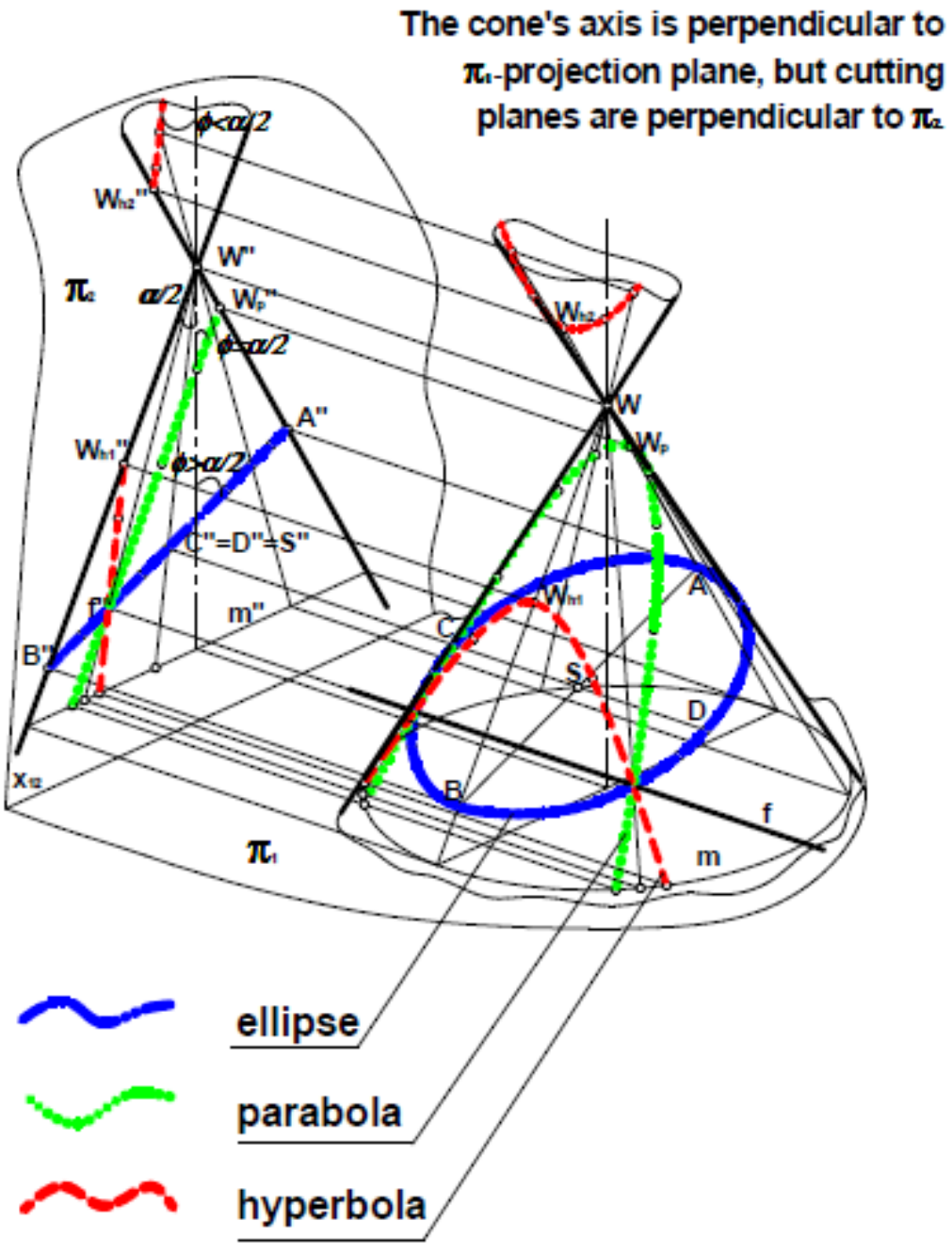
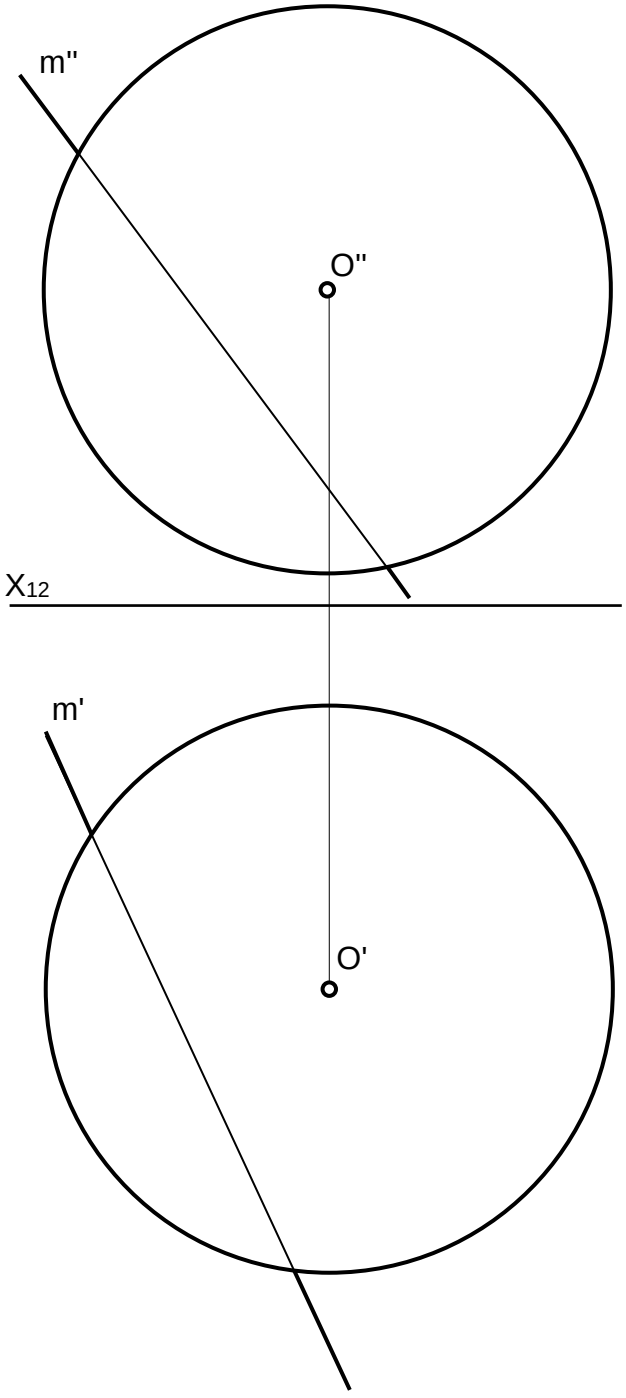
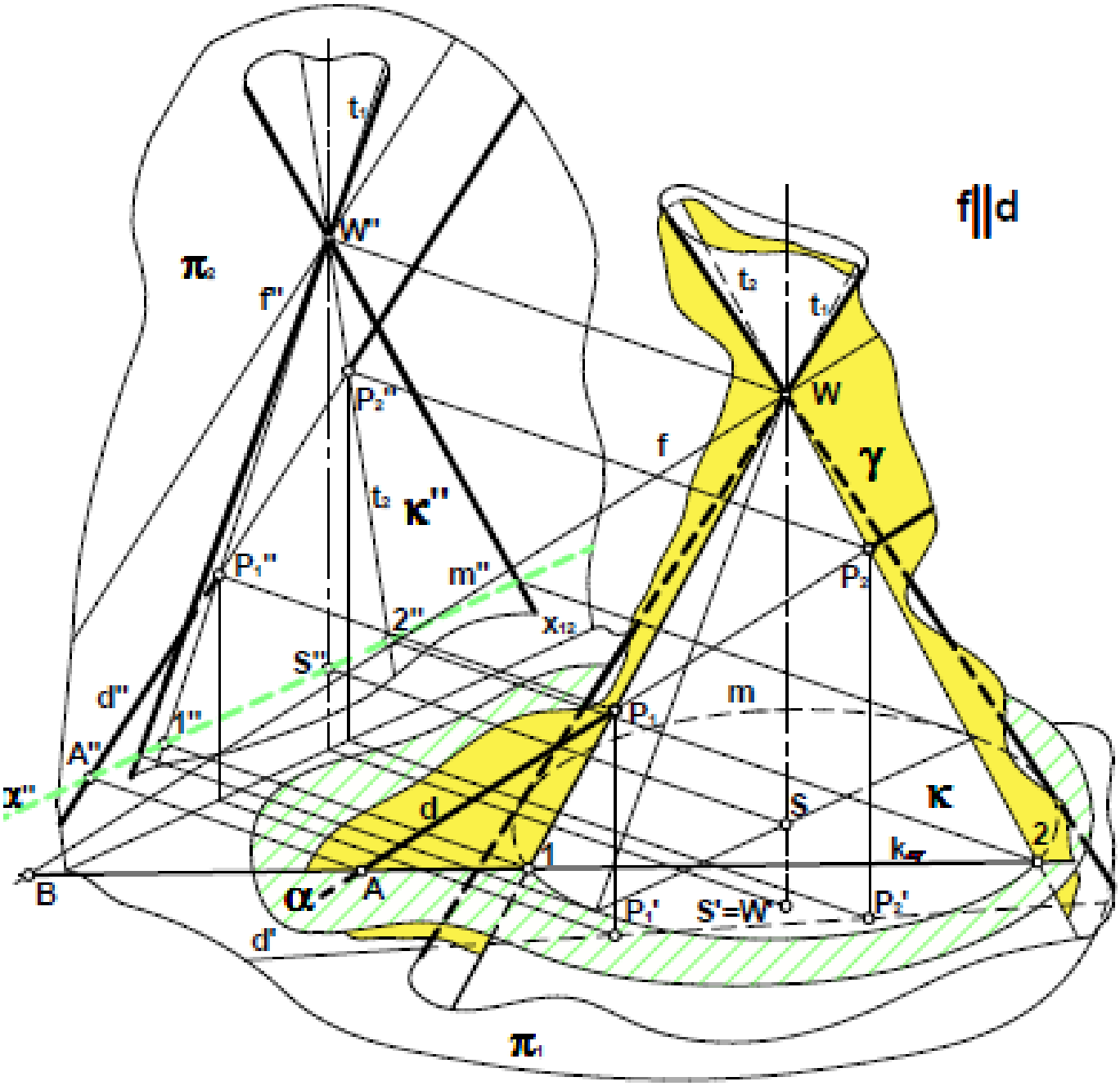
SECTIONS OF QUADRIC SURFACES
PIERCING POINTS OF QUADRIC SURFACES BY A LINE

PROBLEMS		
49	50	51



49. Determine a plane tangent to the sphere's surface. Point of tangency should be one of two points of intersection of the sphere pierced by the straight line **m**.





Cone's axis is perpendicular to π_1-plane

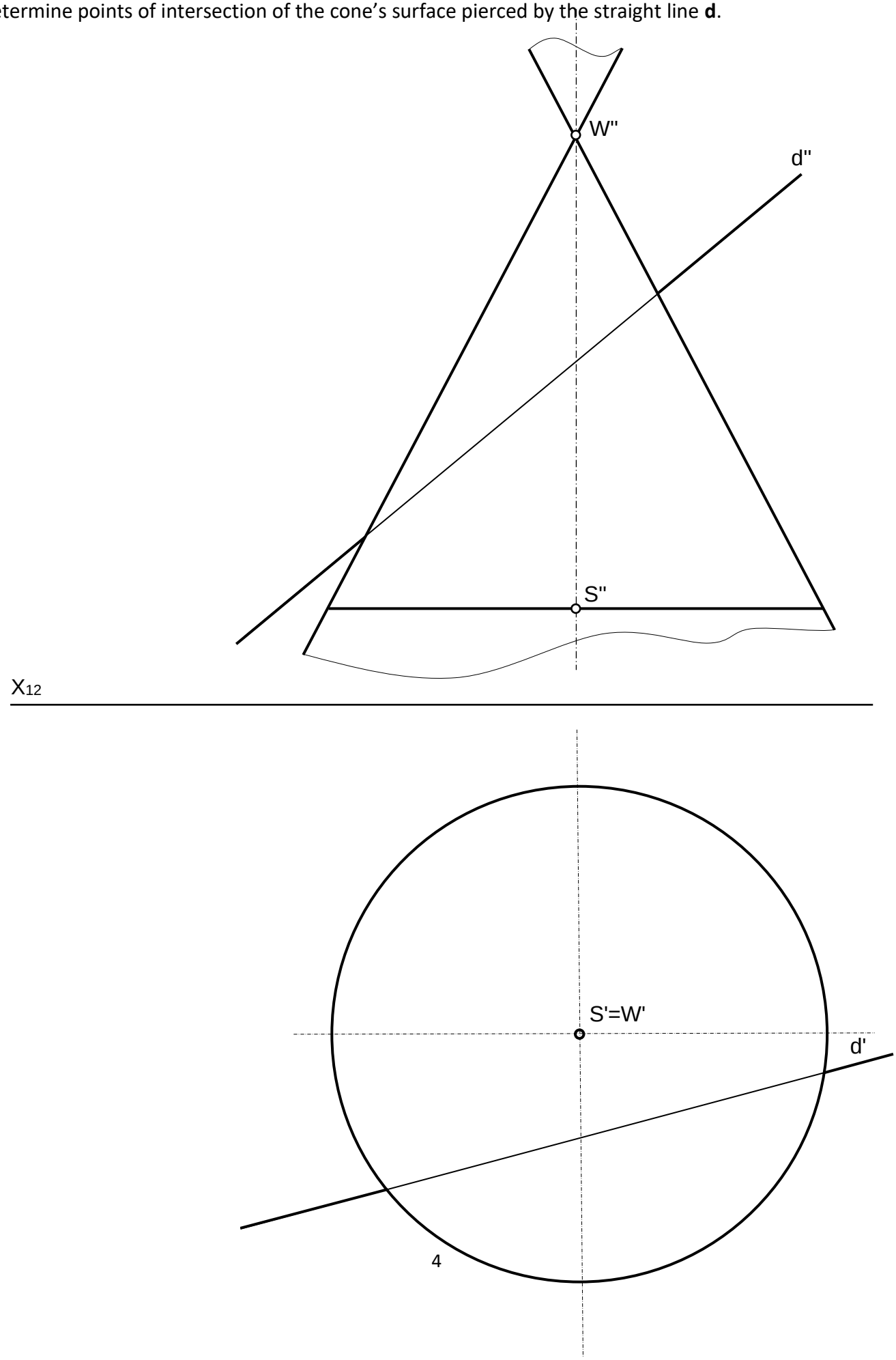
α – cutting plane $\alpha \| \pi_1$

γ – additional plane $\gamma(W,d)$

$A = \alpha \cap d, \quad B = \alpha \cap f, \quad k_{\alpha\gamma}(A,B)$

$k_{\alpha\gamma} = \gamma \cap \alpha, \quad m = \kappa \cap \alpha, \quad \{P_1,P_2\} = \kappa \cap d$

50. Determine points of intersection of the cone's surface pierced by the straight line **d**.



51. Find points of intersection of the cylindrical surface pierced by the straight line **m**.