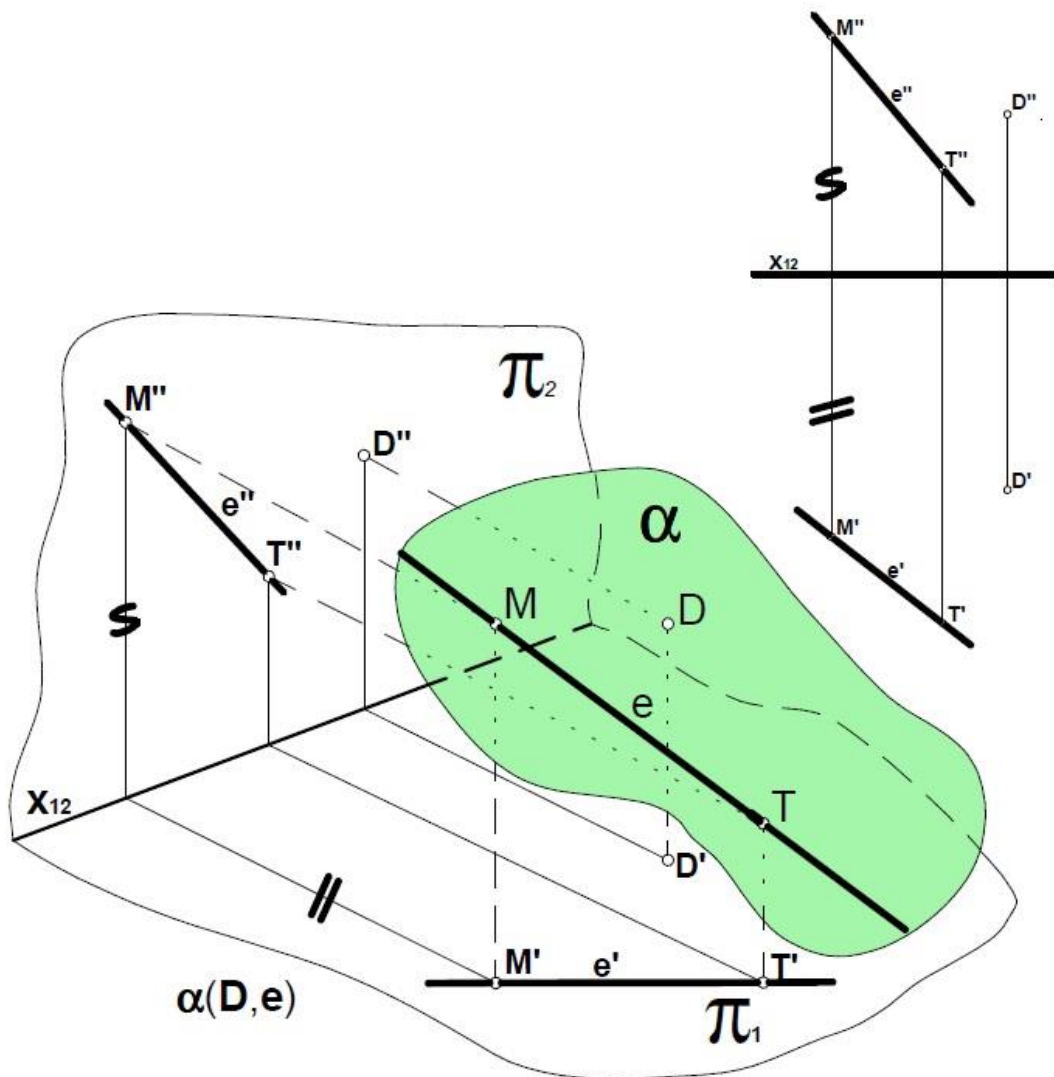


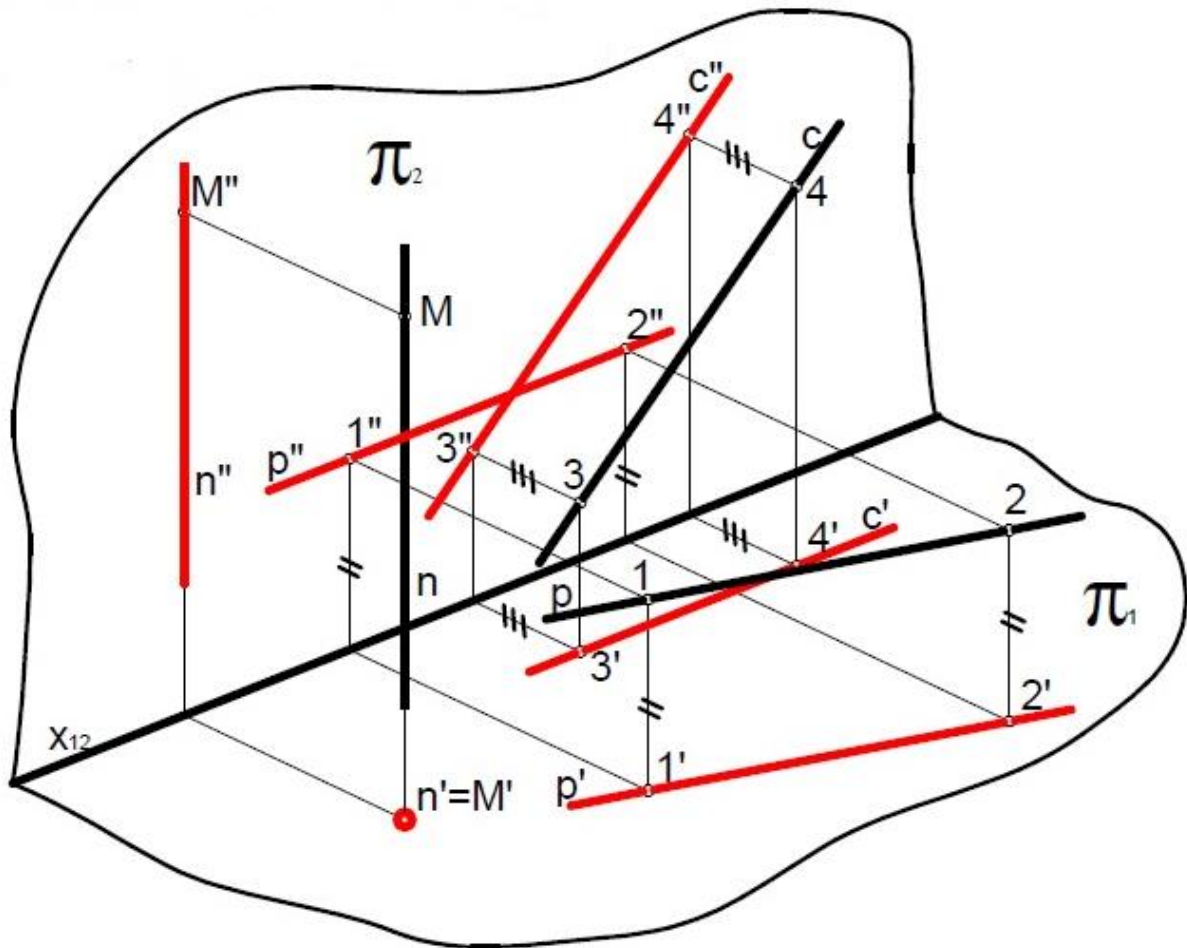
FUNDAMENTAL VIEWS – POINT, LINE AND PLANE

PROBLEMS											
1	2	3	4	5	6	7	8	9	10	11	12



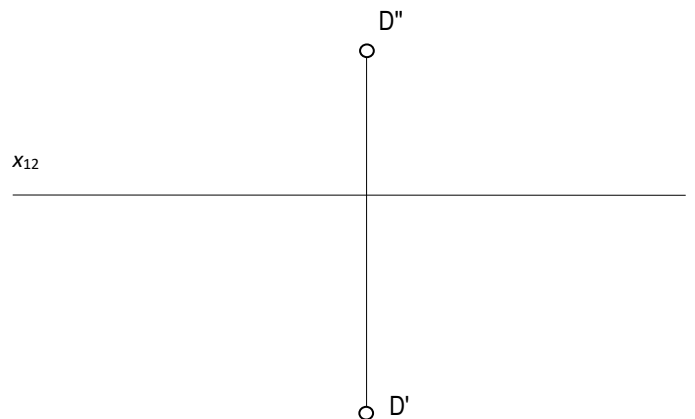
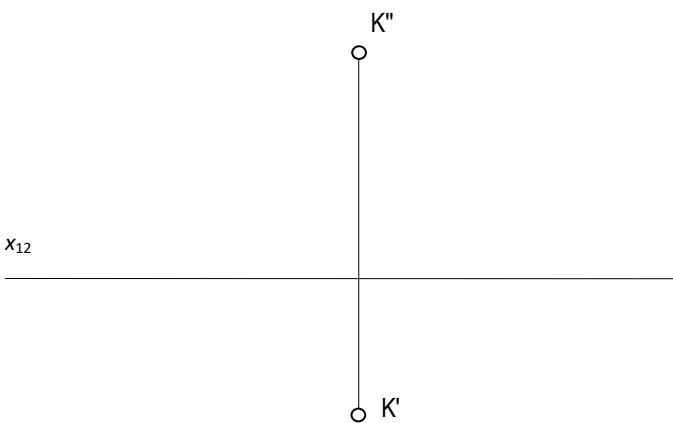
if $e(M, T)$ then $e'(M', T')$ and $e''(M'', T'')$

$n \supset M$ and $n \perp \pi_1$
 if $M \in n$ and $n \perp \pi_1$ then $M' = n'$
 $c(3,4)$ and $c \parallel \pi_2$ (frontal)
 if $c \parallel \pi_2$ then $c' \parallel X_{12}$
 $p(1,2)$ and $p \parallel \pi_1$ (horizontal)
 if $p \parallel \pi_2$ then $p'' \parallel X_{12}$

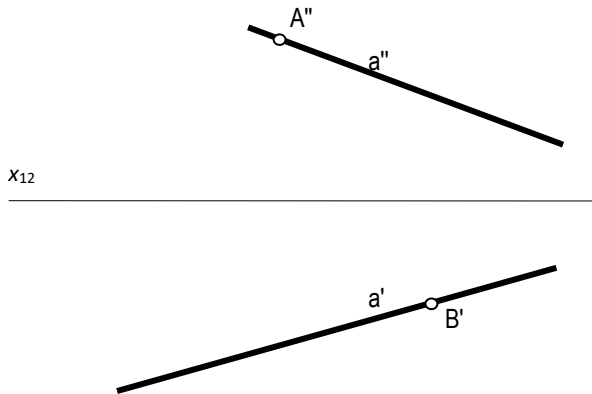


1. Draw a horizontal line p ; $K \in p$

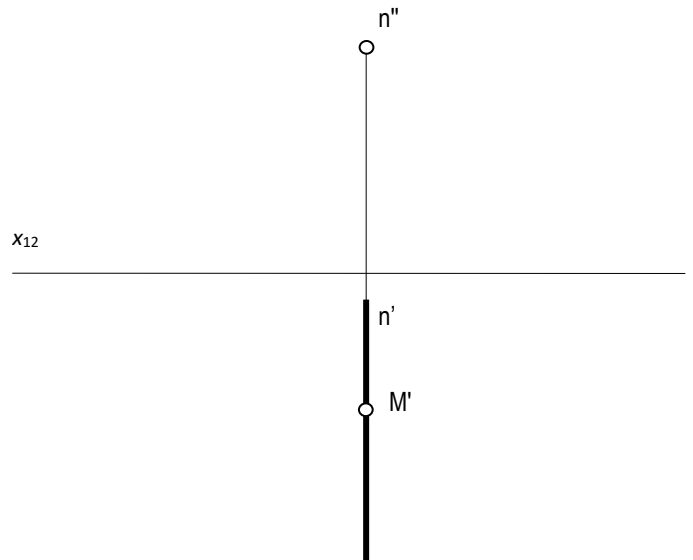
2. Draw a vertical line v ; $D \in v$



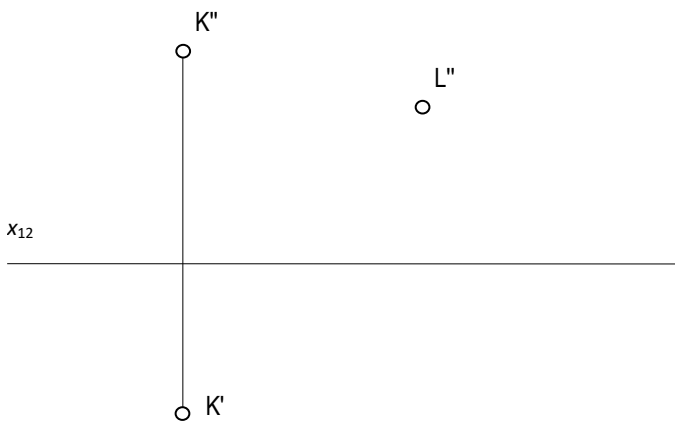
3. Find missing views of points A and B assuming that $A \in a, B \notin a$



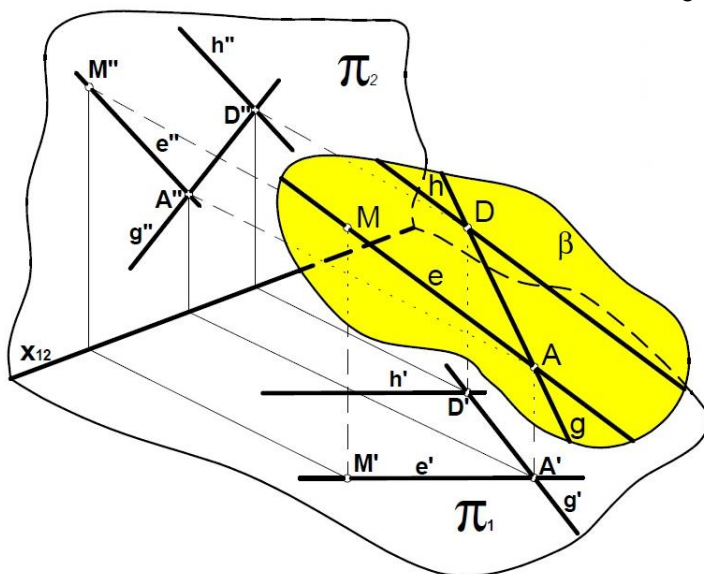
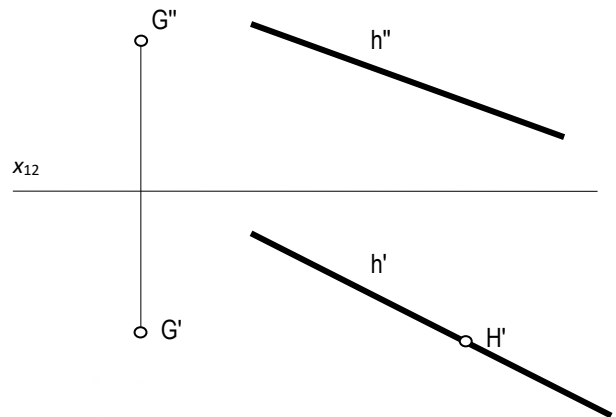
4. Find a missing view of point M, assuming that $M \in n$



5. Find missing views of a frontal line c and point L, assuming that line c is defined by points K and L



6. Find missing views of line g and point H, assuming that lines g and h are parallel, $g \parallel h$, and points $G \in g, H \in h$

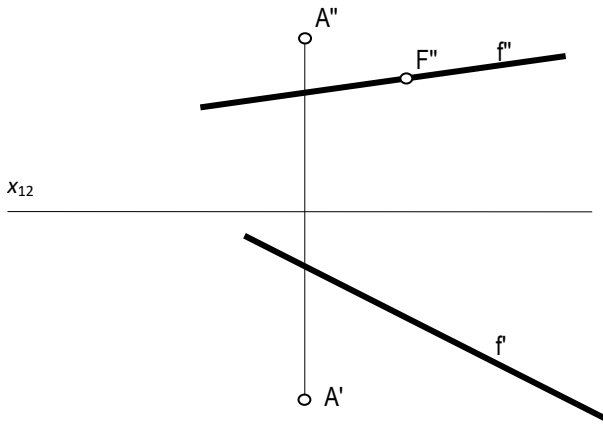


$\beta(A,D,M)$
 $\beta(D,e)$
 $\beta(e,g)$ where $A = e \cap g$
 $\beta(e,h)$ where $e \parallel h$

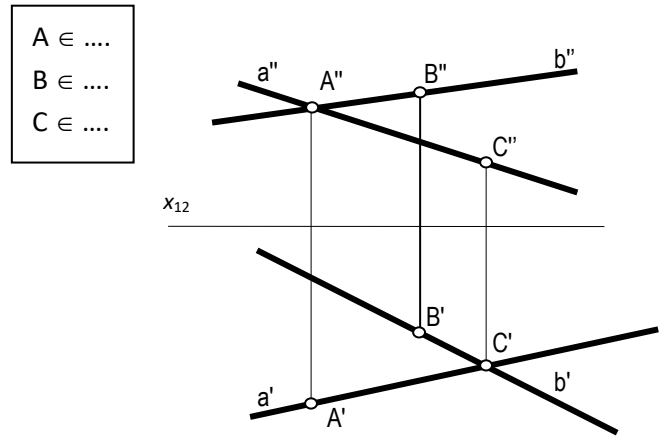
If $e \parallel h$ then (according to the condition of parallelity) $e' \parallel h'$ and $e'' \parallel h''$

If $A = e \cap g$ then $A' = e' \cap g'$ and $A'' = e'' \cap g''$

7. Find missing views of point F and line a, assuming that F is the intersection point of lines a(A, F) and f



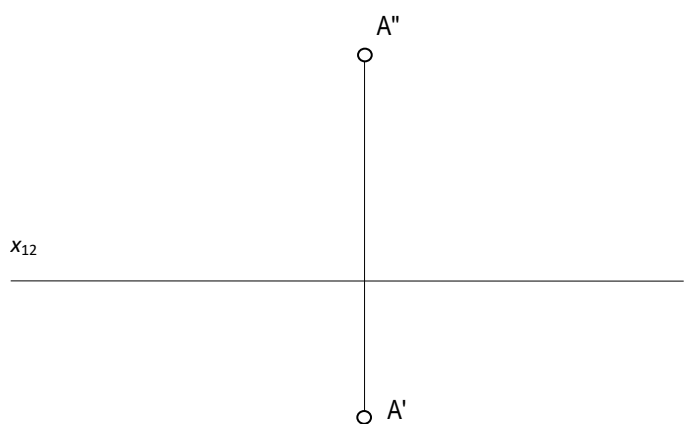
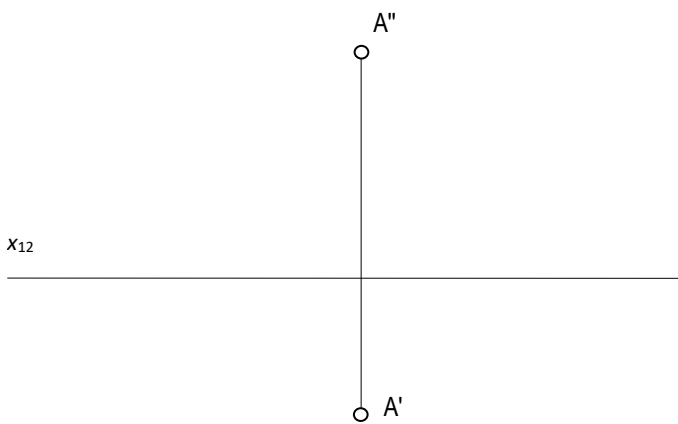
8. Specify which points belong to lines a and b, knowing that a and b are skew lines, $a \cap b = \emptyset$



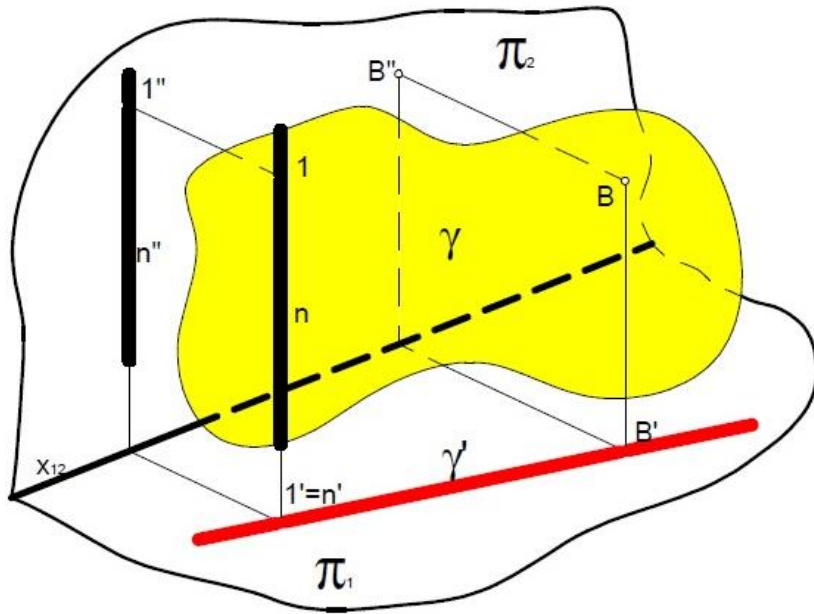
VIEW OF PLANE IS DETERMINED BY PROJECTING ALL THE ELEMENTS DEFINING THAT PLANE

9. Define an oblique plane α (A, b)

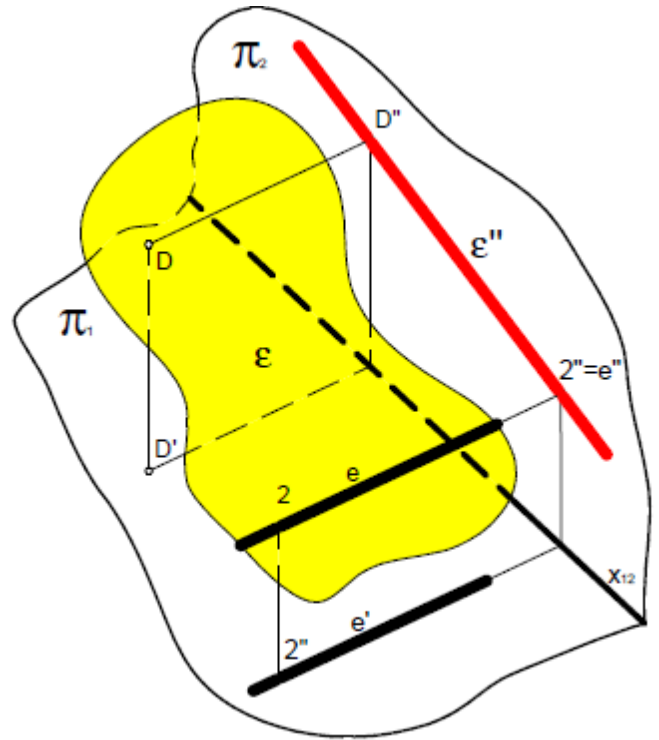
10. Define a vertically-projecting plane α (A, b)



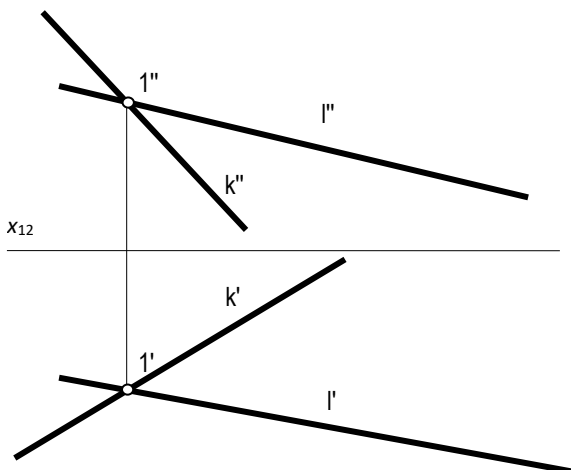
If $\gamma(B,n)$ and $n \perp \pi_1$ then $\gamma(B,n) \perp \pi_1$.
 γ is the horizontally-projecting plane.



If $\epsilon(D,e)$ and $e \perp \pi_2$ then $\epsilon(D,e) \perp \pi_2$.
 ϵ is the vertically-projecting plane.



11. Draw a triangle ΔABC on plane $\alpha (k, l)$, where vertices A, B, C belong to lines k and l



12. Draw an oblique quadrangle ABCD on plane $\alpha (a, b)$, where $a \parallel b$

