

INT (1)

A vertical cylinder 80mm dia. and 100mm axis is completely penetrated by another horizontal cylinder 50 mm dia. and 100 mm axis. Axis of the horizontal cylinder is parallel to VP & bisect the axis of the vertical cylinder. Draw projections of the cylinders showing curves of intersections.

Steps:

Three Views of the Vertical cylinder.(TV, FV & SV.)

Three Views of the horizontal cylinder.(SV,FV & TV)

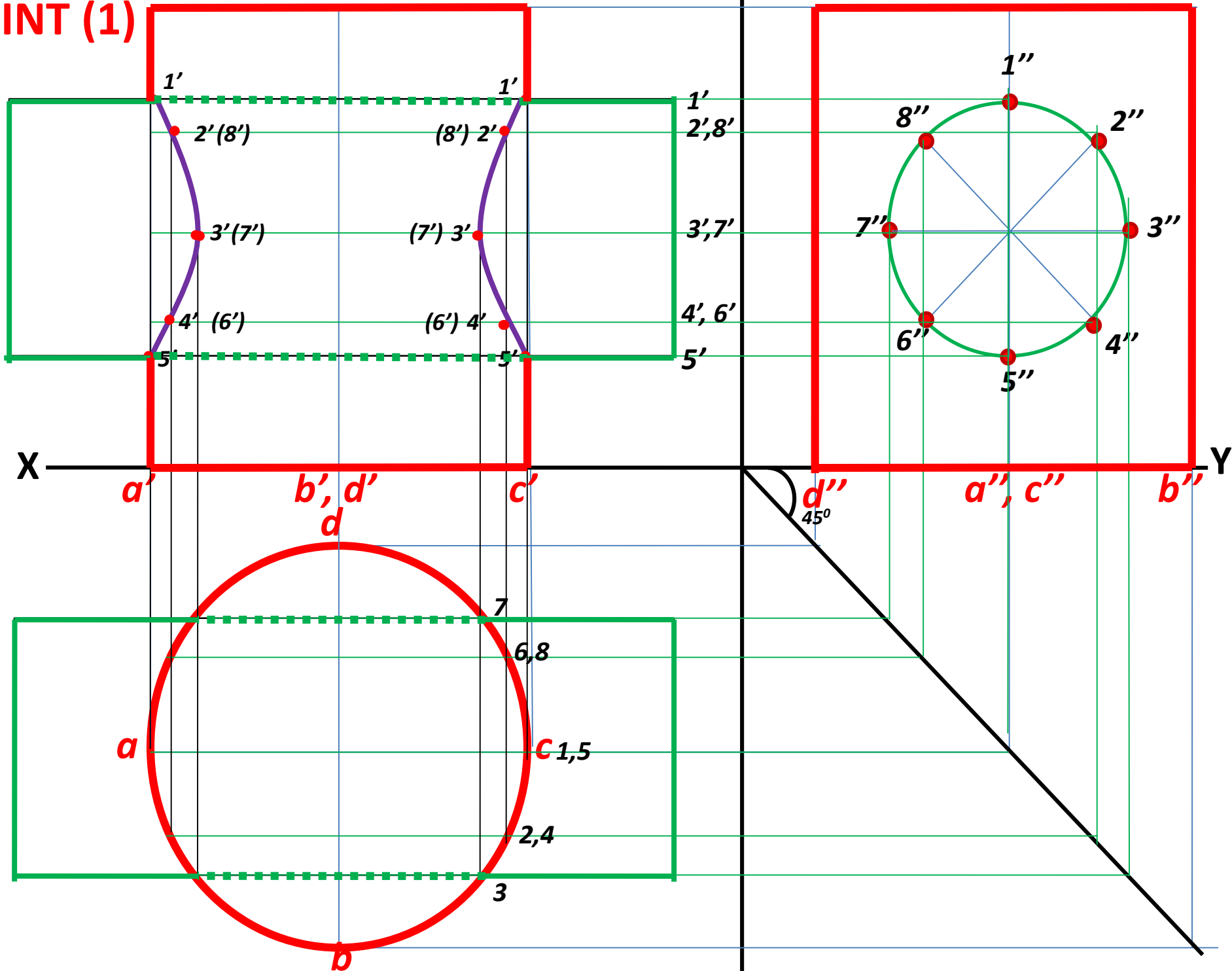
Eight generators on the horizontal cylinder each in SV, FV & TV.

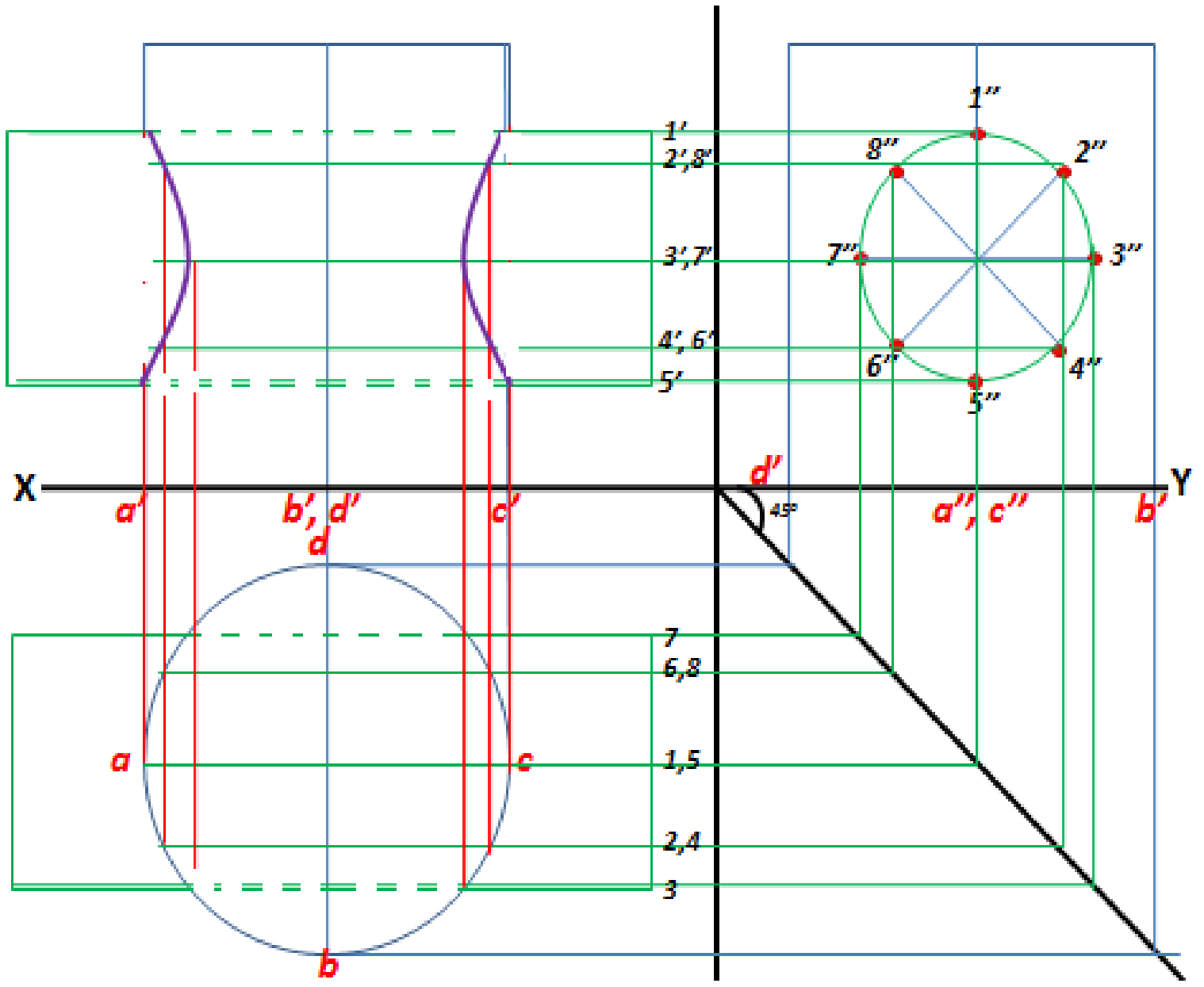
Fix the Intersection points of the generators in TV with the plan of the Vertical cylinder.

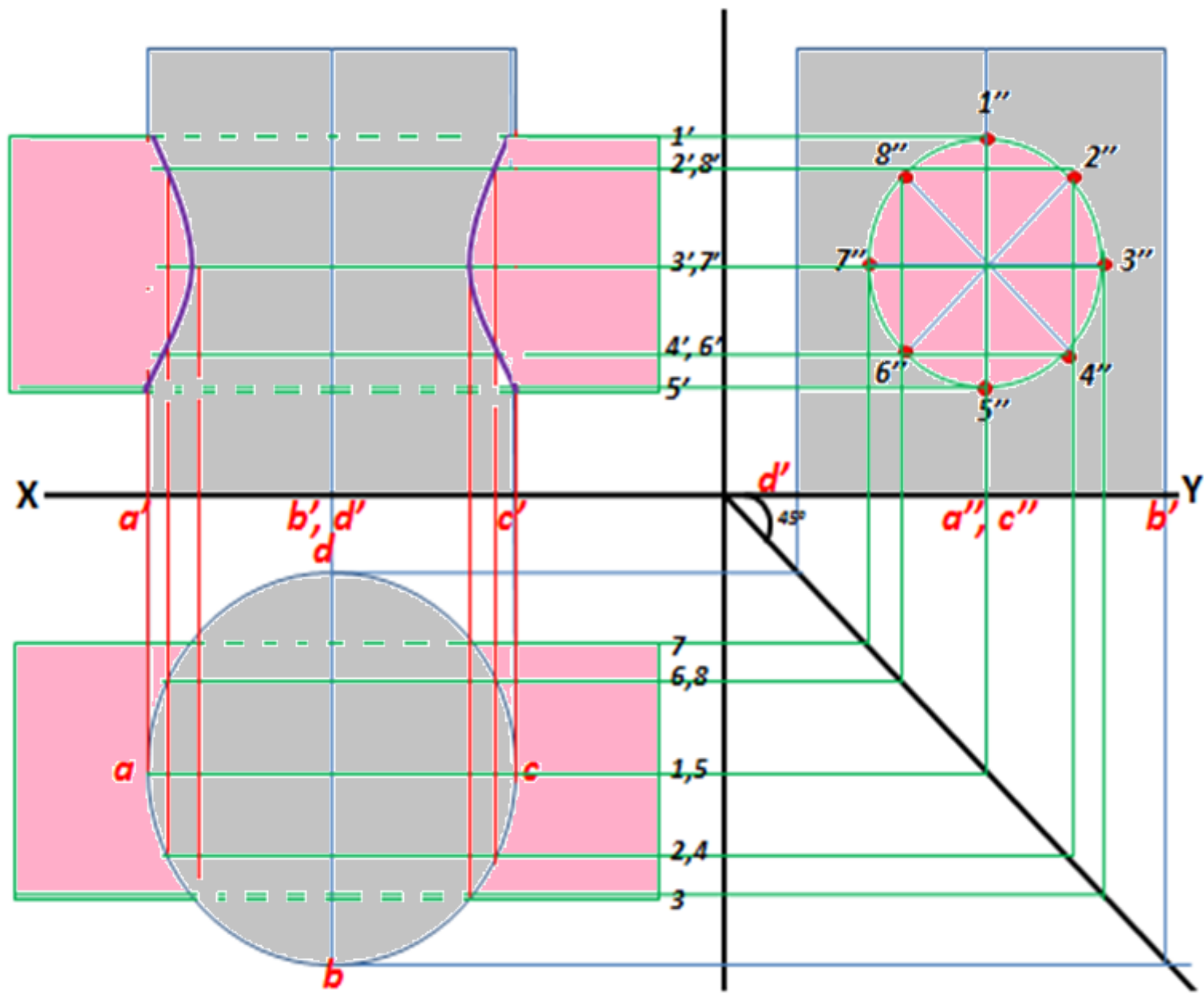
Draw Projectors from these Intersection points to meet the respective generators in the FV.

Draw the curve of intersection.

INT (1)

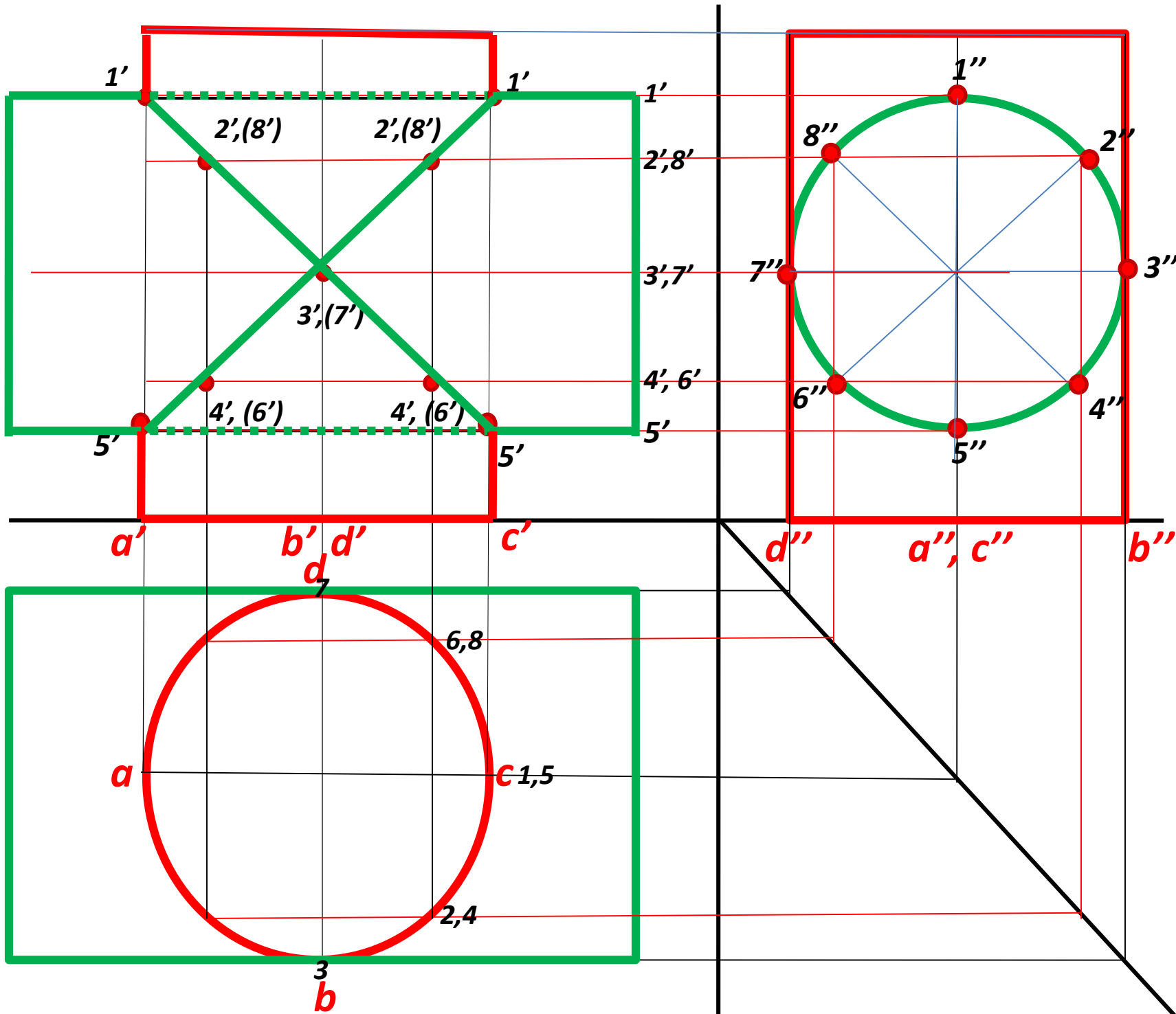


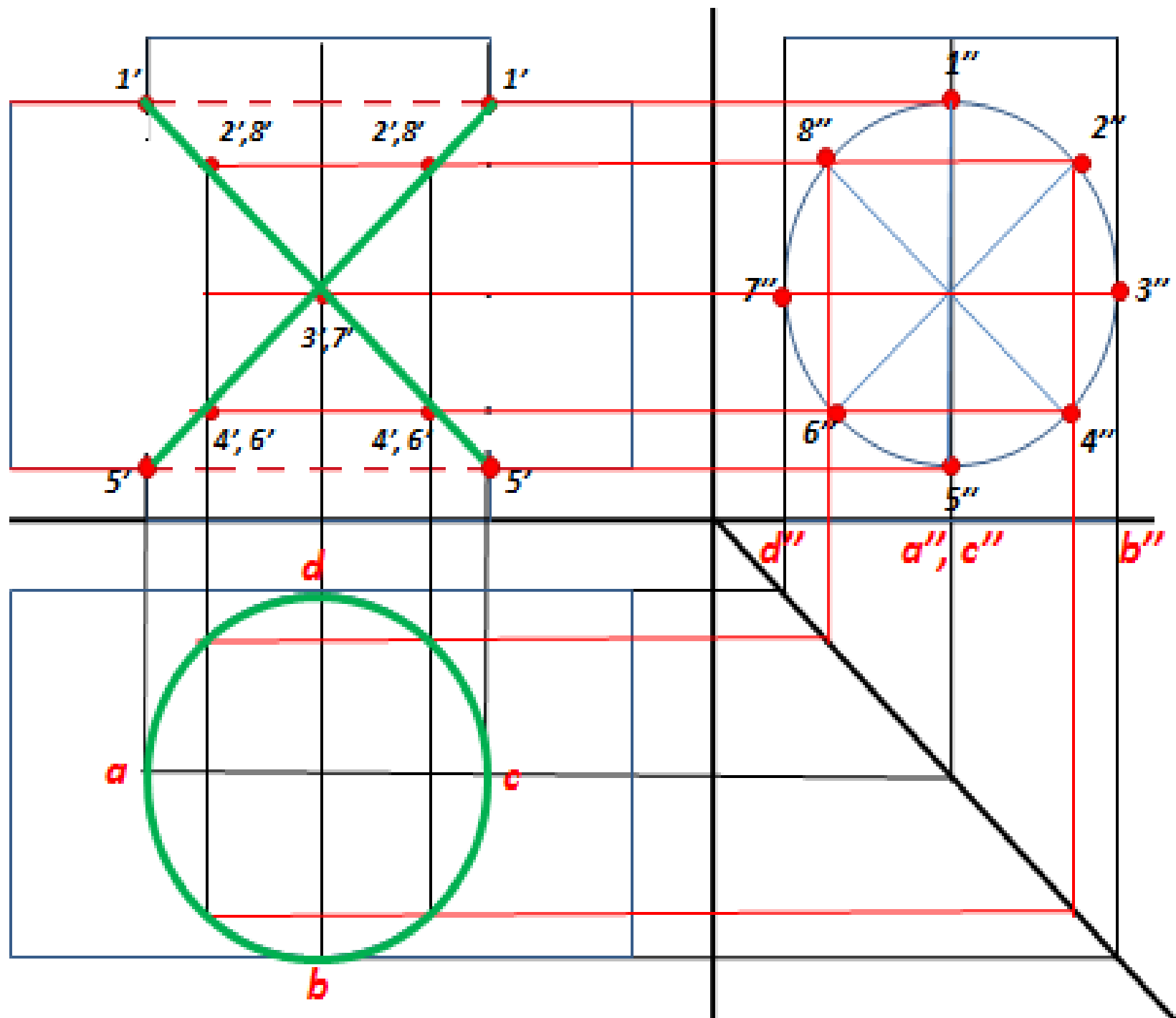


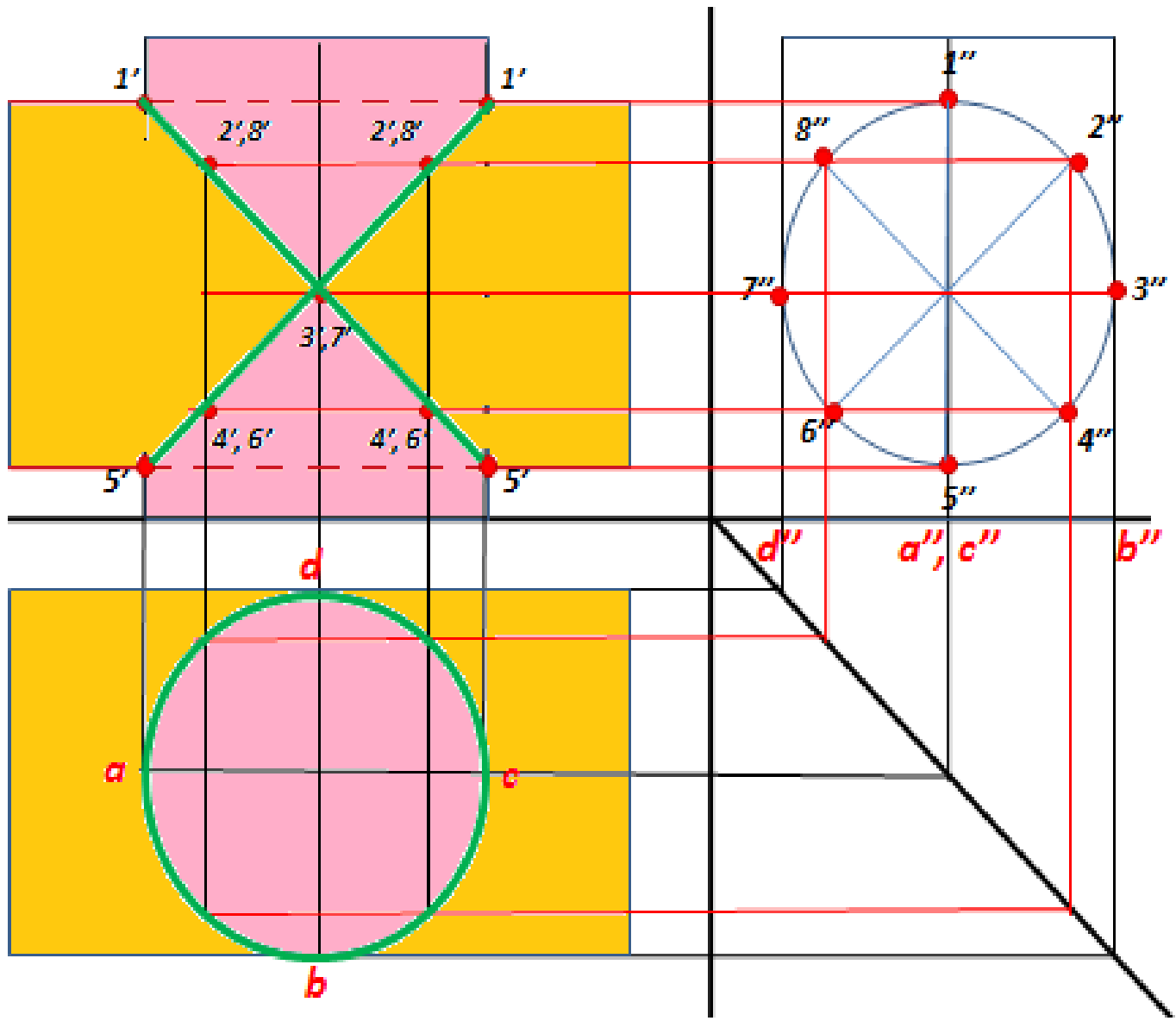


INT (2)

A vertical cylinder 50mm dia. and 70mm axis is completely penetrated by another horizontal cylinder of the same size. Axis of the horizontal cylinder is parallel to VP & bisect the axis of the vertical cylinder. Draw projections of the cylinders showing curves of intersections.

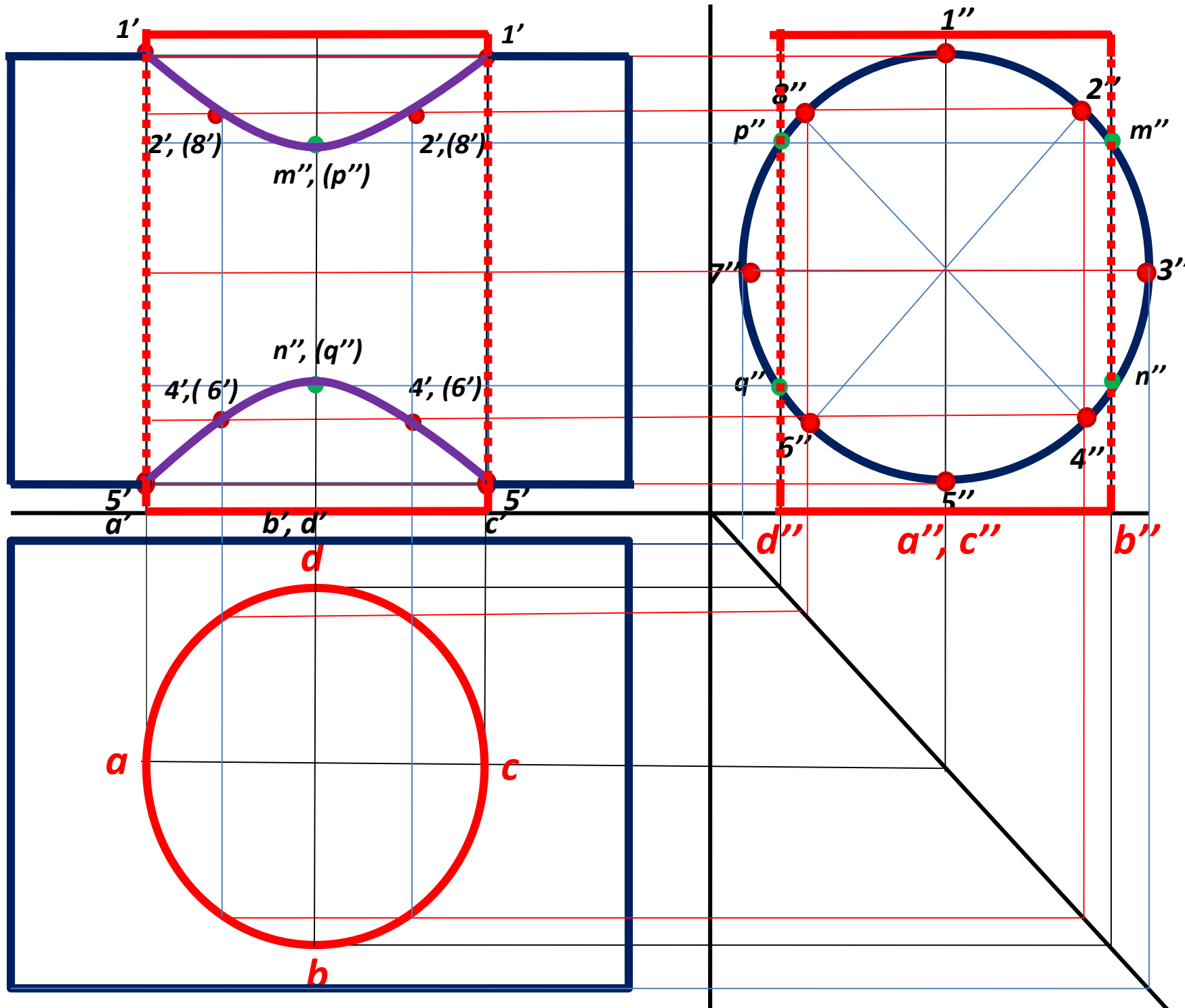


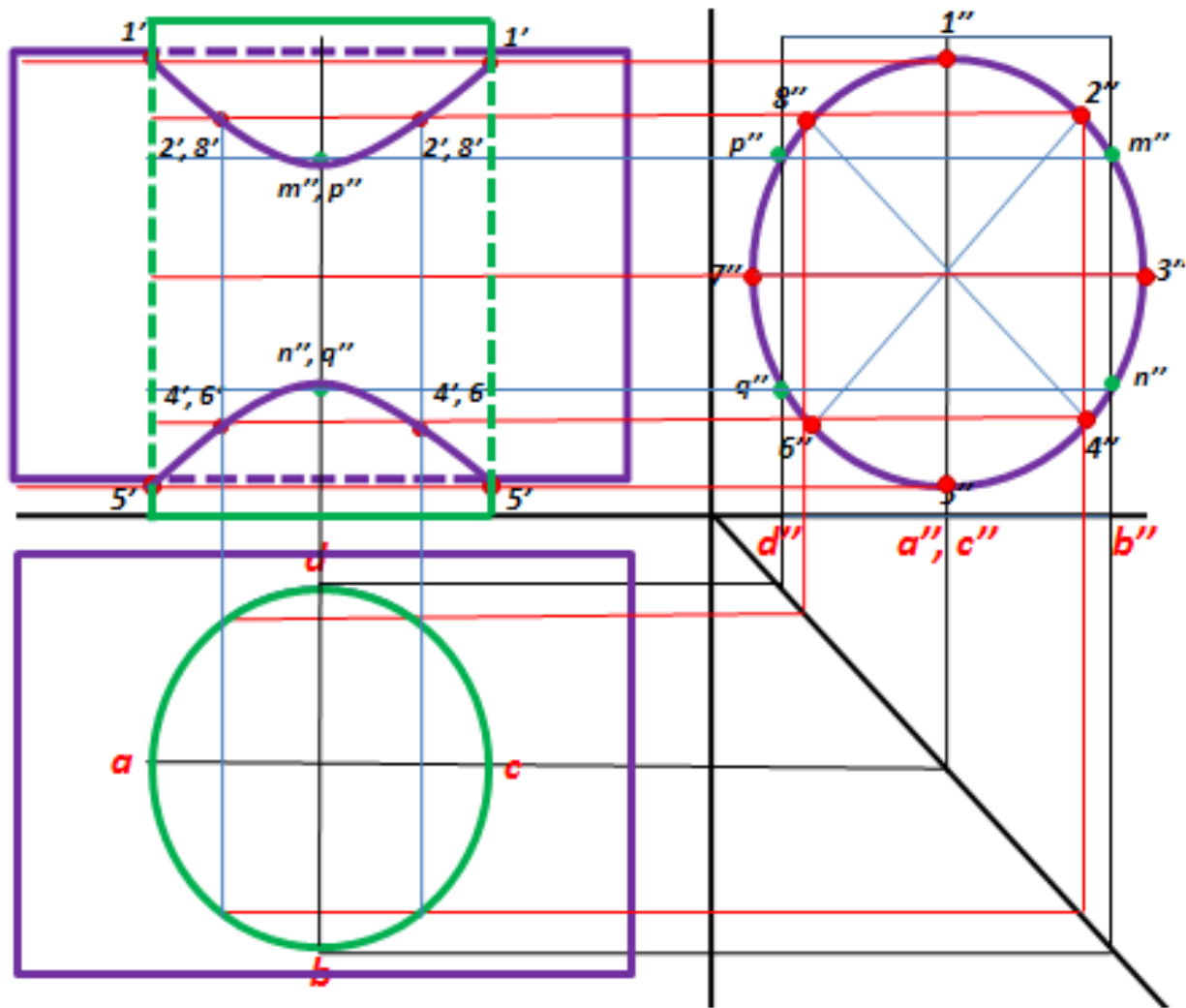


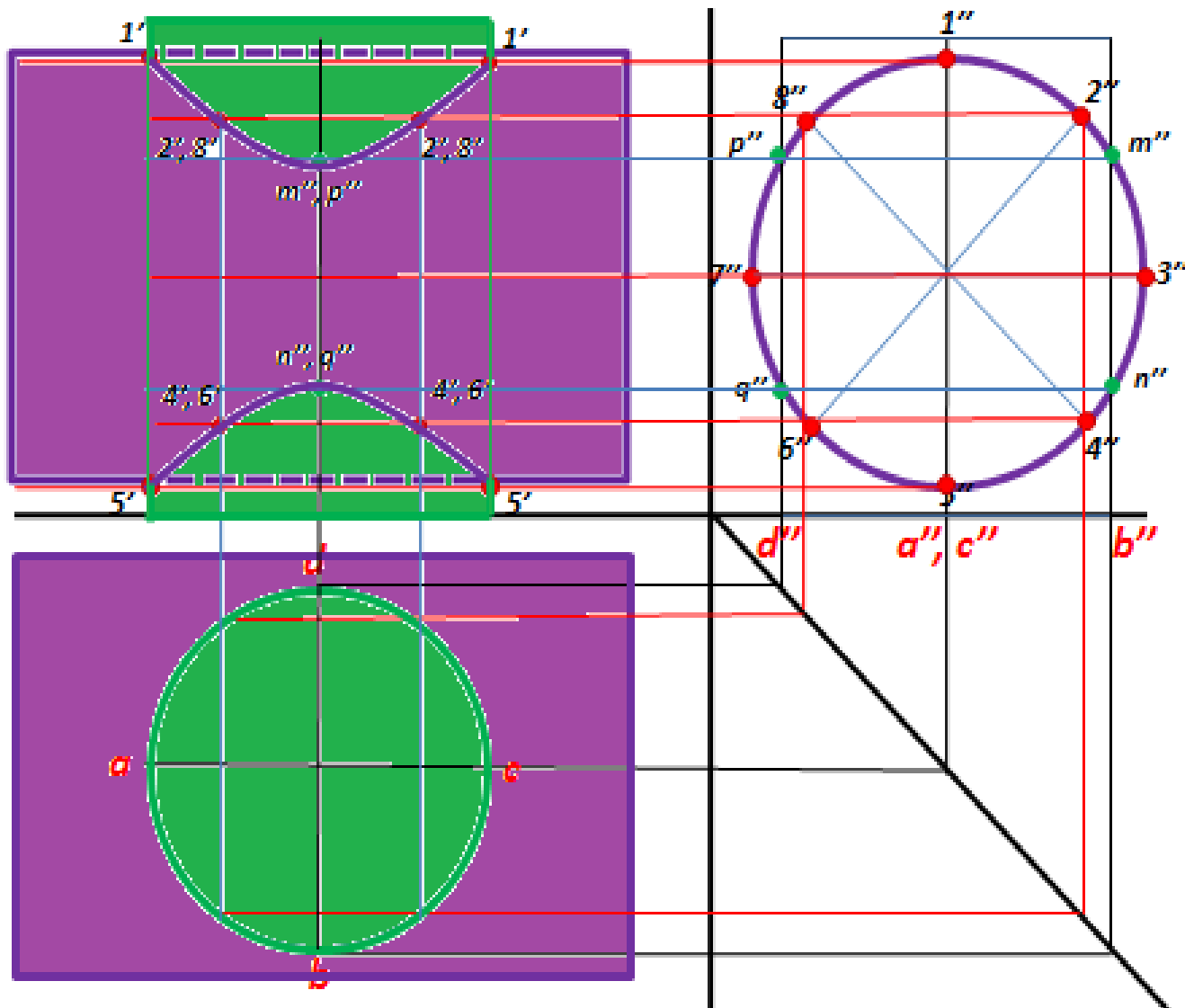


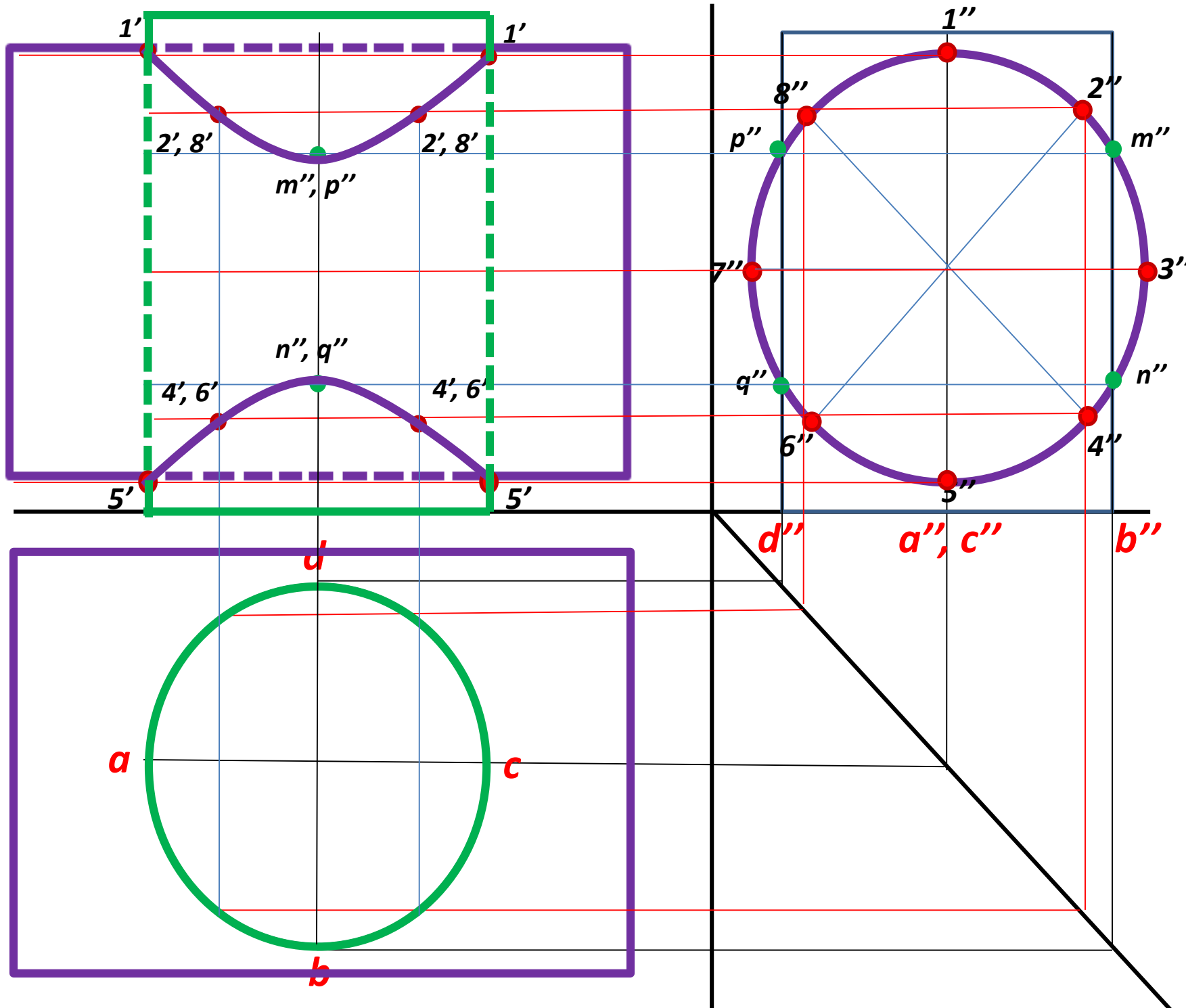
INT (3)

A vertical cylinder 50 mm dia. and 70 mm axis is completely penetrated by another horizontal cylinder of 70 mm dia. and 90 mm axis. Axis of the horizontal cylinder is parallel to VP & bisect the axis of the vertical cylinder. Draw projections of the cylinders showing curves of intersections.





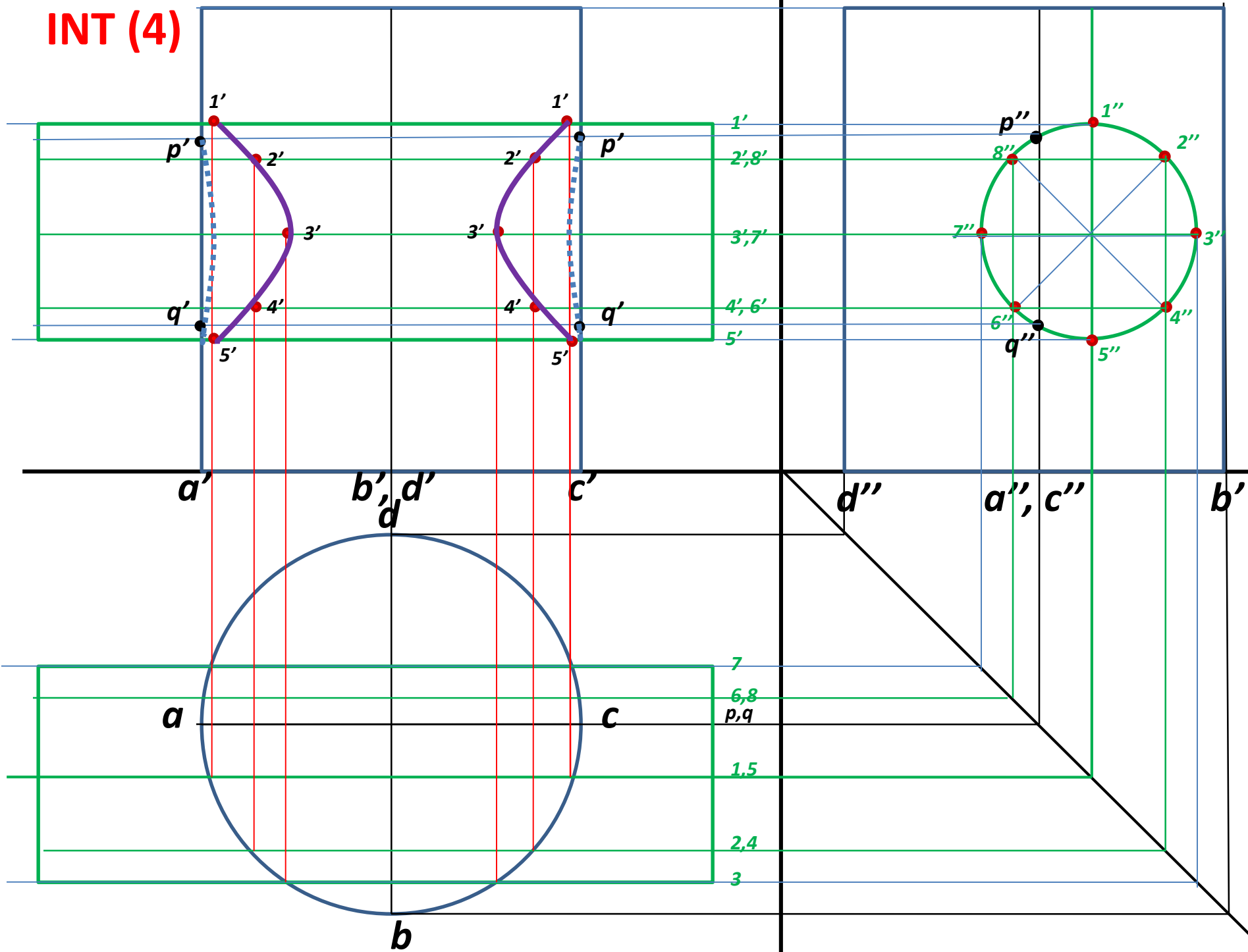


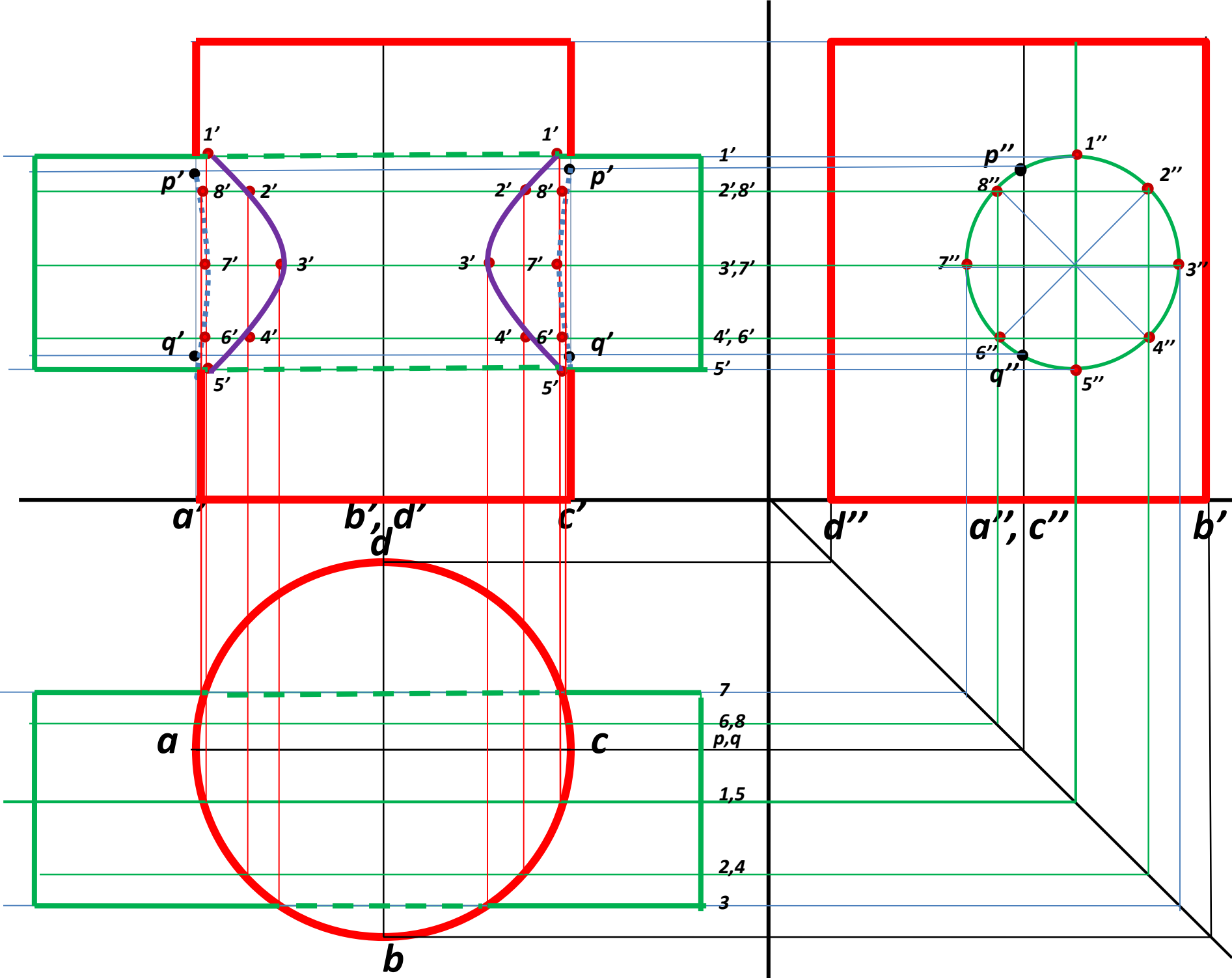


INT (4)

A vertical cylinder 90mm dia. and 100mm axis is completely penetrated by another horizontal cylinder 60 mm dia. and 100 mm axis. Axis of the horizontal cylinder is parallel to VP & 10 mm in front of the axis of the vertical cylinder. Draw projections of the cylinders showing curves of intersections.

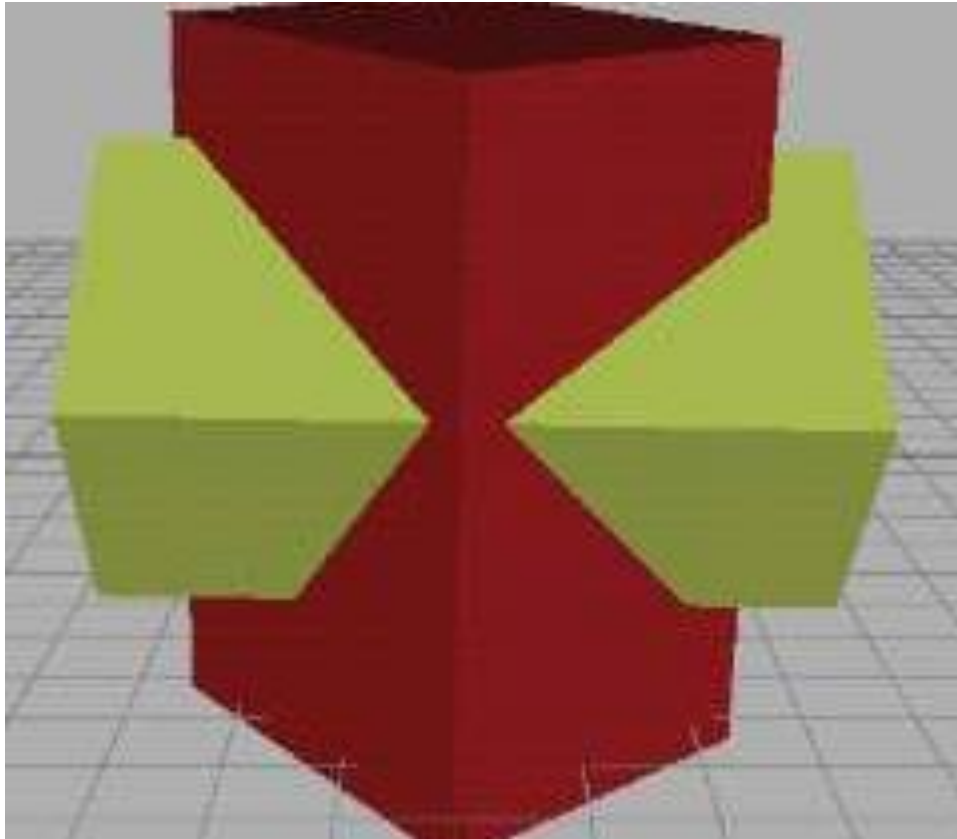
INT (4)



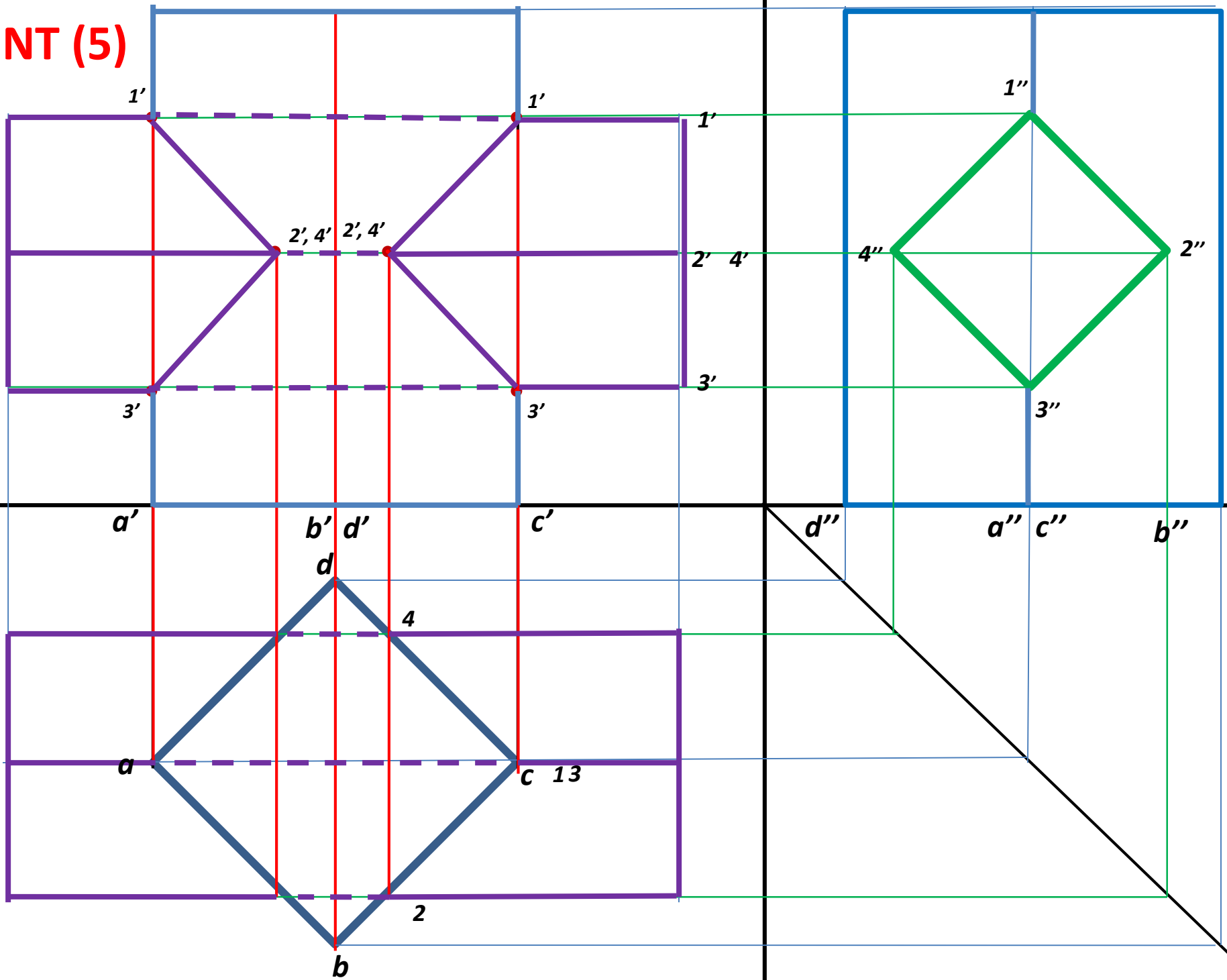


INT (5)

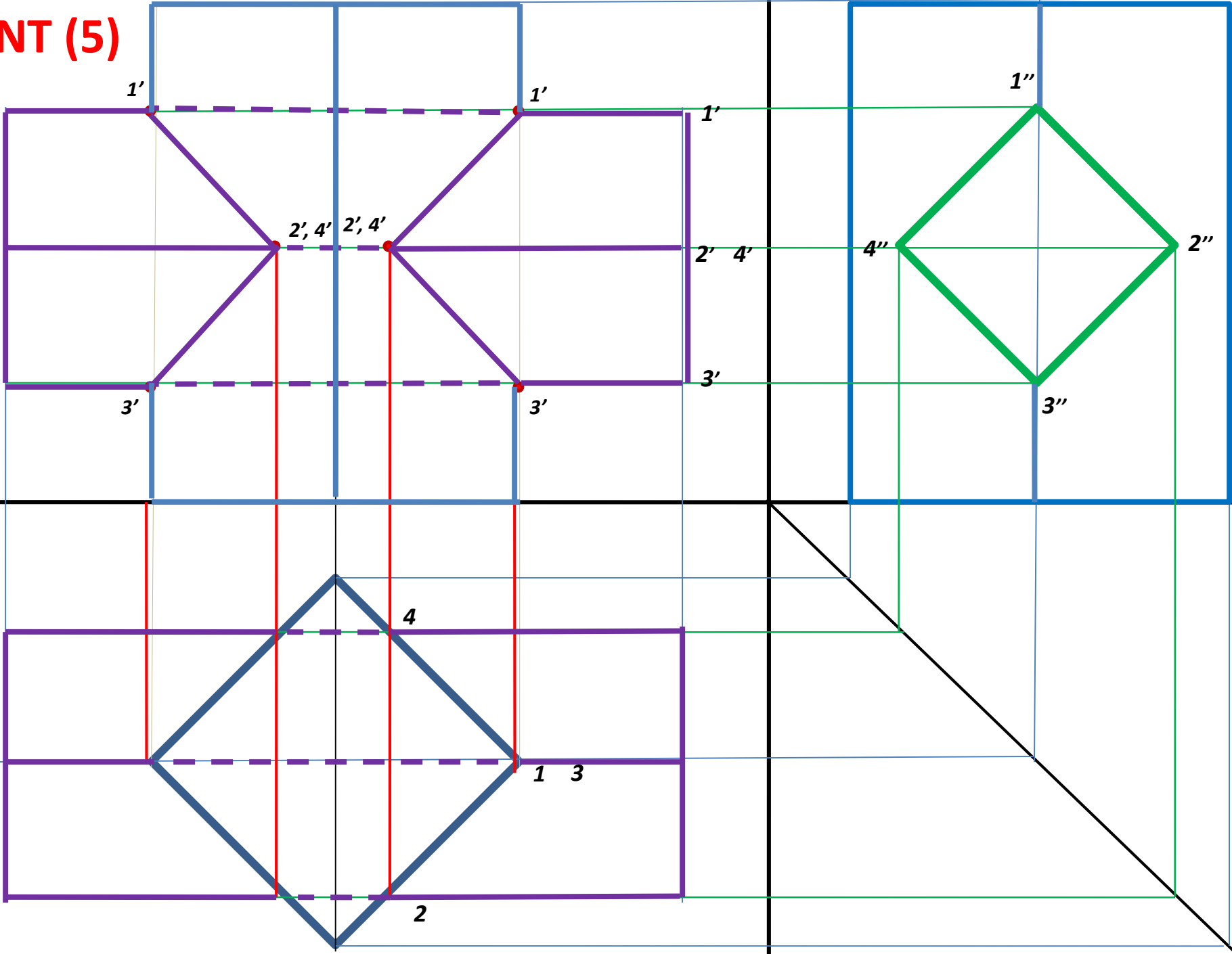
A vertical square prism 50 mm base sides and axis 80mm long is completely penetrated by another horizontal square prism of 40 mm sides and axis 80mm long. Axis of the horizontal square prism is parallel to VP and bisects the axis of the vertical square prism. All faces of prisms are equally inclined to VP. Draw projections showing curves of intersections.



INT (5)



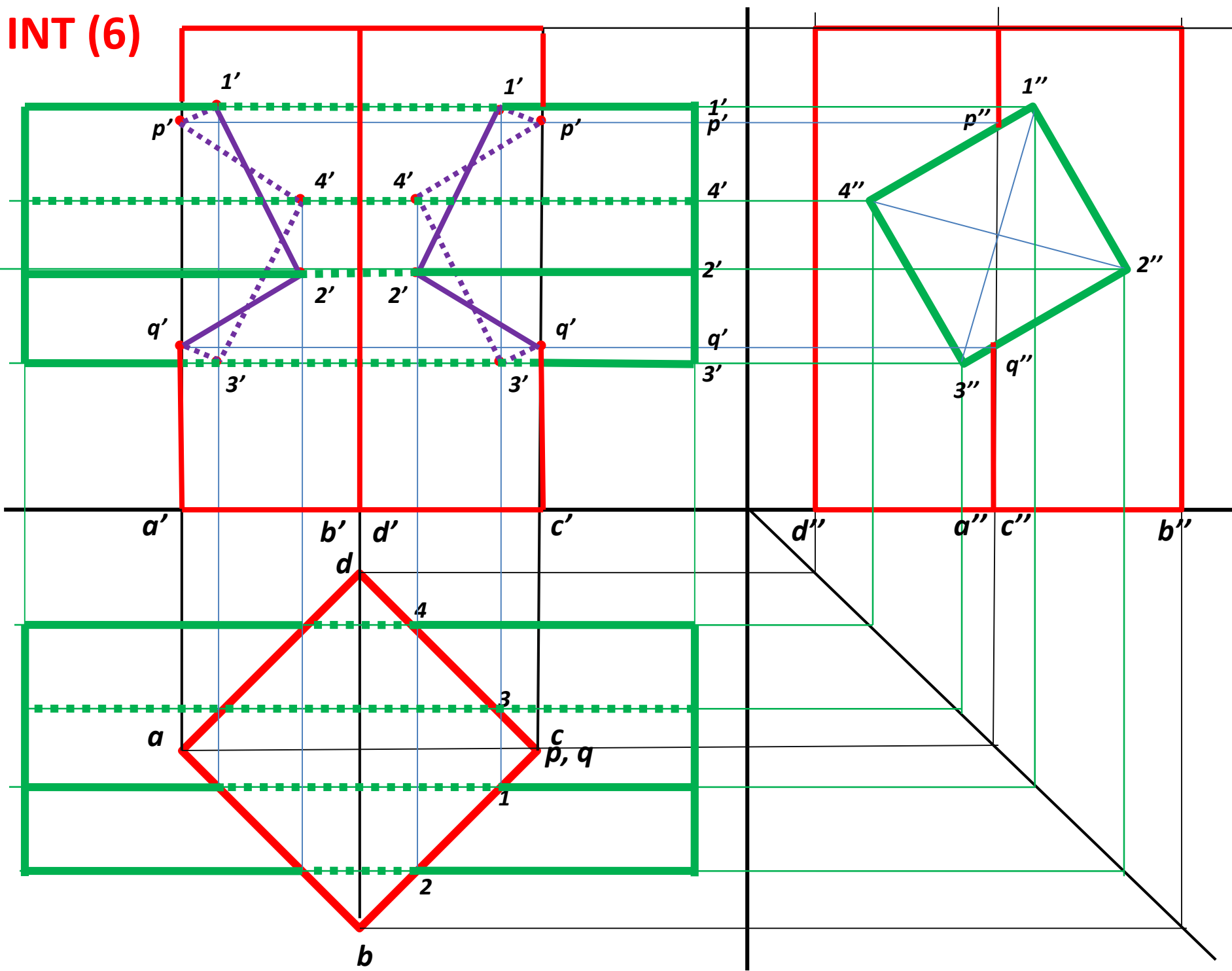
INT (5)



INT (6)

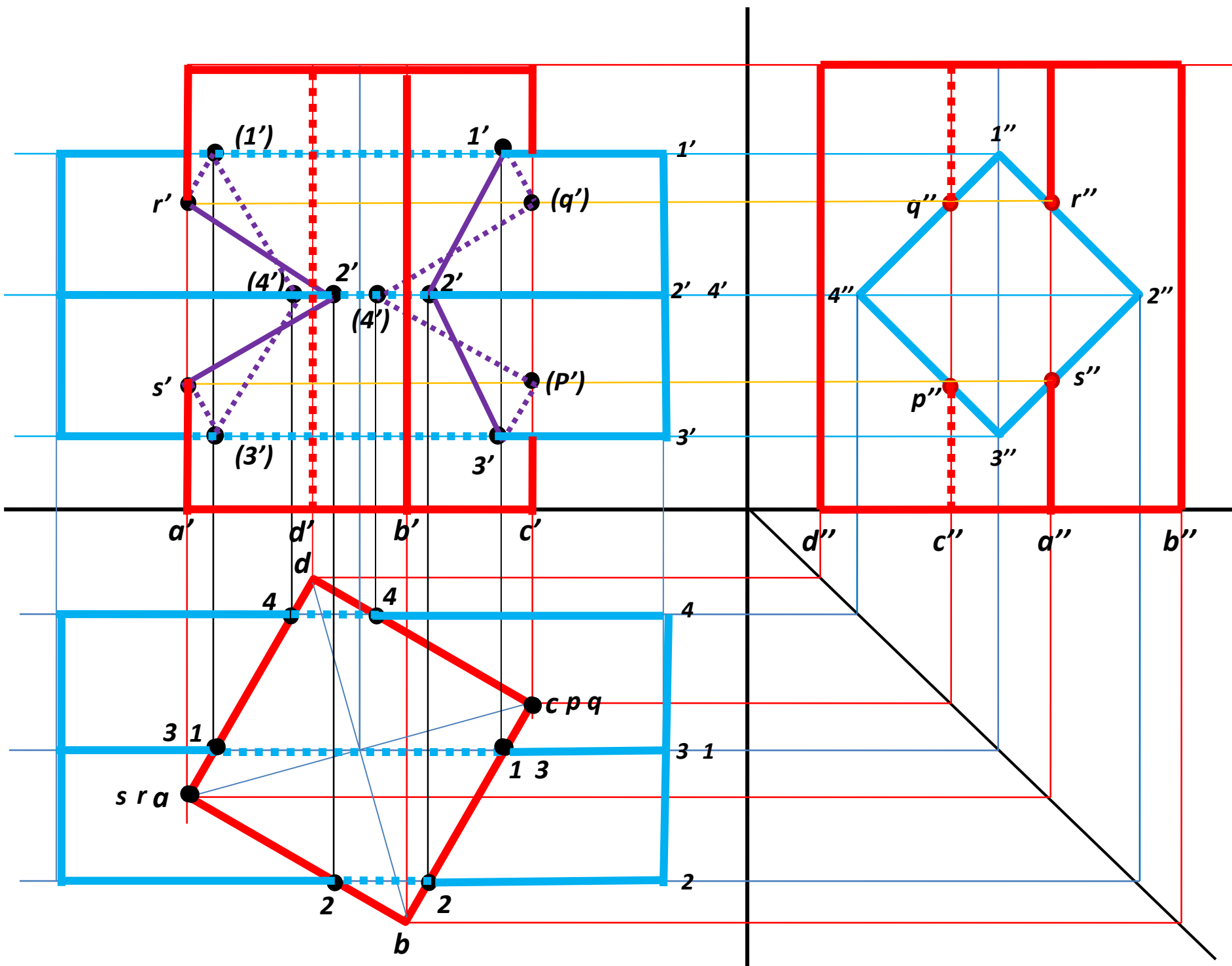
A vertical square prism 40 mm base sides and axis 80mm long is completely penetrated by another horizontal square prism of 30 mm sides and axis 80 mm long. All vertical faces of the vertical square prism are equally inclined to VP. Axis of the horizontal square prism is parallel to VP. Both axes intersect & bisect each other. Two rectangular faces of the horizontal square prism are 30° inclined to HP. Draw projections showing curves of intersections.

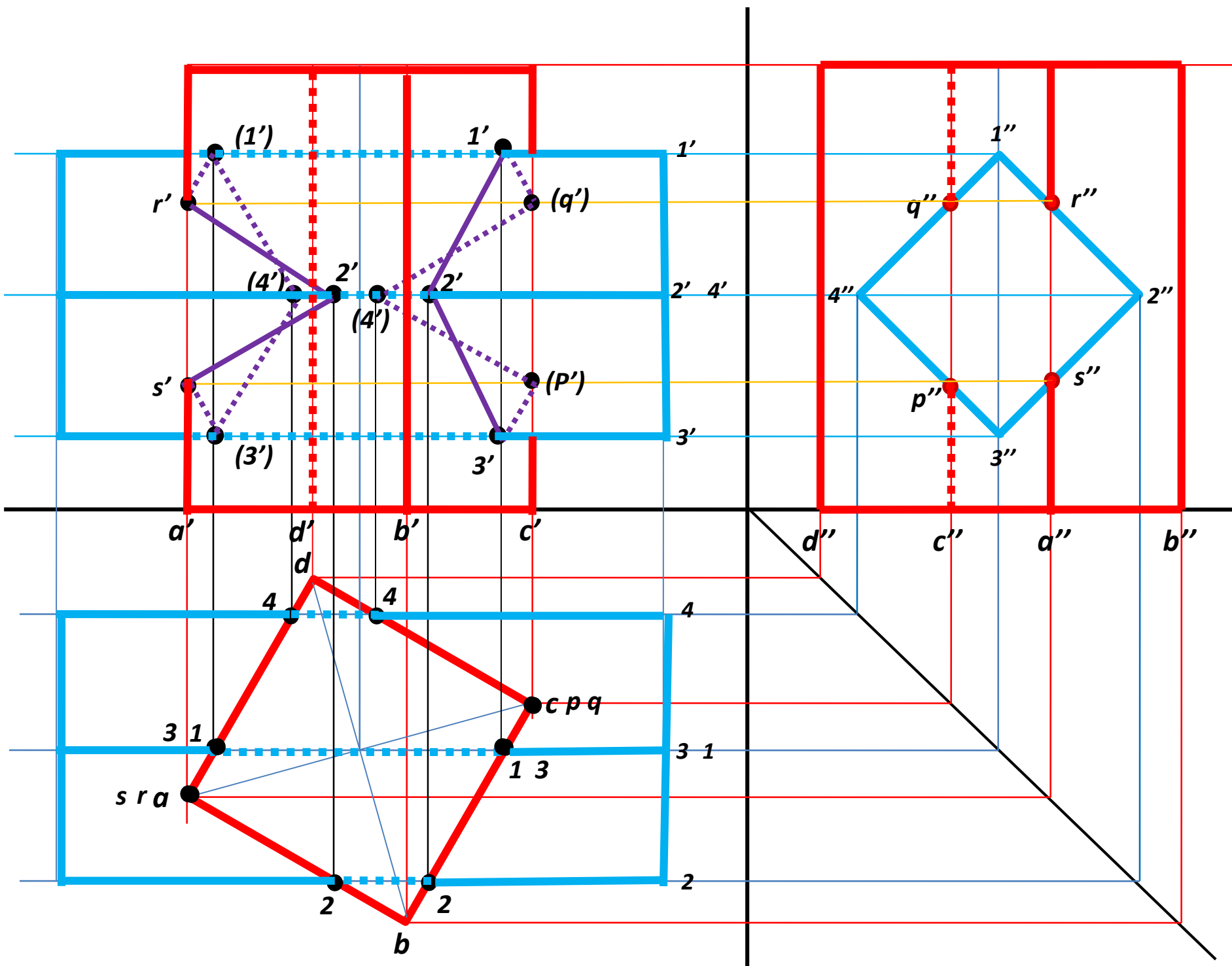
INT (6)



INT (7)

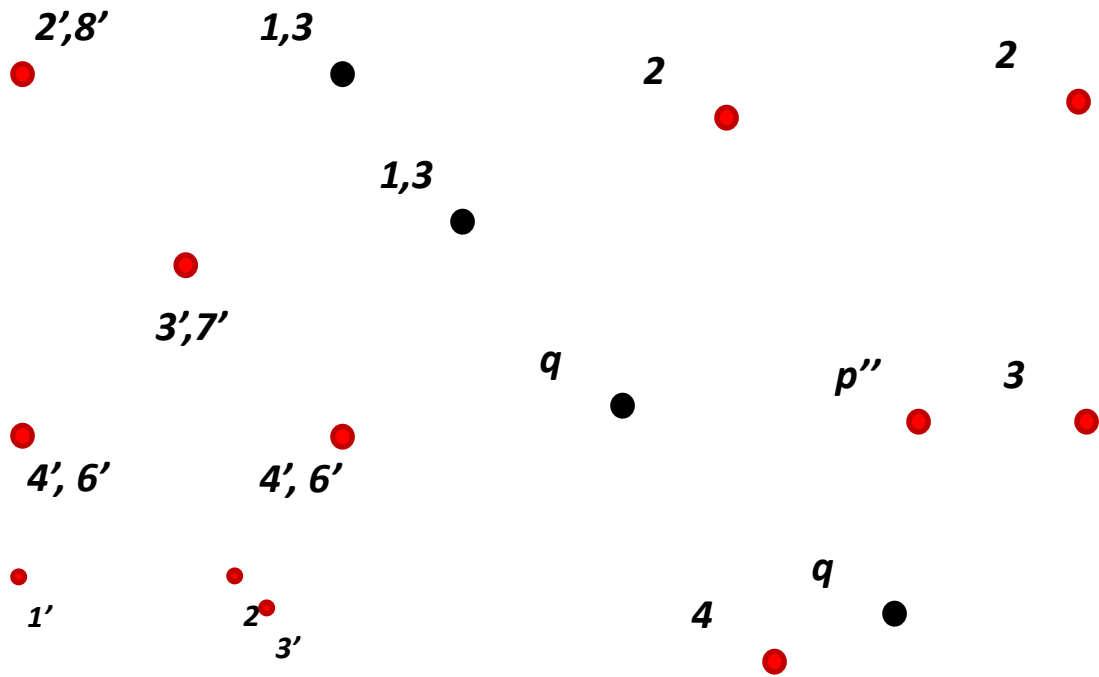
A vertical square prism 40 mm base sides and axis 80mm long is completely penetrated by another horizontal square prism of 30 mm sides and axis 80 mm long. Two rectangular faces of the vertical square prism are 30° inclined to VP. Axis of the horizontal square prism is parallel to VP. Both axes intersect & bisect each other. All rectangular faces of the horizontal square prism are equally inclined to HP. Draw projections showing curves of intersections.

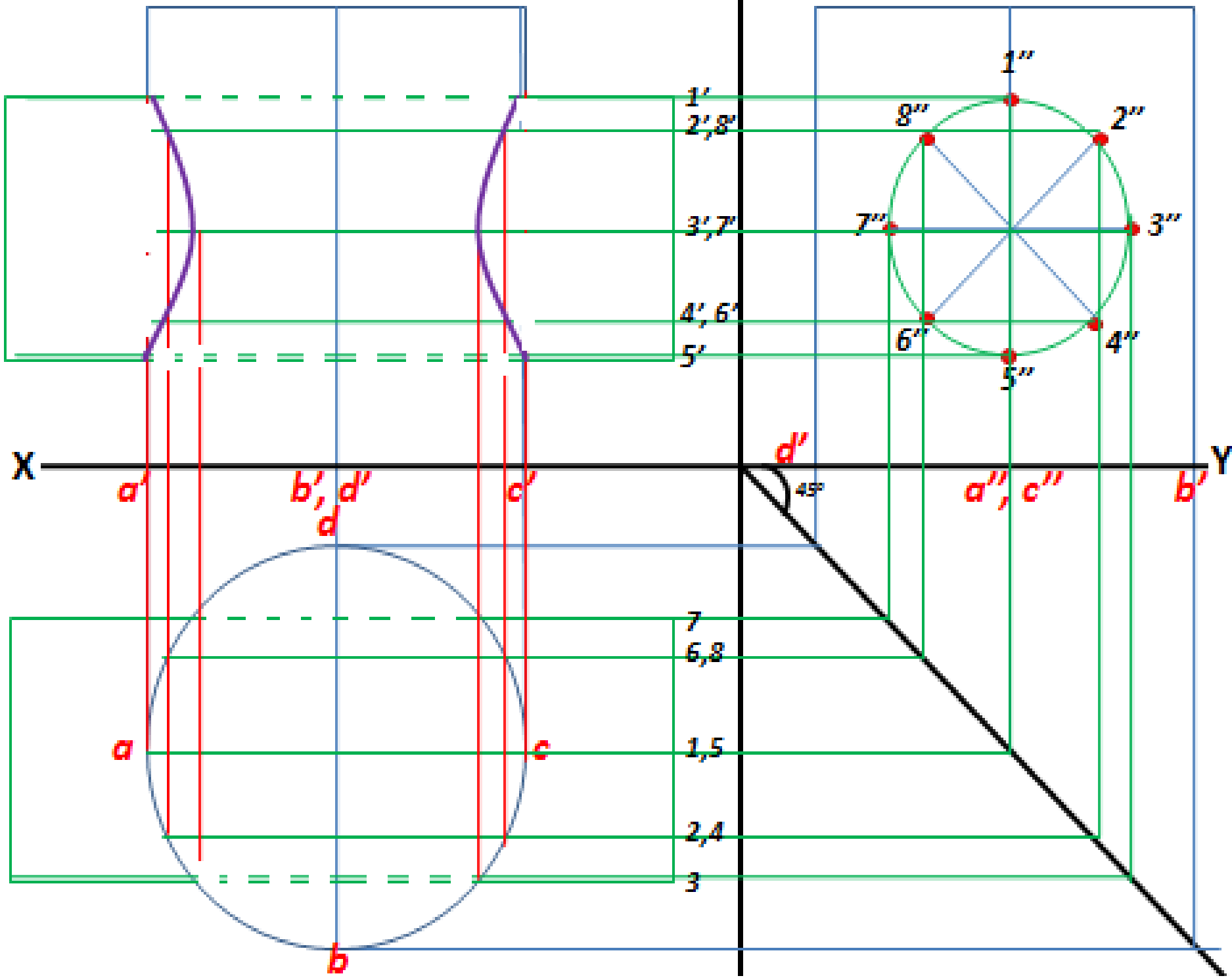




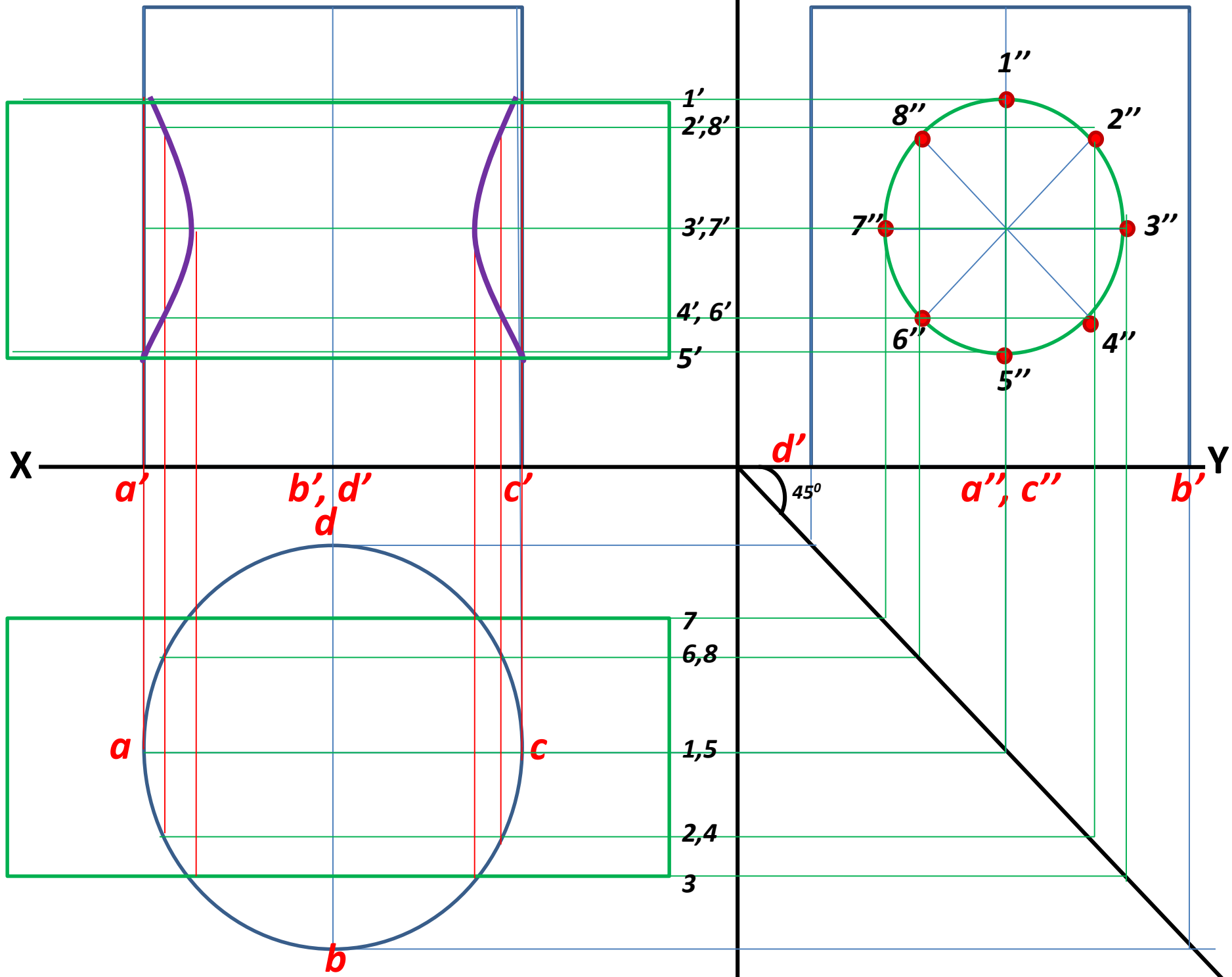


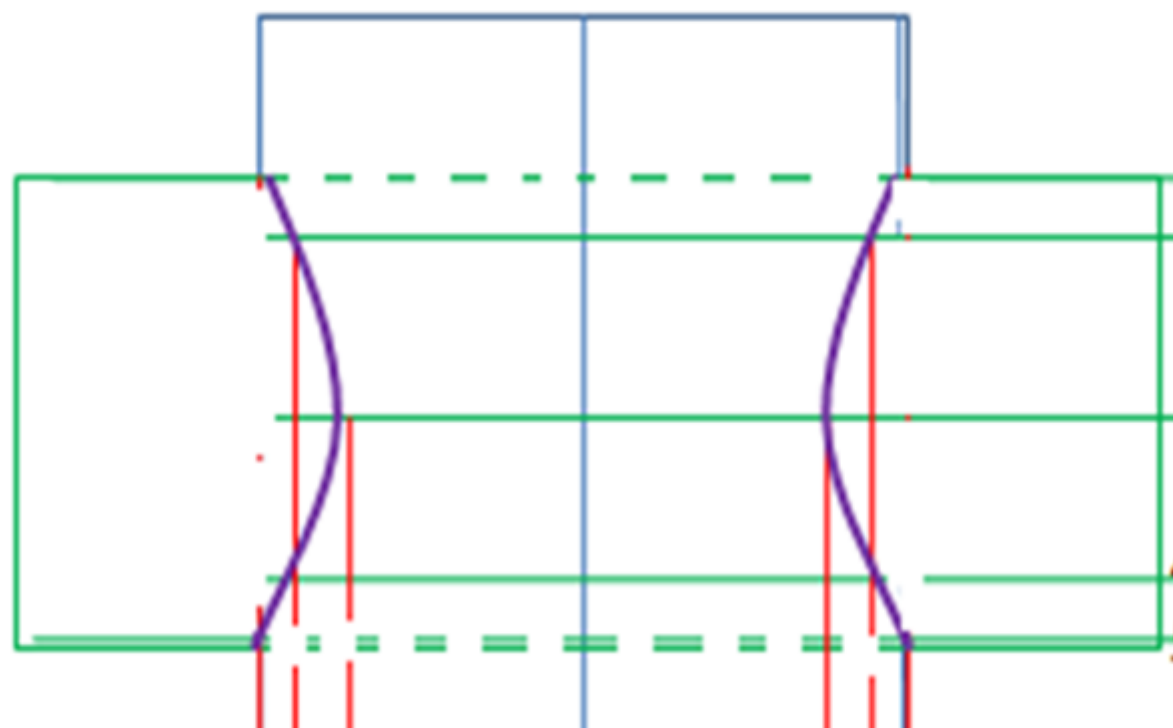


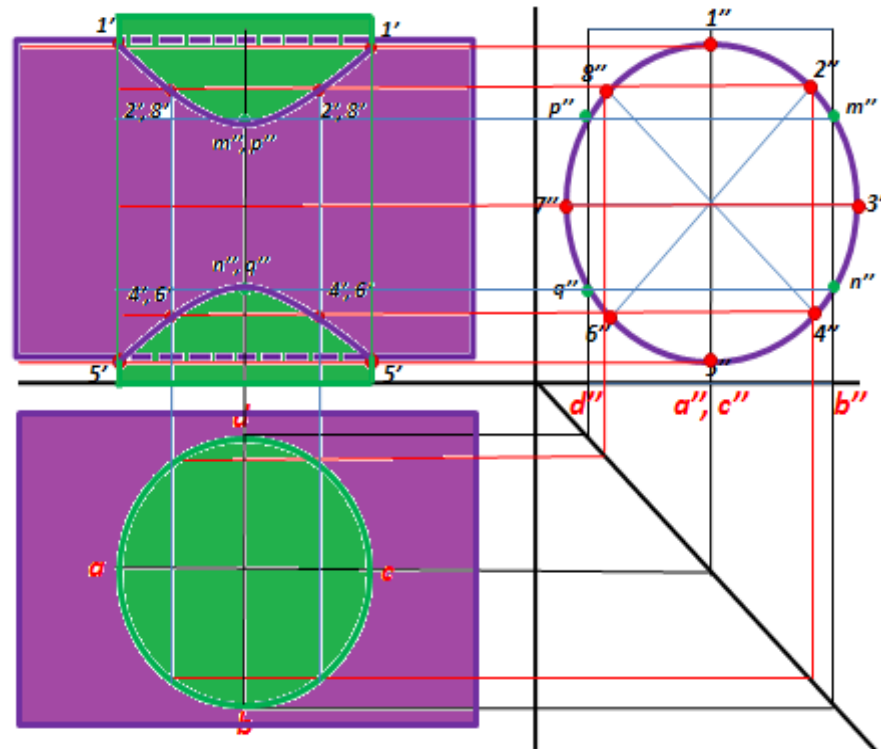




A vertical square prism 40 mm base sides and 70mm axis is completely penetrated by another horizontal square prism of 30 mm sides and axis 70 mm. Both axes Intersects & bisect each other. All faces of prisms are equally inclined to VP. Draw projections showing curves of intersections.







For plotting an accurate curve, certain *critical or key points*, at which *the curve changes direction*, must also be located. *These are the points at which outermost or extreme lines of each cylinder pierce the surface of the other cylinder.*

