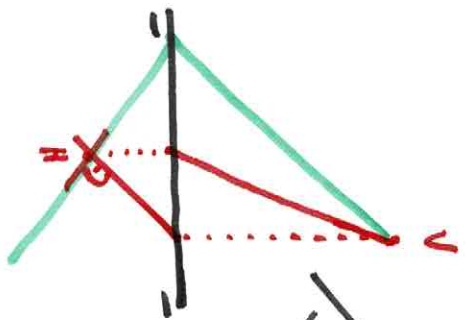
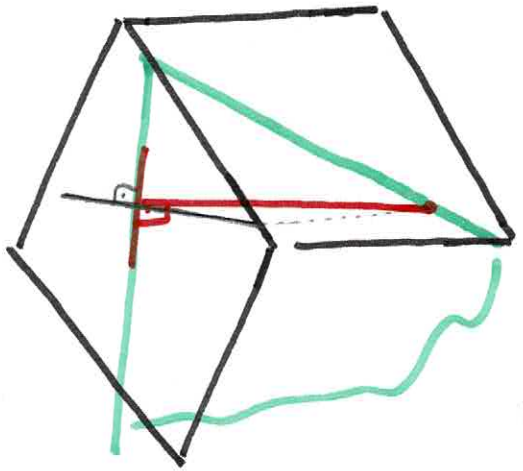
OBLICUO



PARA QUE $r \in Q \rightarrow \begin{cases} V_2 \in Q_2 \\ H_1 \in Q_1 \end{cases}$

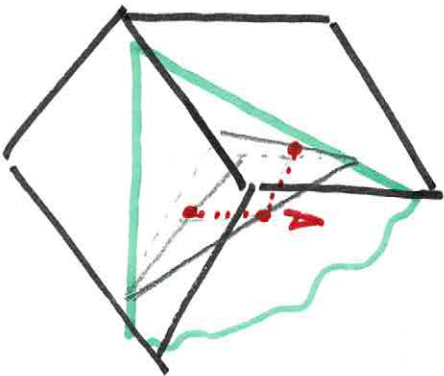
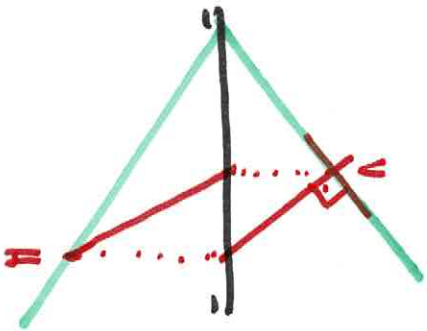
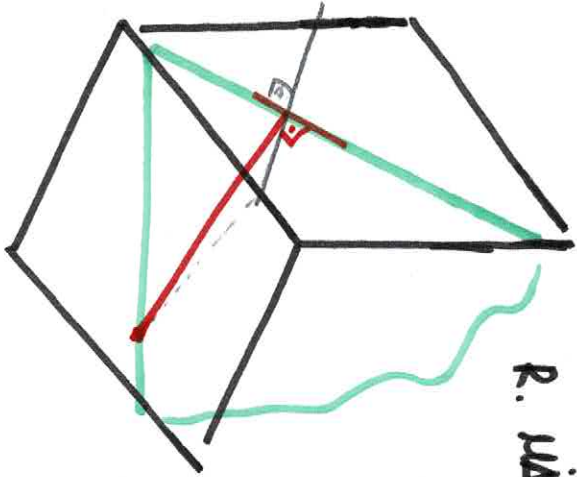


R. MÁX. PENDIENTE



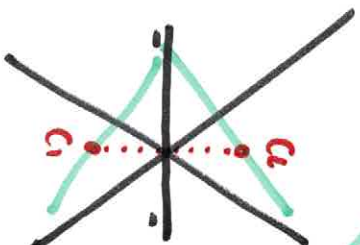
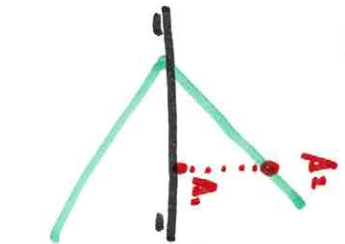
- PUNTOS EN LOS PLANOS

R. MÁX INCLINACIÓN

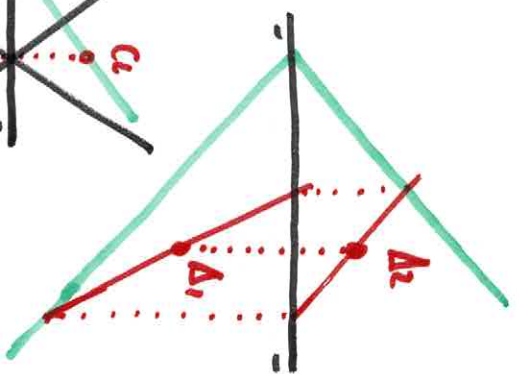


PARA QUE PEO

{ PER U
{ REO

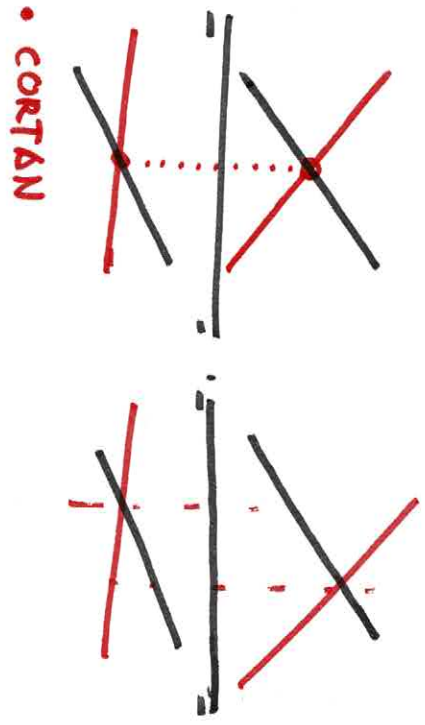


Noji

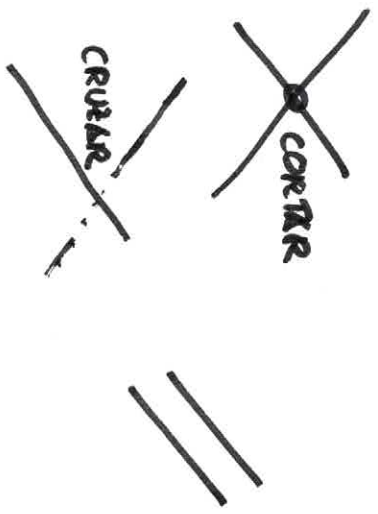


- INTERSECCIONES -

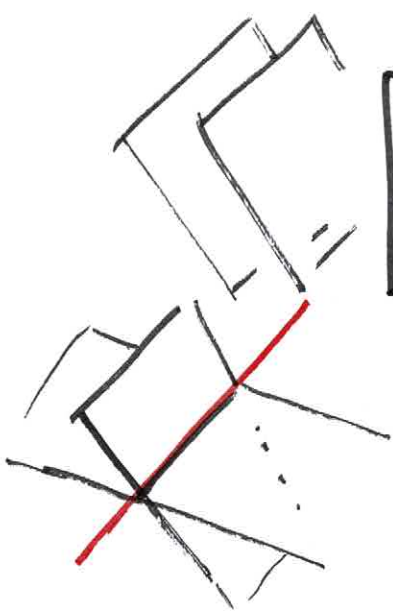
- ✓ RECTAS → CORTAR EN UN PUNTO
- PLANOS → RECTA DE INTERSECCION
- RECTA + PLANO → PUNTO DE INTERSECCION



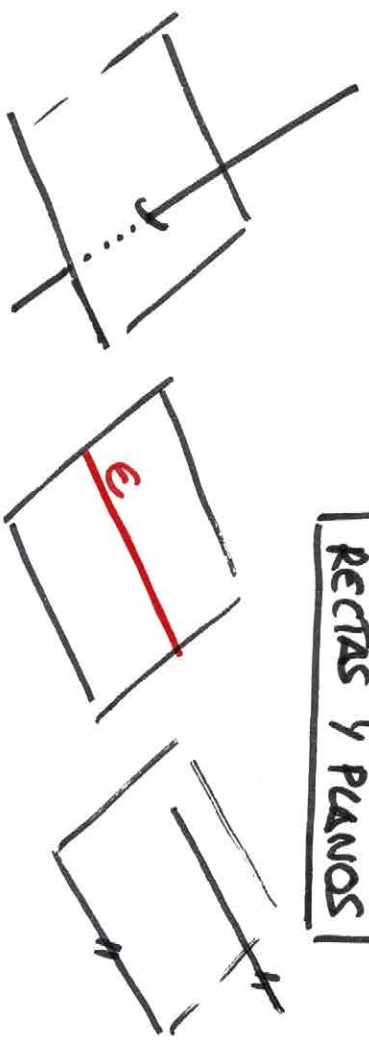
RECTAS



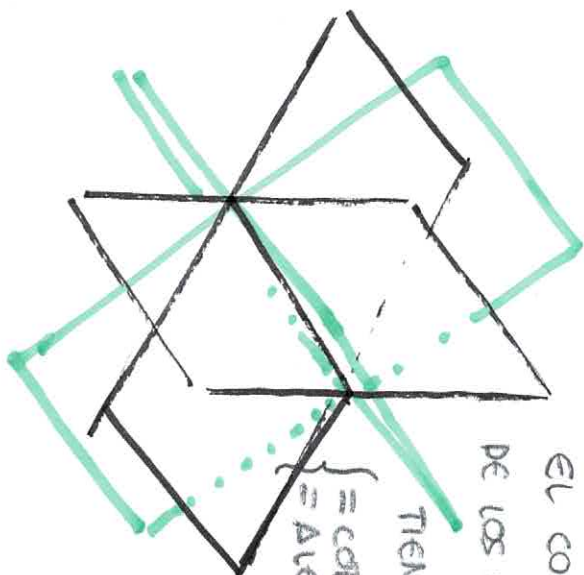
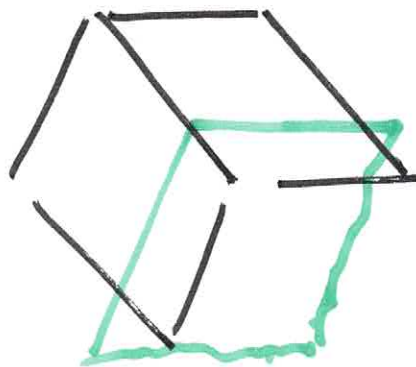
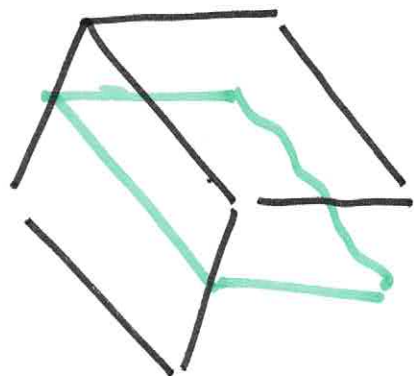
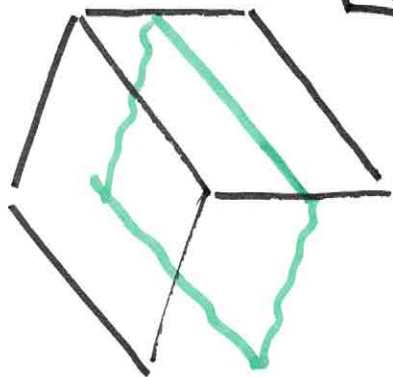
PLANOS



RECTAS Y PLANOS



TIPOS DE PLANOS:

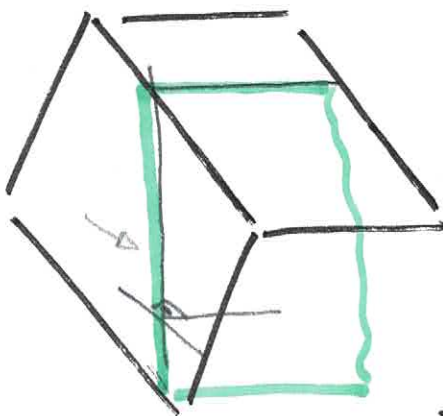
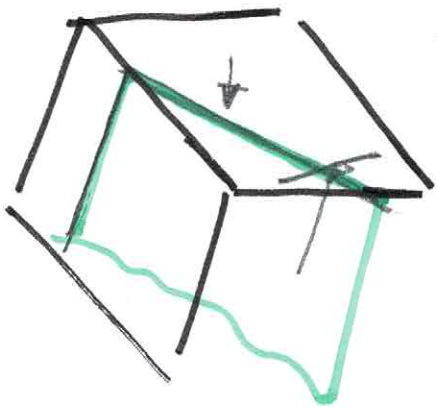


EL CONTENIDO DE LOS BISECTORES TIENE

= COTA
= ASESAMIENTO



PROYECTANTES.



PROYECTANTE VERTICAL

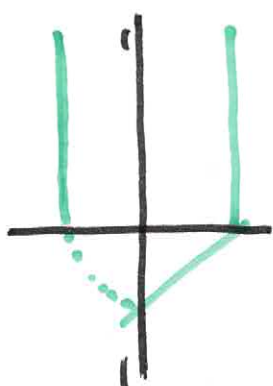


PROYECTANTE HORIZONTAL



AL PERFIL

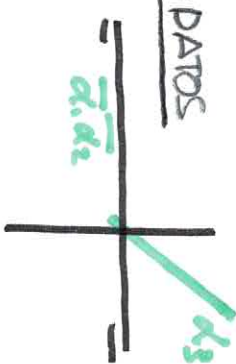
// Δ LA LT.

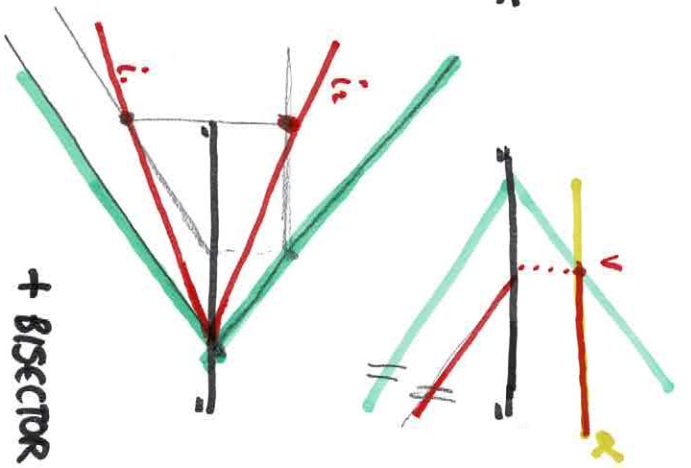
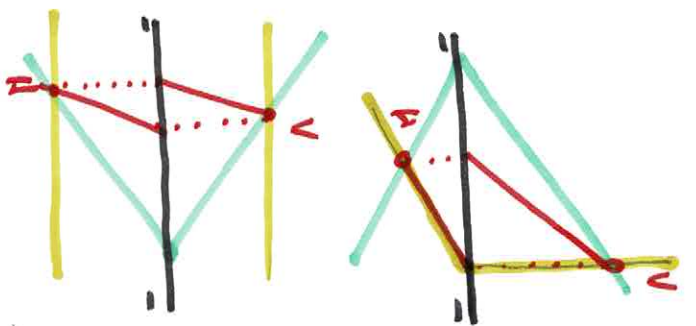
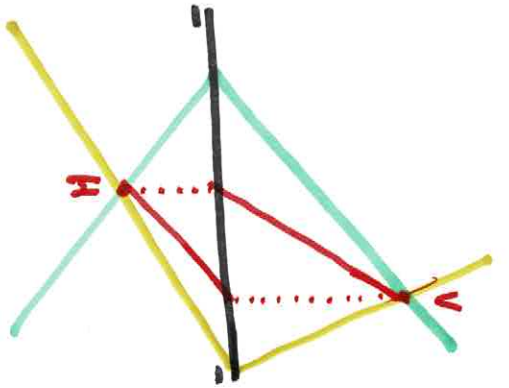
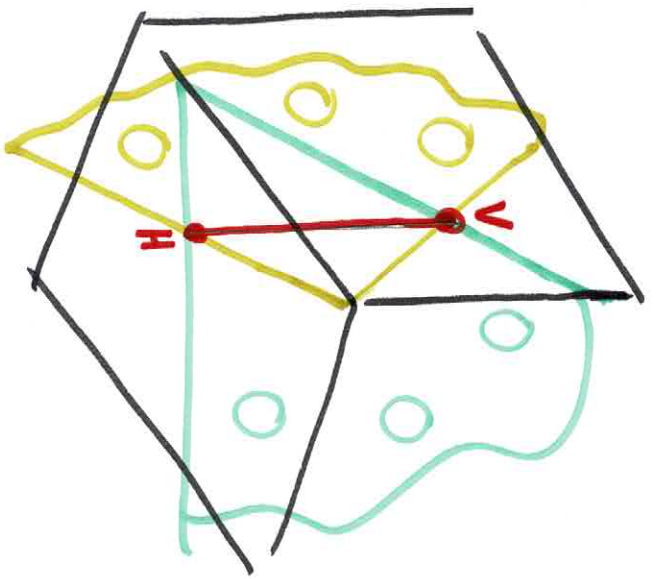


BISECTORES

PASA POR LA LT

+ DATOS

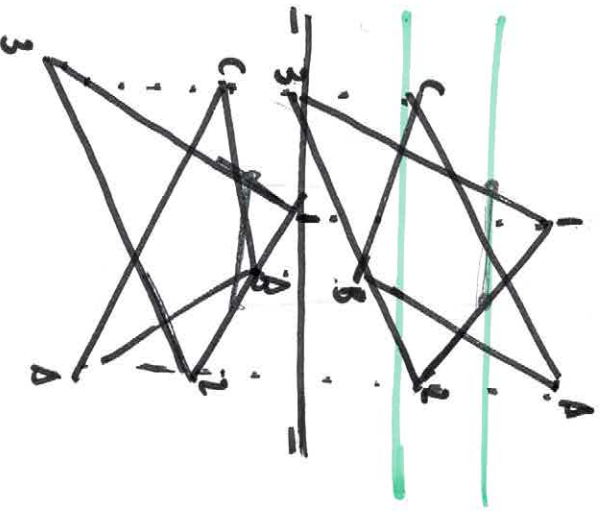




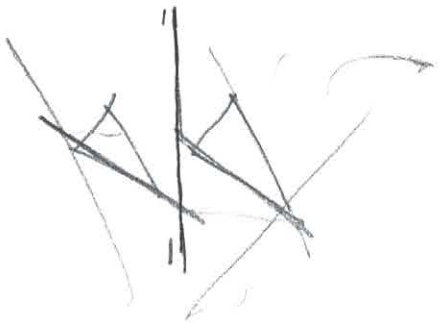
+ BISECTOR
(1')

(8)

SUPERFICIES PLANAS:



(1)



(2)

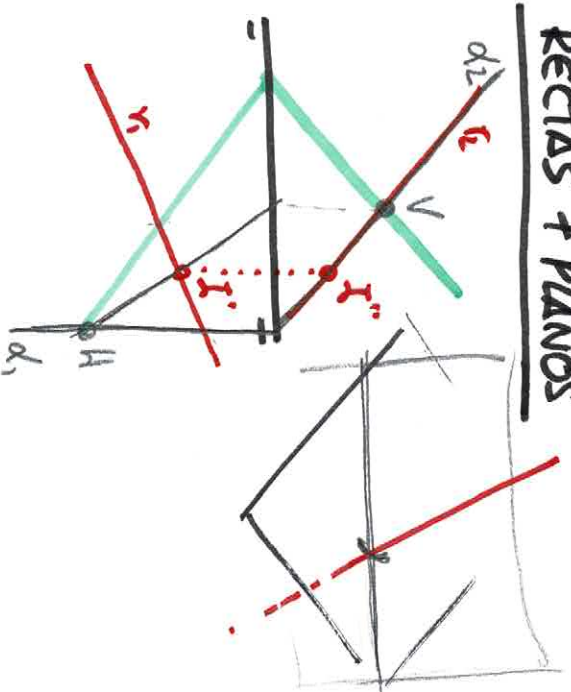
∥

CORTAR CON

PLANOS:

- HORIZONTALES
- FRONTALES

RECTAS + PLANOS

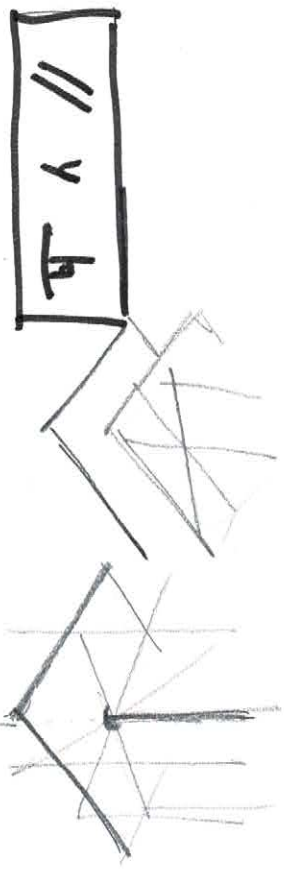


¿CÓMO HACEMOS UN PLANO?

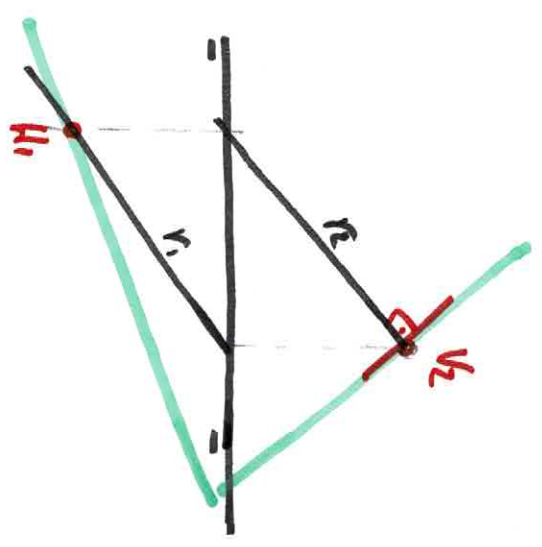
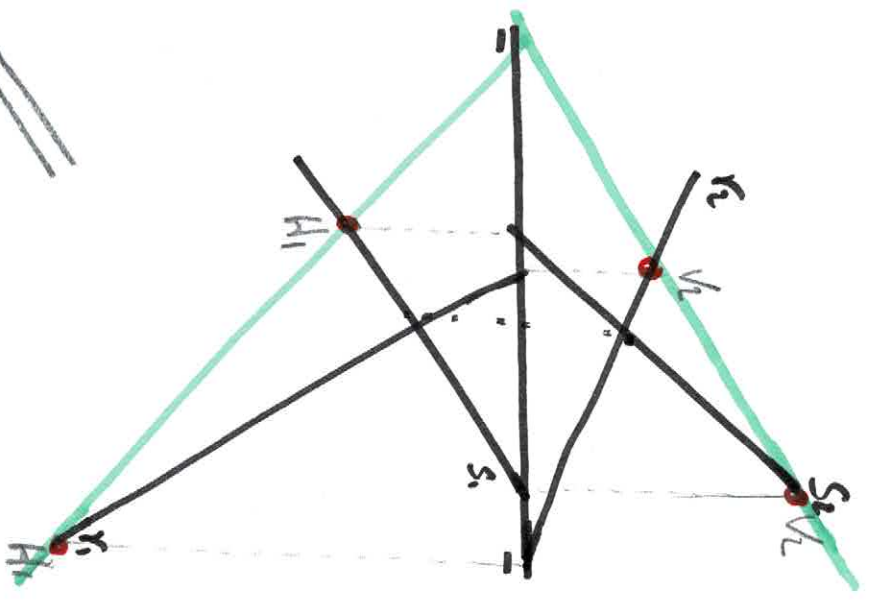
3 PUNTOS → 2 RECTAS.



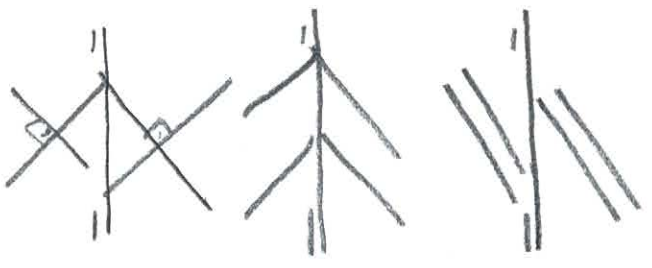
↙ RECTA MÁX. PENDIENTE
MÁX. INCLINACIÓN



$R+R$	//	SI	NO *1
$P+P$	//	SI	NO *2
$R+P$	//	NO *3	SI

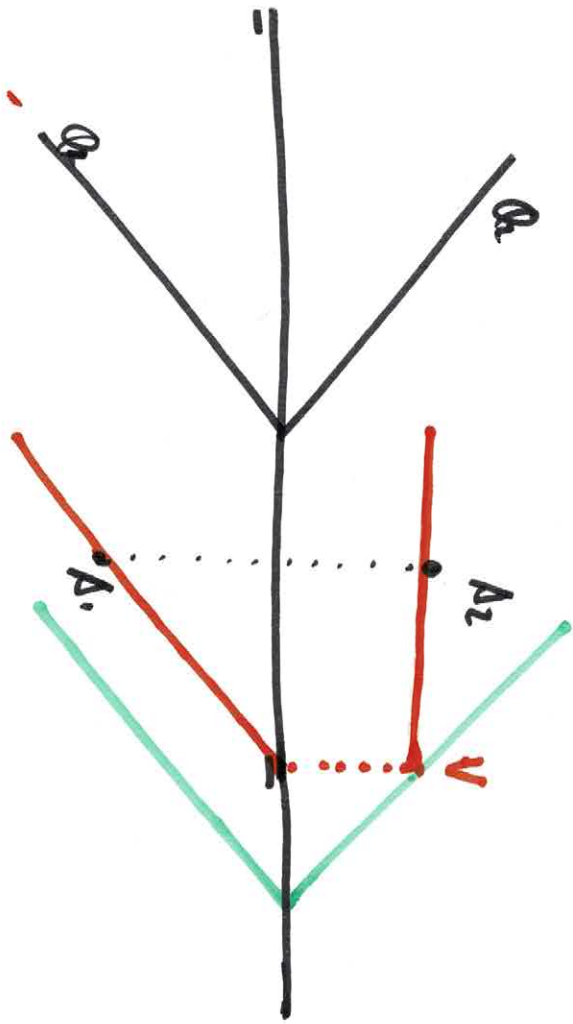


R.U.I.

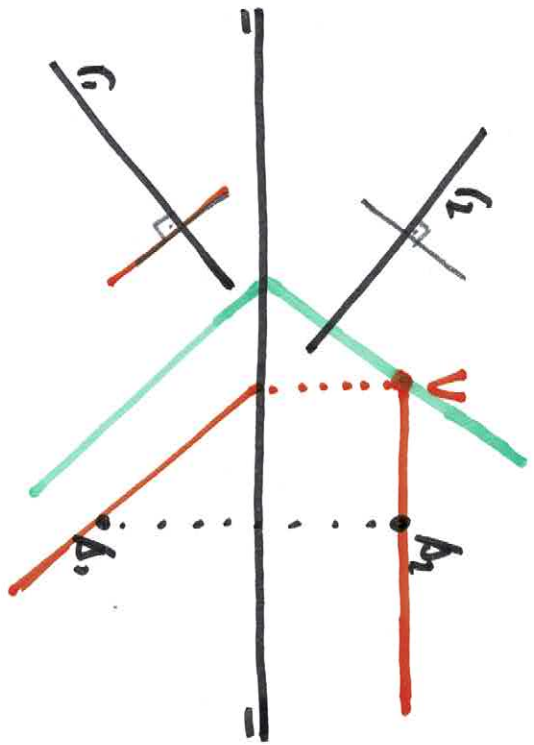


- 1* LAS RECTAS SE VERÁN h SI AL MENOS UNA ES HORIZONTAL O FRONTAL Y SE VERÁ h EN LA PROJ. EN VN
- 2* PARA QUE UN PLANO SEA h A OTRO h DEBE CONTENER A UNA RECTA h
- 3* PARA QUE R SEA // Q → debe ser // a una recta de ese plano.

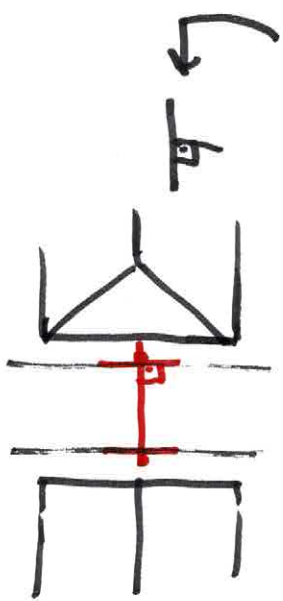
⊛ PLANO // PLANO QUE PASE X A



PLANO β A RECTA QUE PASE X A



DISTANCIAS



MINIMA DISTANCIA
MÁS PRÓXIMO
CERCANO

ME DIR α

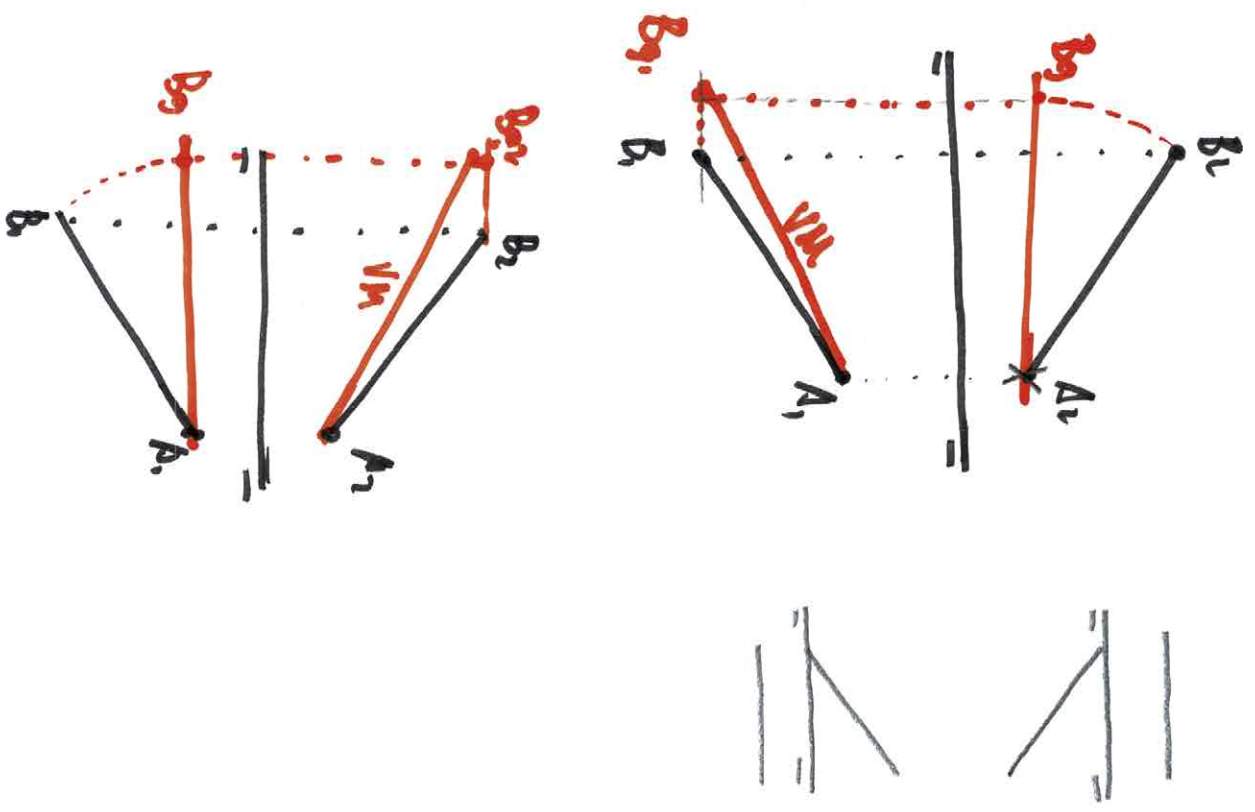
VM

GIROS
DISTANCIAS

CAMBIOS DE PLANO

ABATIMIENTOS.

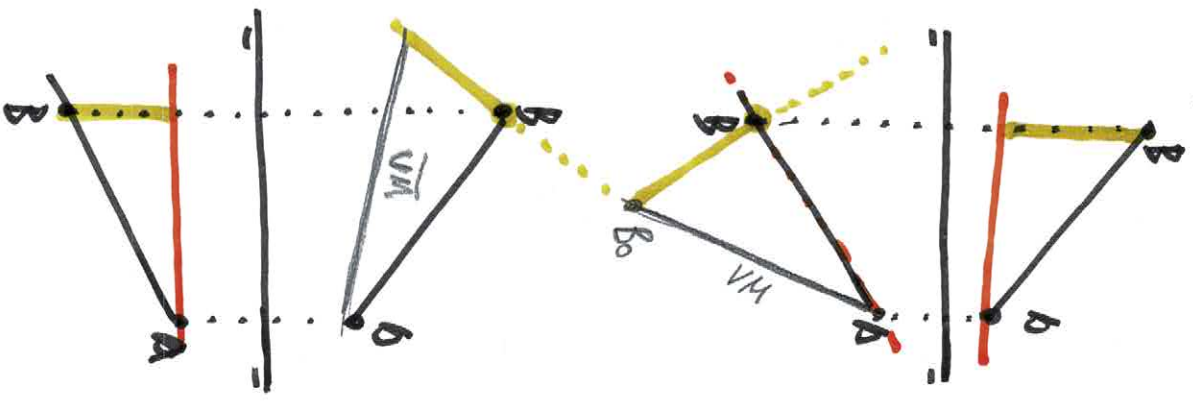
- GIROS Y DISTANCIAS -



≠ ALEJAMIENTO

≠ COTA

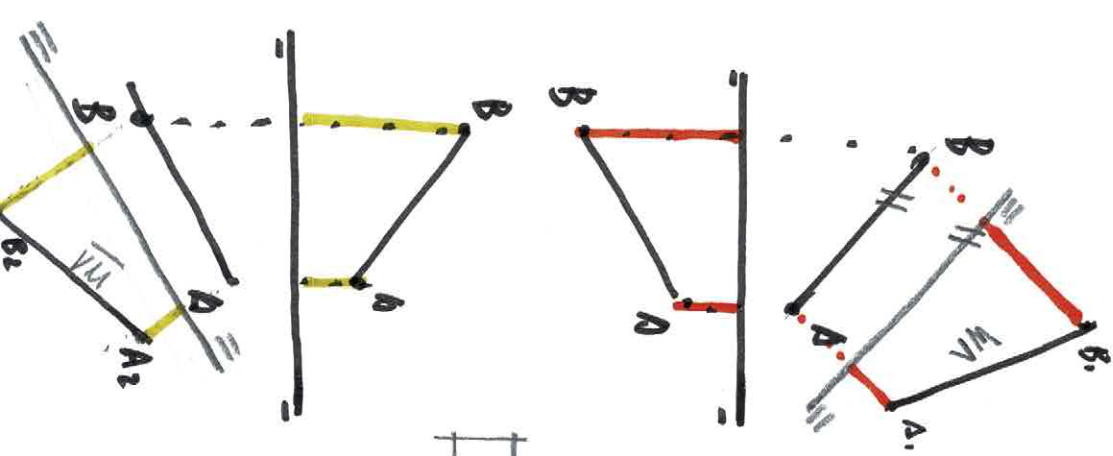
ABATIMIENTO DE TRIÁNGULOS



- CAMBIOS DE PLANO -

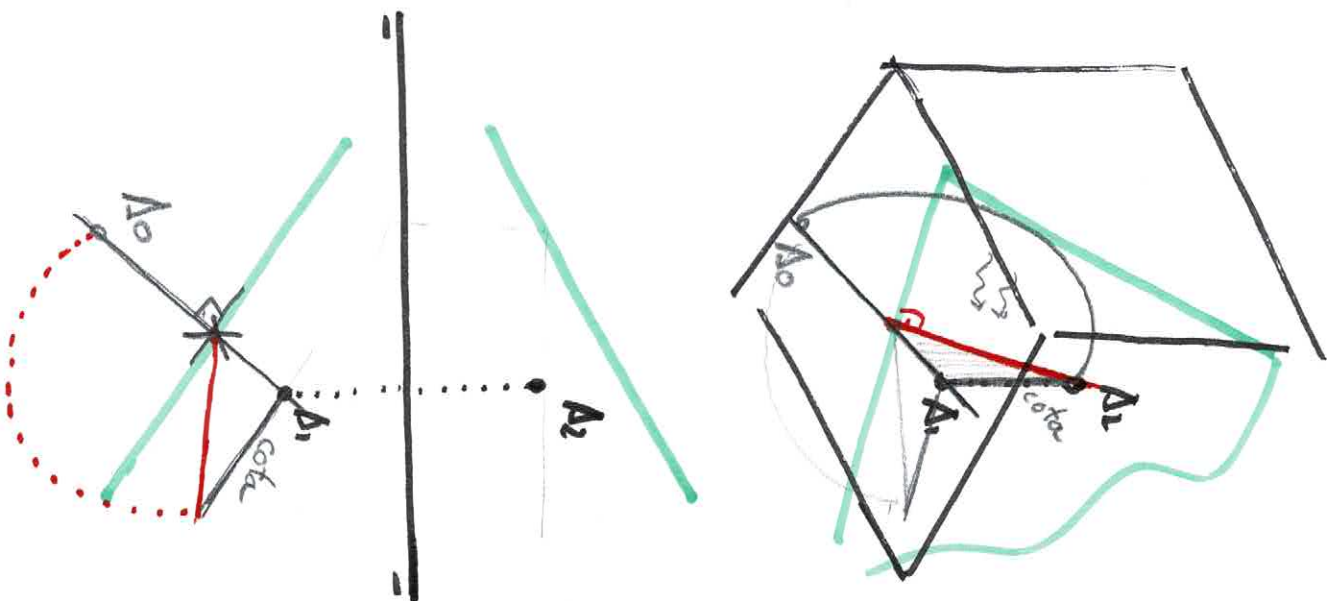
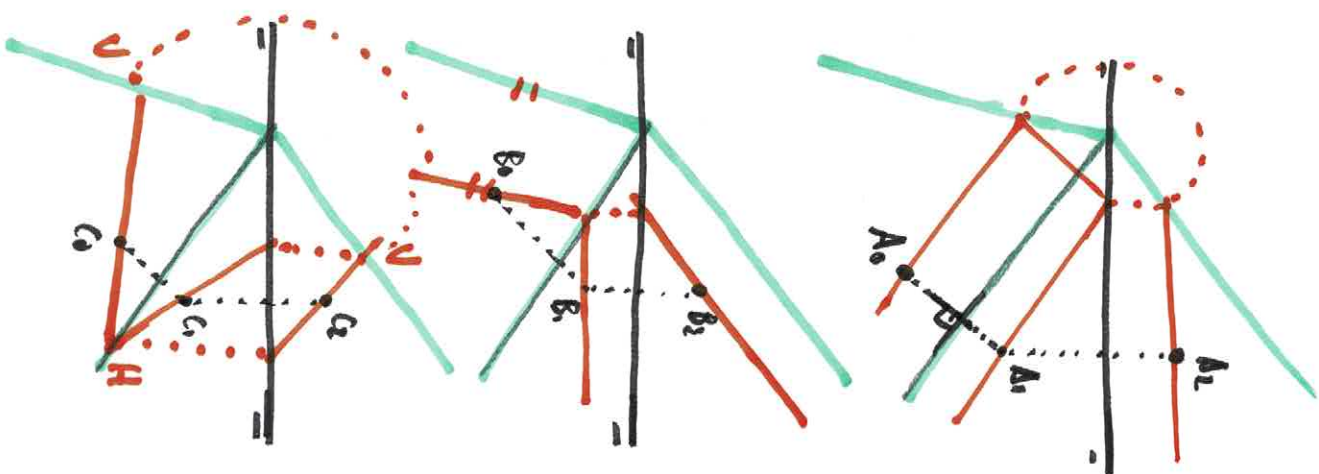
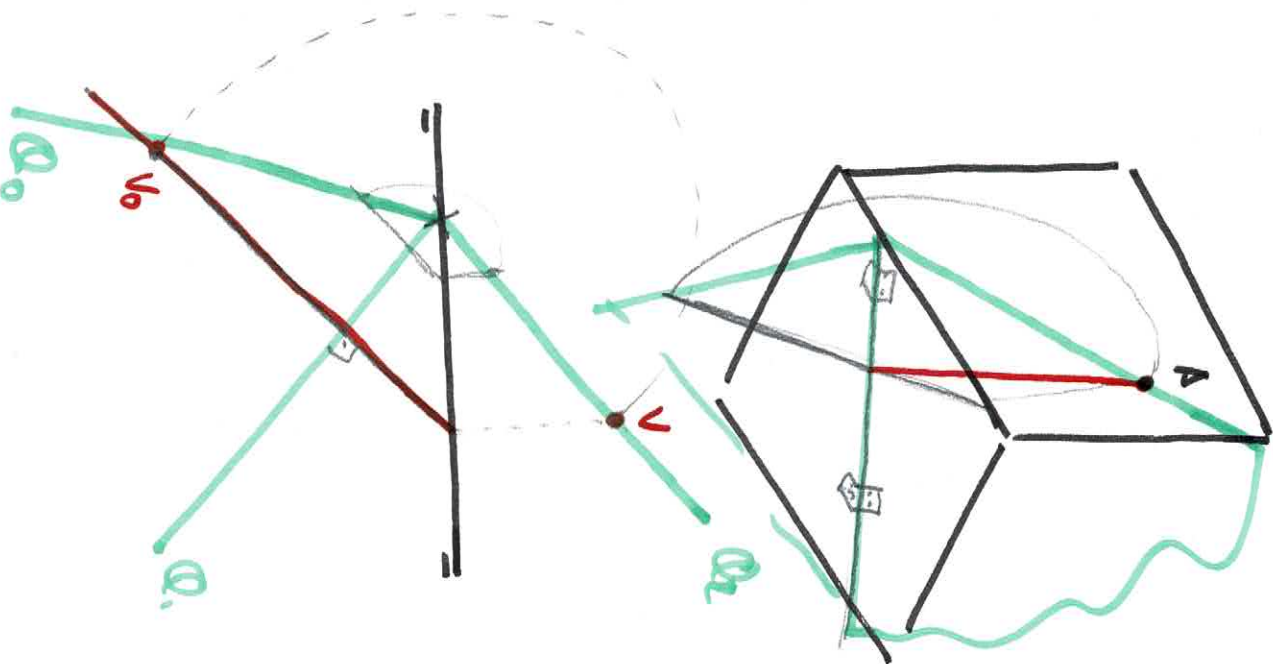
C.P.H

C.P.V

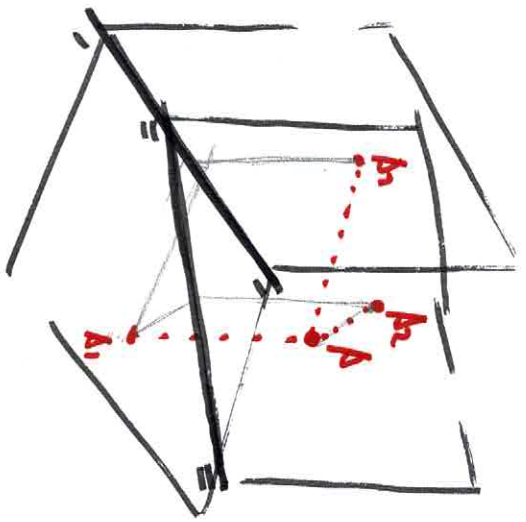


- ABATIMIENTOS -

↳ PLANOS



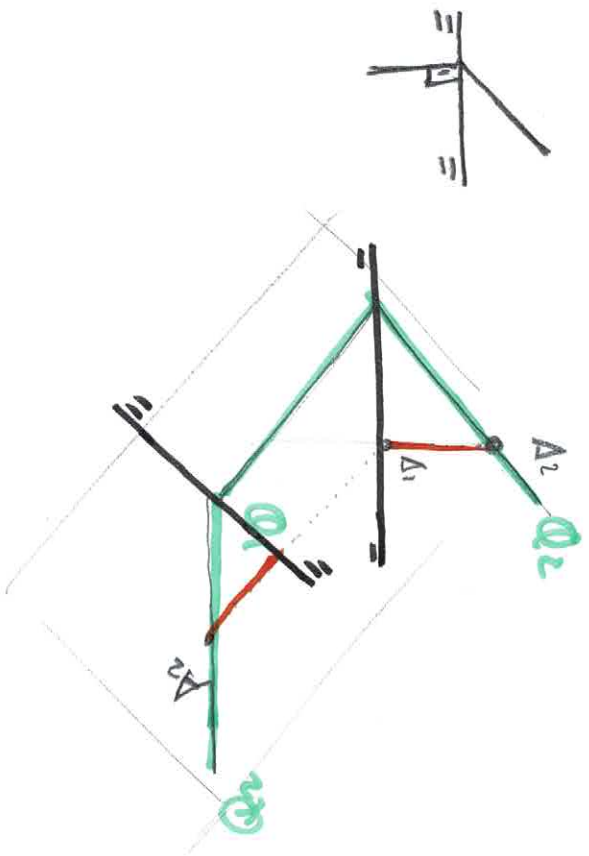
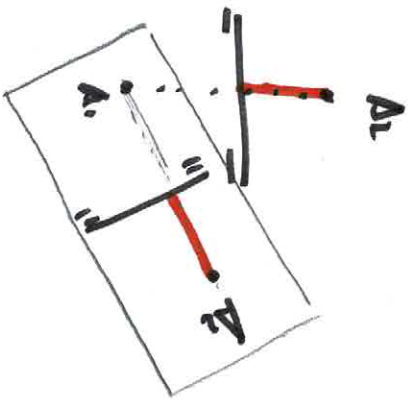
- CAMBIOS DE PLANO -



CAMBIO DE PLANO

VERTICAL

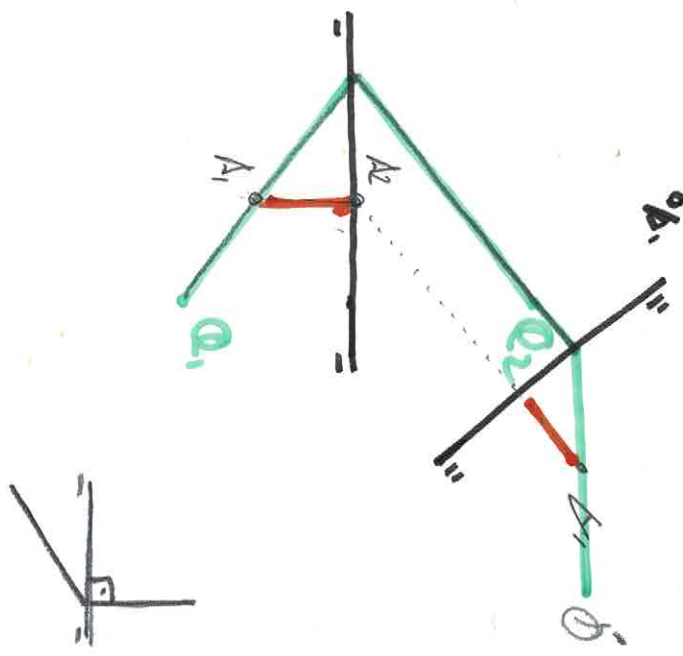
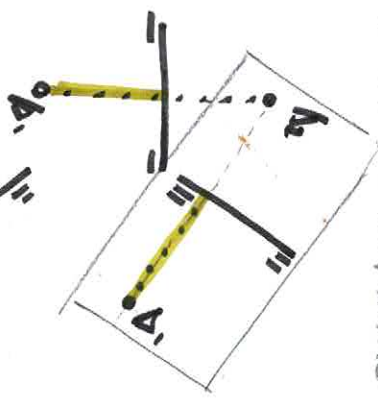
* LA COTA SE MANTIENE.



CAMBIO DE PLANO

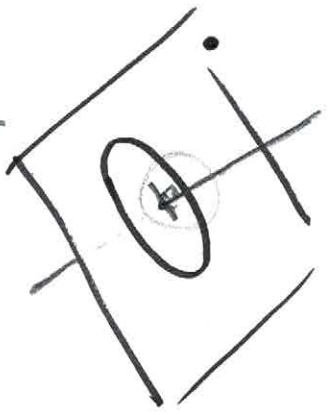
HORIZONTAL

* EL ALCEJAMIENTO SE MANTIENE.



— CONSTRUCCIONES —

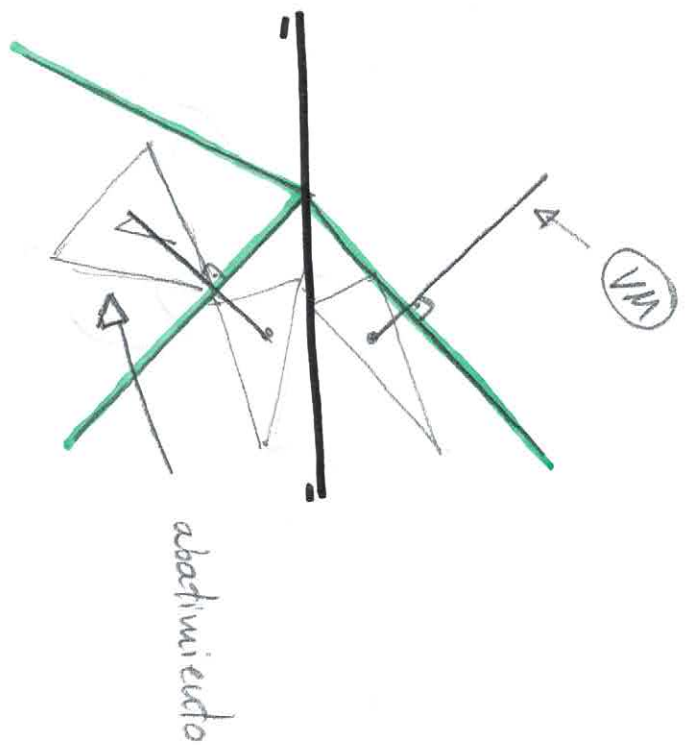
↳ SOBRE PLANO



OPCIÓN 1

↳ ABATIR PLANO → BASE. → DESABATIR

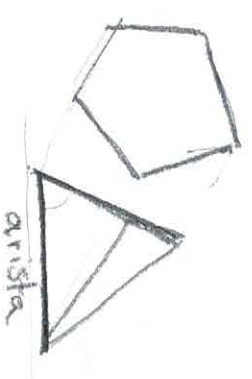
LEVANTAR ALTURA → h → GIRO (VM)



OPCIÓN 2

↳ RECOLOCAR FIGURA → CAMBIO DE PLANO.

ESQUEMA 3D → POSICIÓN MEJORADA → datos de la figura en VM

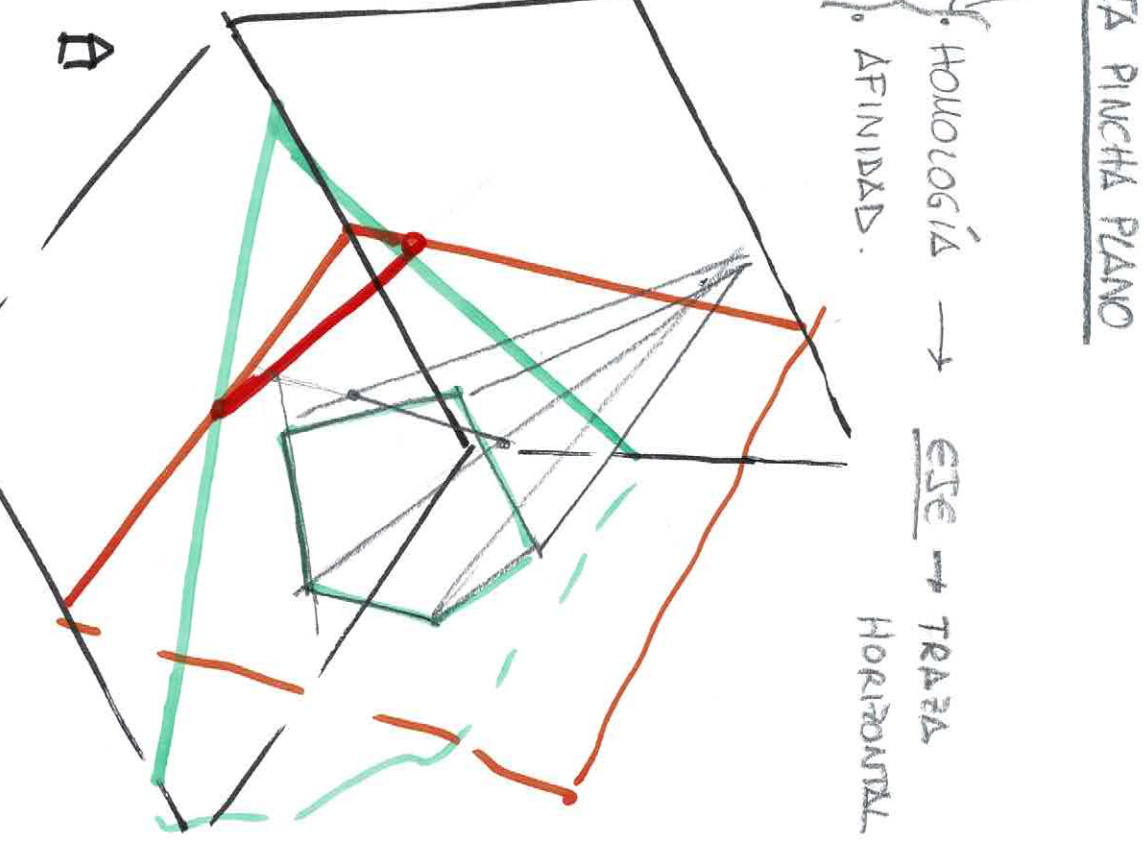
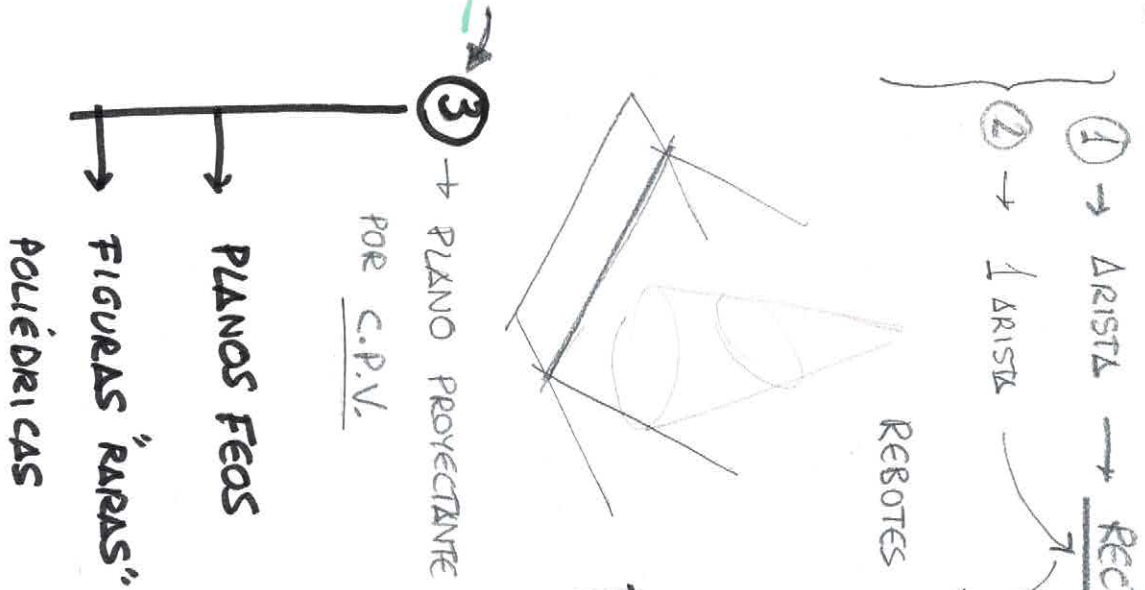
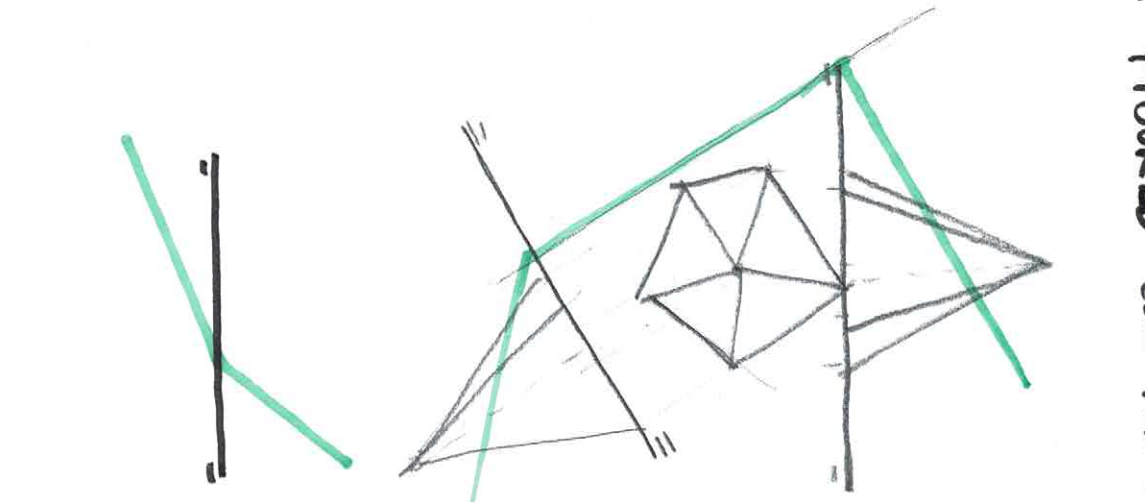


* CONSTRUCCIÓN AUXILIAR

- POLIEDROS
- POLIGONOS
- ALTURAS ...

SECCIONES

• FIGURAS CON PLANOS

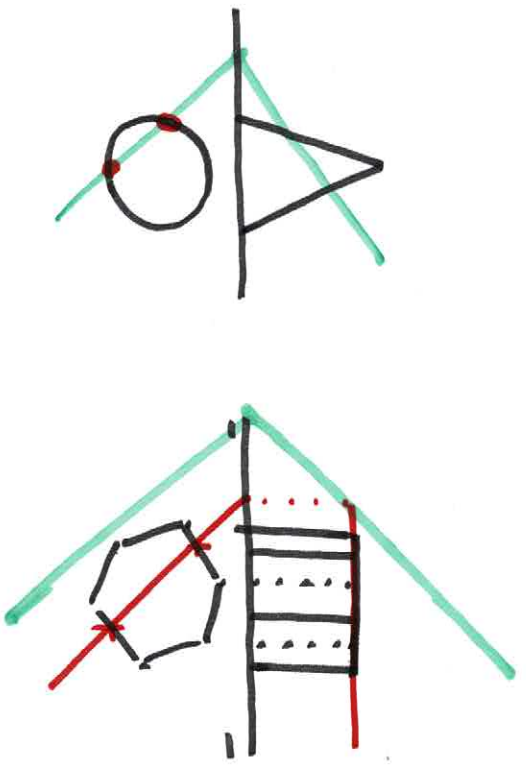


① → ARISTA → RECTA PINCHA PLANO
 ② → ↓ ARISTA
 REBOTES
 HOMOLOGÍA →
 AFINIDAD.

EJE → TRAZA
 HORIZONTAL

PLANOS FEOS
 FIGURAS "RARAS"
 POLIÉDRICAS

SECCIONES

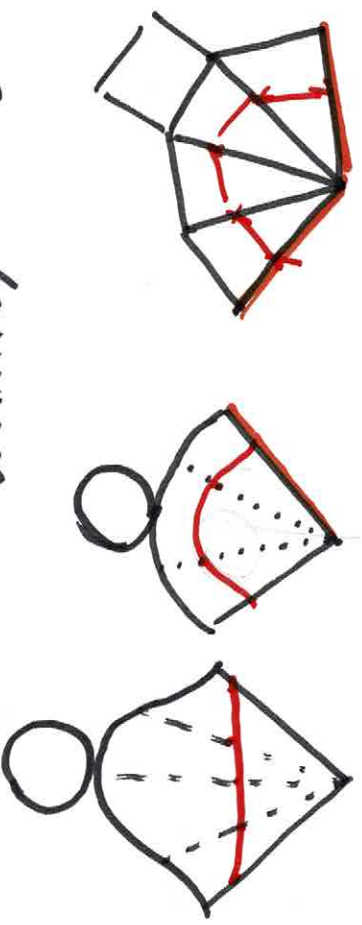


*DESARROLLOS

→ VII

(PUNTA)

CONO



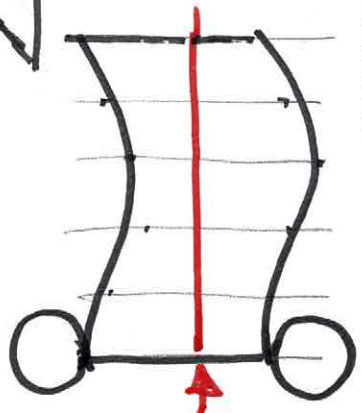
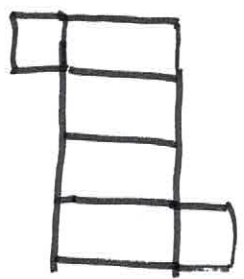
PRISMAS / CILINDROS

* DESARROLLO

TRANSFORMADA. / DESARROLLO LATERAL.

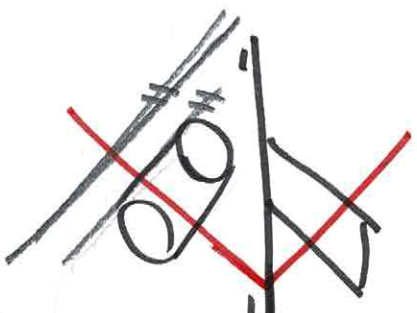
HUECO

TRONCO. → VM



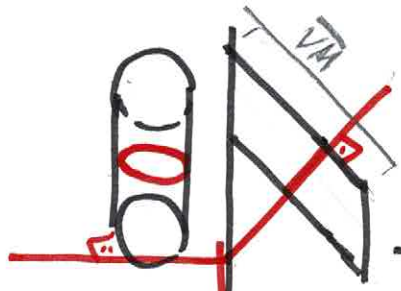
GEODÉSICA

DISTANCIA + CORTA POR EL EXTERIOR ENTRE 2 PUNTOS DE UNA FIGURA.



C.P.V

VM

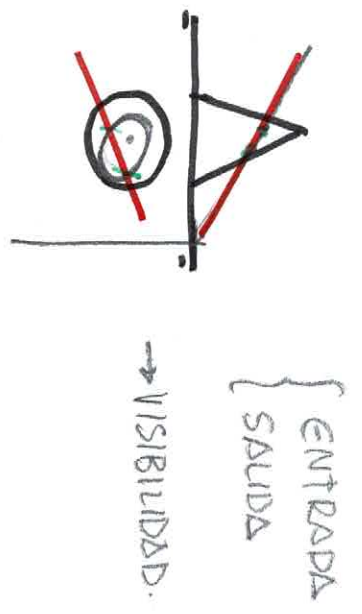


CVIII

VISTAS



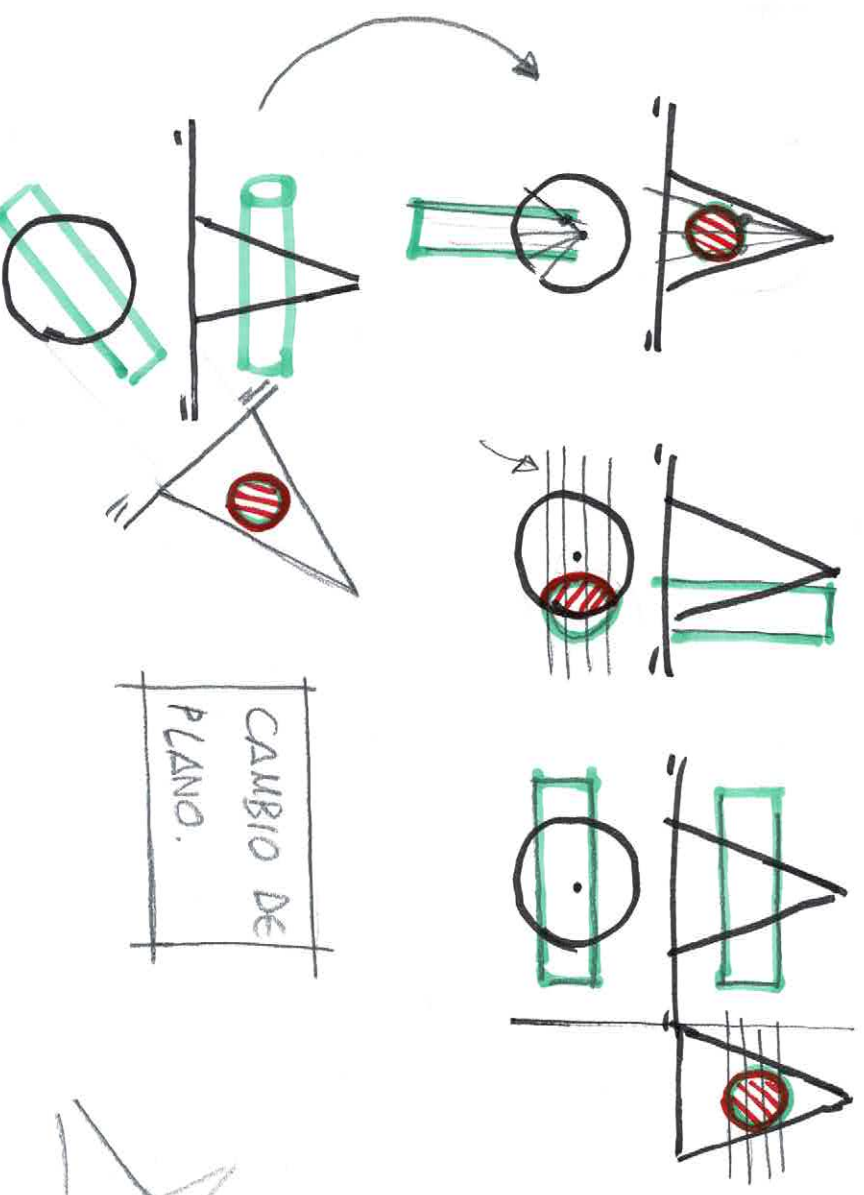
→ INTERSECCION RECTA/FIGURA.



→ VISIBILIDAD.

GENERATRICES
CORTE POR PLANOS

→ INTERSECCIONES ENTRE FIGURAS:

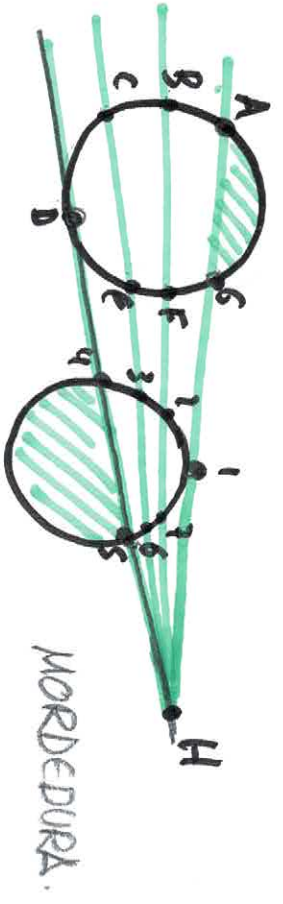
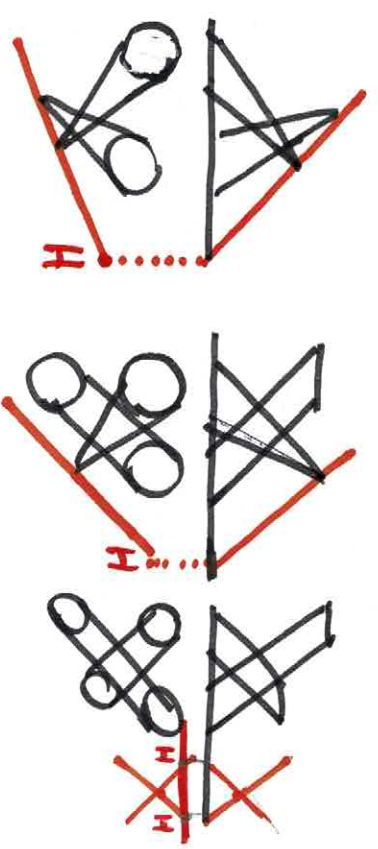


CAMBIO DE PLANO.

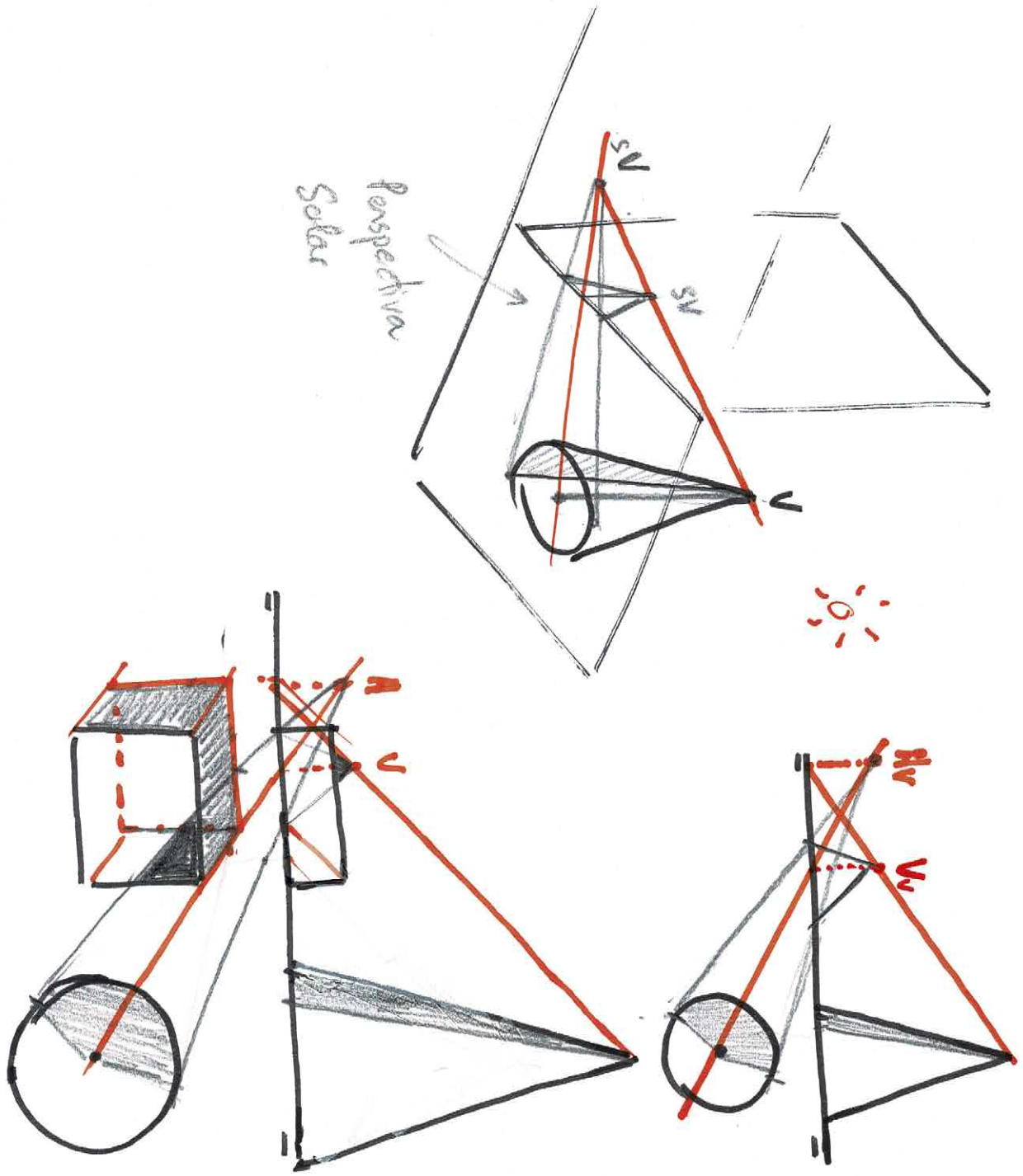
- LISTA DE LA CAJERA:

↳ FIGURAS APOYADAS EN EL PH.

→ OBLICUAS:



SOMBRA



Perspectiva
Solar

FIN