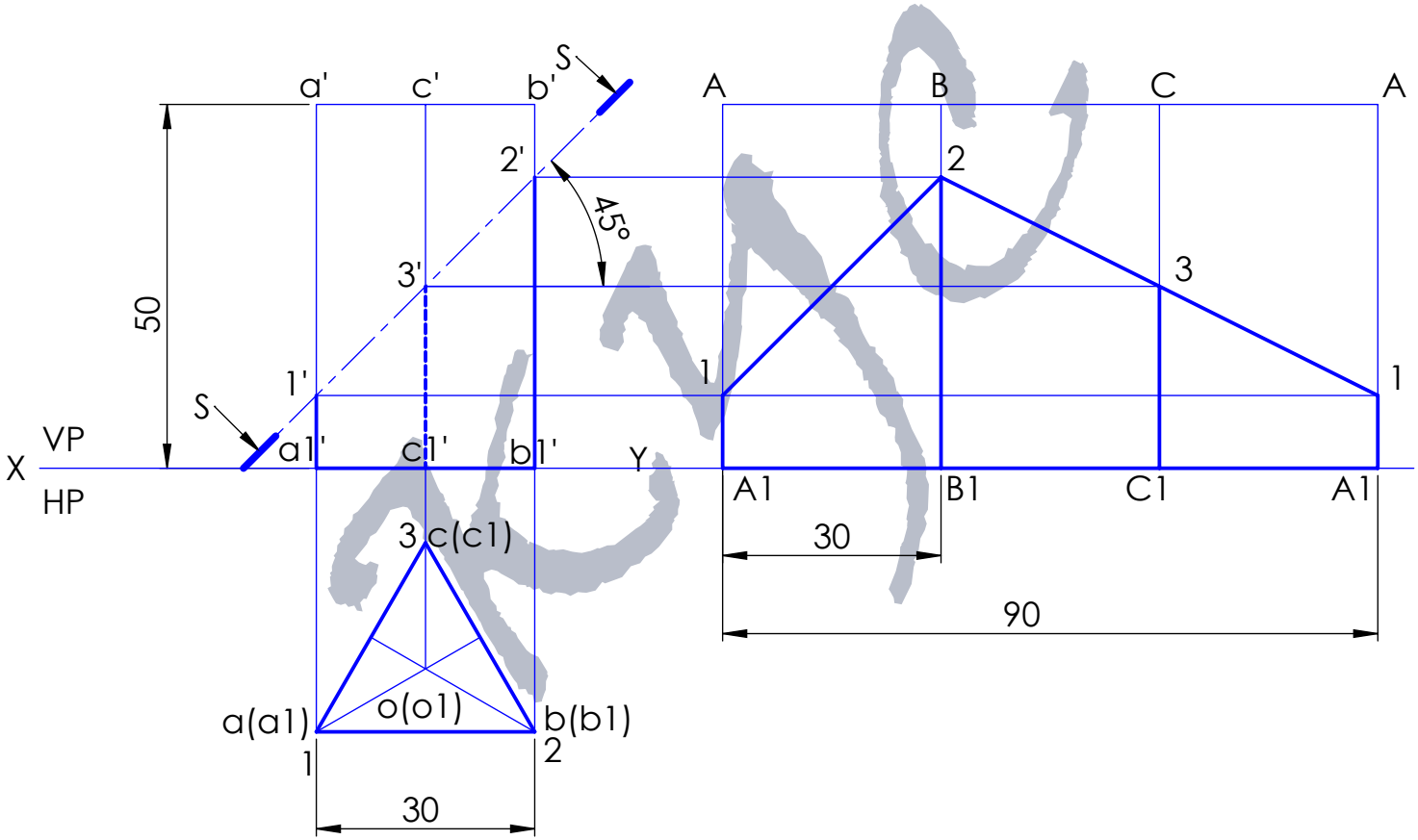
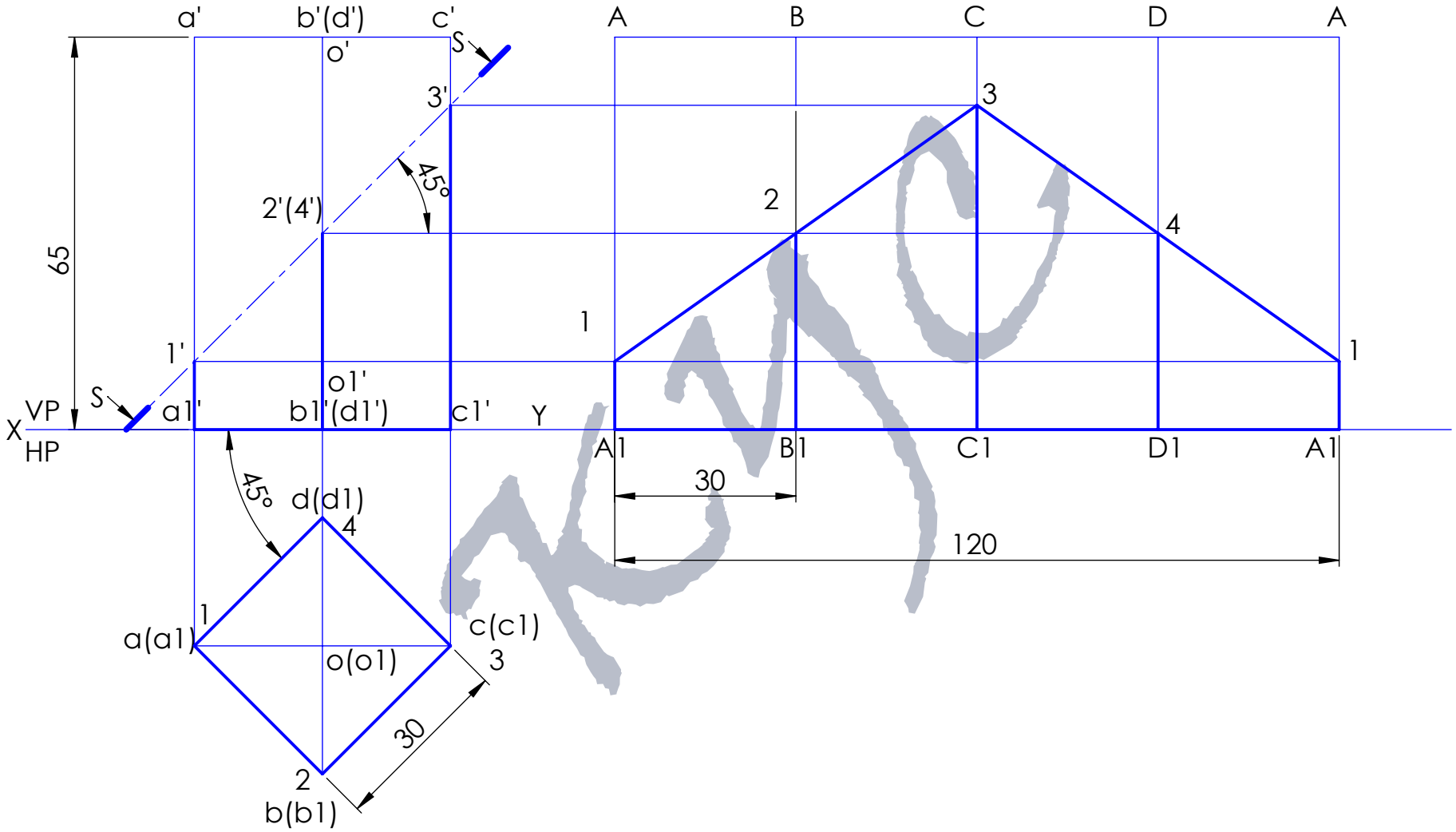
DEVELOPMENT OF LATERAL SURFACES

10.1 A triangular prism of base edge 30 mm and height 50 mm rests on HP with its axis vertical and a base edge parallel to VP and farther from it. A section plane perpendicular to VP and inclined at 45° to HP bisects the axis of the prism. Draw the development of lateral surface of retained portion of the solid.



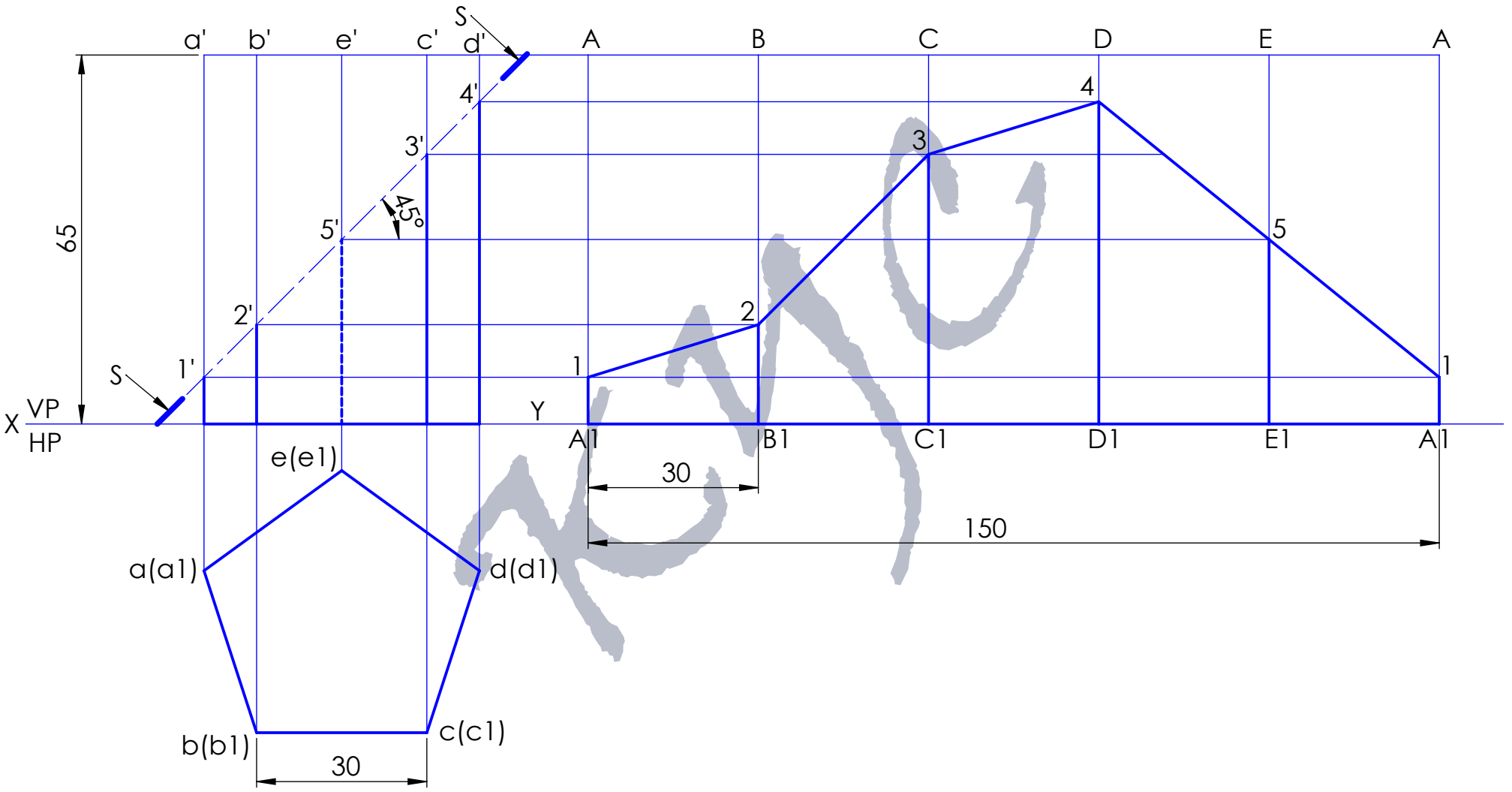
DEVELOPMENT OF LATERAL SURFACES

10.2 A square prism of 30mm base edges and 65mm axis length rests on HP with its axis vertical and two of its lateral surfaces are equally inclined to VP. A section plane perpendicular to VP and inclined at 45° to HP bisects the axis of the prism. Draw the development of lateral surface of retained portion of the solid.



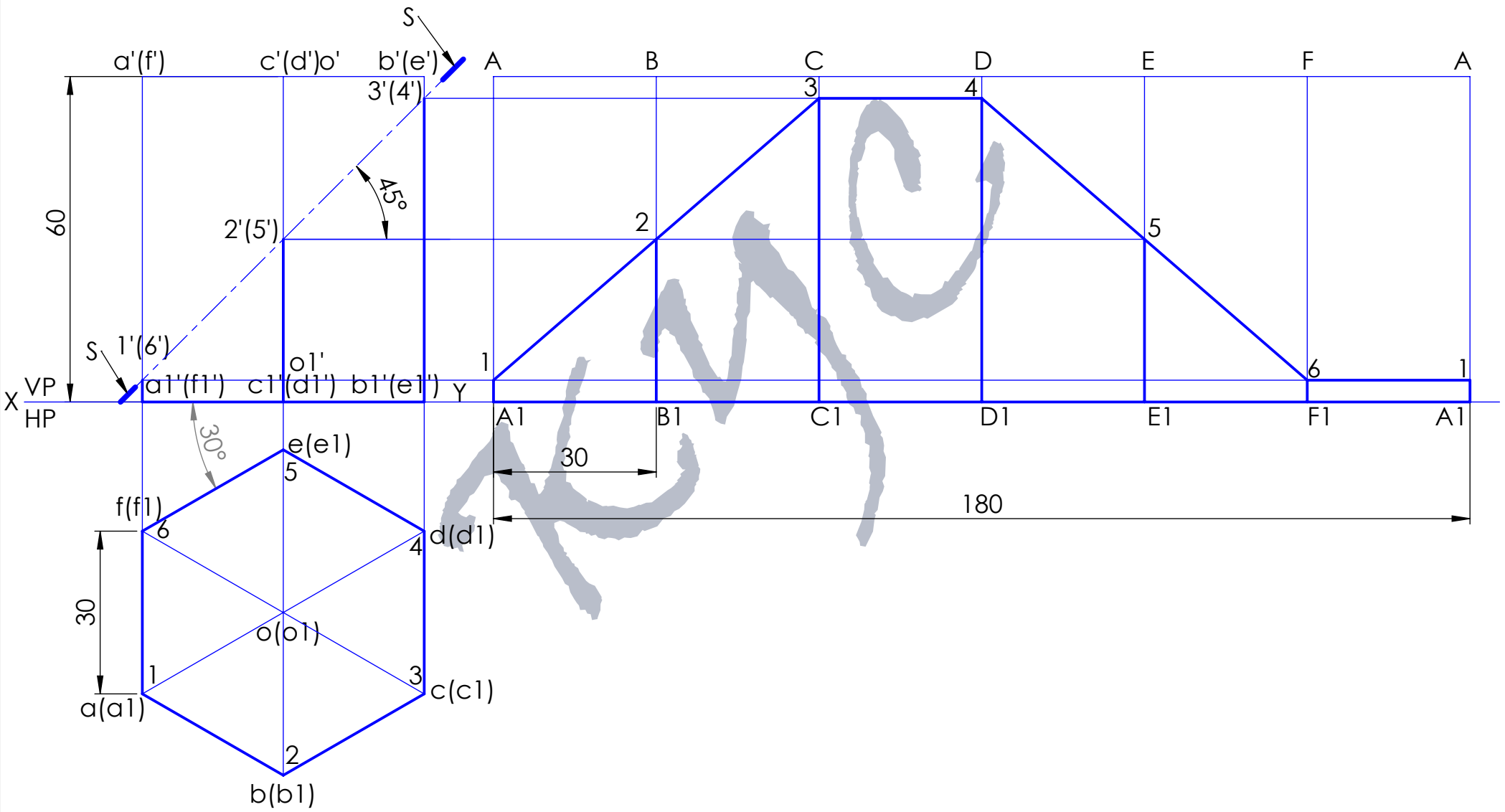
DEVELOPMENT OF LATERAL SURFACES

10.3 A pentagonal prism of 30mm base edges and 65mm axis length rests on HP with two of its lateral surfaces are equally inclined to VP and nearer to it. A section plane perpendicular to VP and inclined at 45° to HP bisects the axis of the prism. Draw the development of lateral surface of retained portion of the solid.



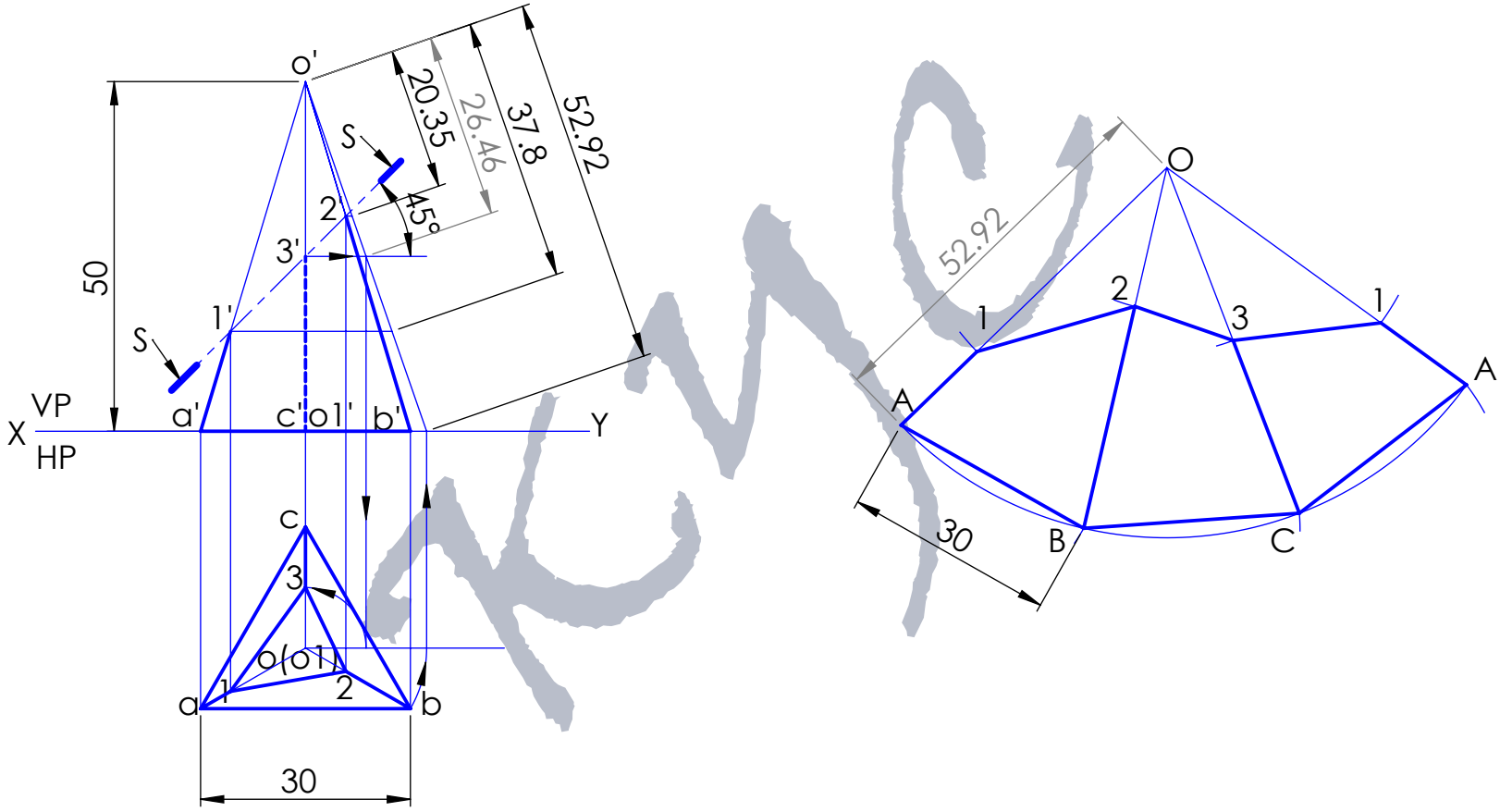
DEVELOPMENT OF LATERAL SURFACES

10.4 A hexagonal prism of 30mm base edges and 60mm axis length rests on HP with its axis vertical and one of its lateral surfaces is inclined at 30° to VP and nearer to it. A section plane perpendicular to VP and inclined at 45° to HP bisects the axis of the prism. Draw the development of lateral surface of retained portion of the solid.



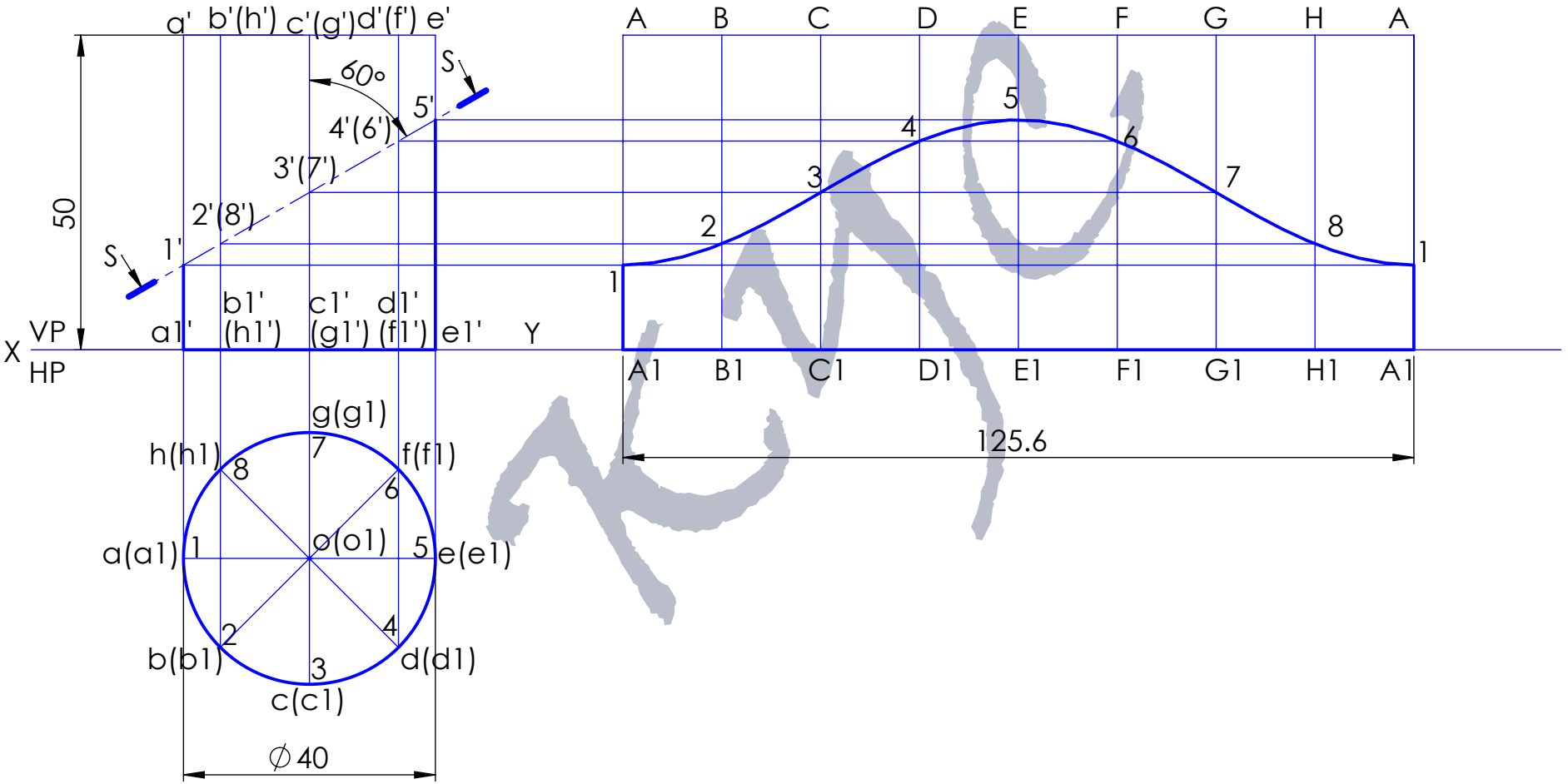
DEVELOPMENT OF LATERAL SURFACES

10.5 A triangular pyramid of base edge 30mm and height 50mm rests on HP with its axis vertical and two of its base edges equally inclined to VP and nearer to it. A section plane perpendicular to VP and inclined at 45° to HP bisects the axis of the pyramid. Draw the development of lateral surface of retained portion of the solid.



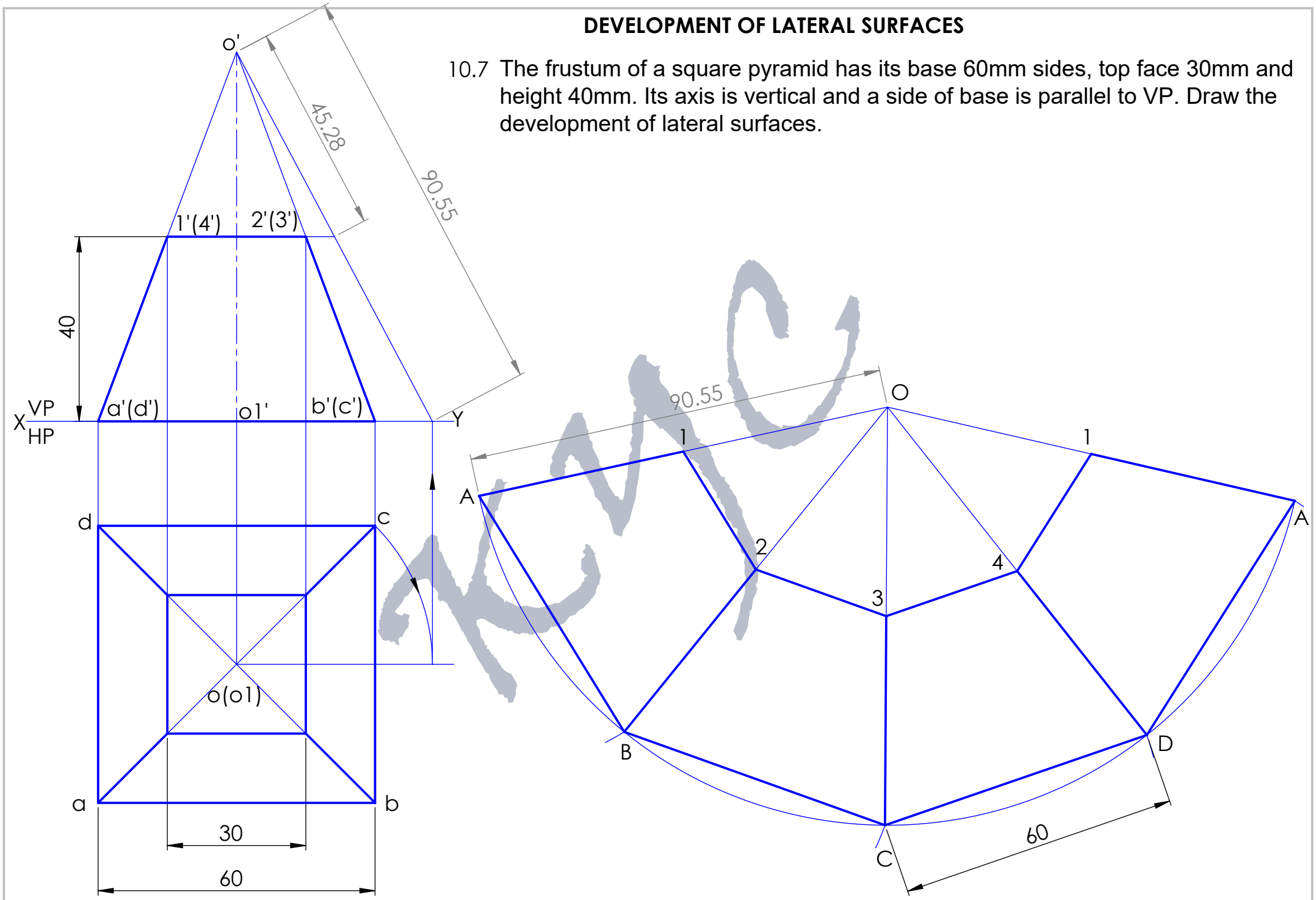
DEVELOPMENT OF LATERAL SURFACES

10.6 Draw the development of the lateral surface of a truncated cylinder, 40mm diameter of base and height 50mm, if the truncated flat surface of the cylinder bisects the axis at 60° to it.



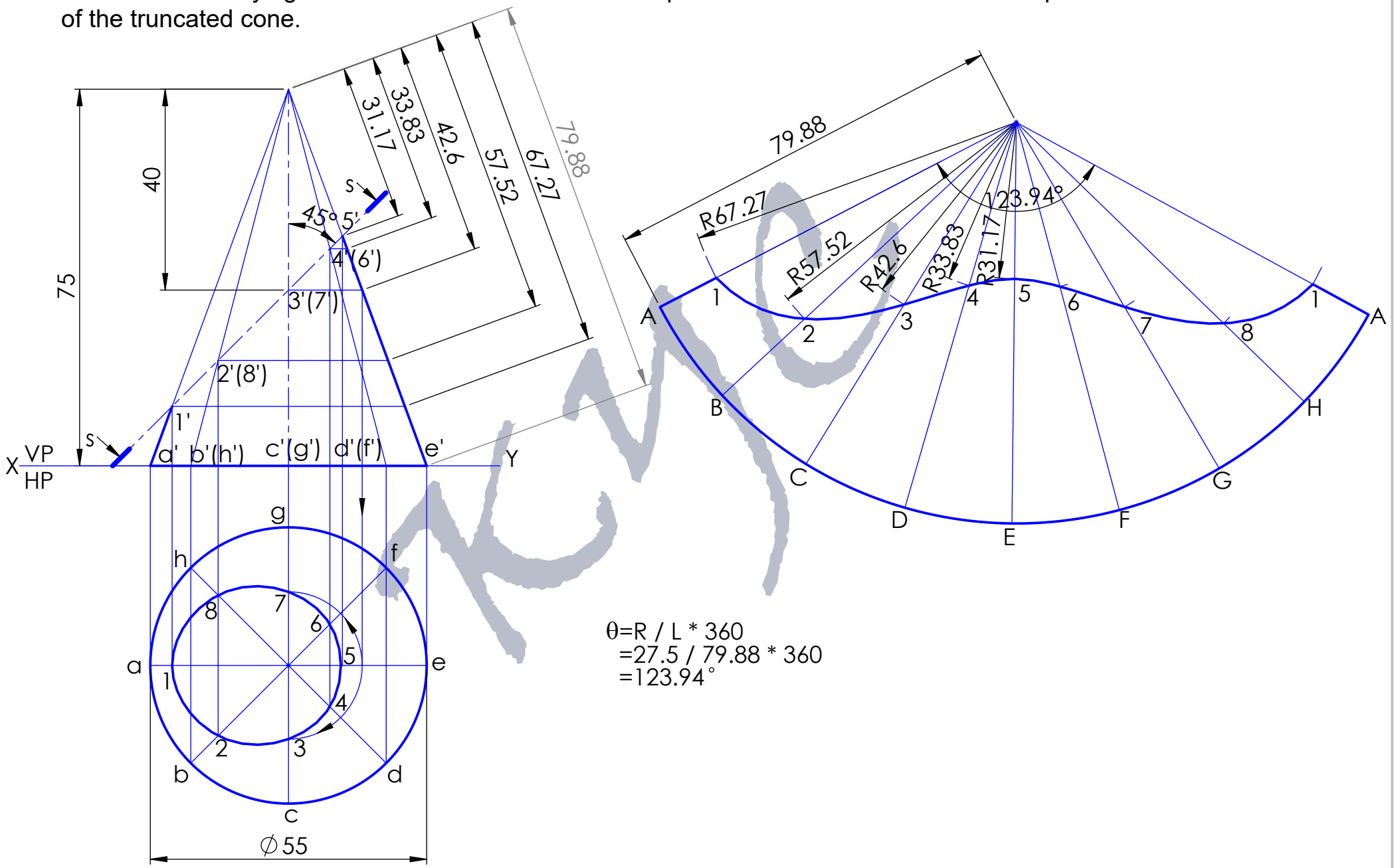
DEVELOPMENT OF LATERAL SURFACES

10.7 The frustum of a square pyramid has its base 60mm sides, top face 30mm and height 40mm. Its axis is vertical and a side of base is parallel to VP. Draw the development of lateral surfaces.



DEVELOPMENT OF LATERAL SURFACES

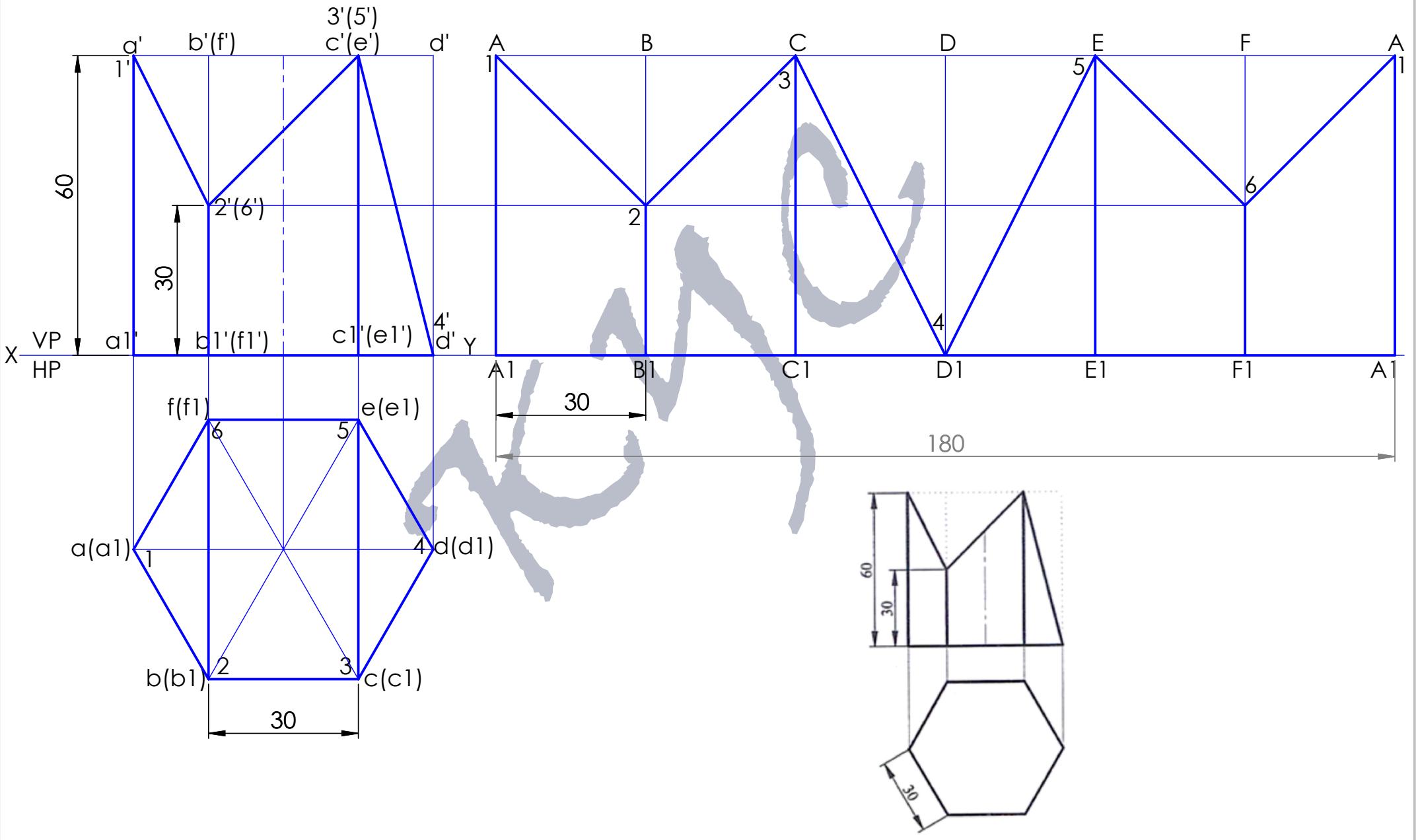
10.8 A right cone of 55mm base diameter and 75mm height stands on its base on HP. It is truncated with its surface inclined at 45°to the axis lying at a distance of 40mm from the apex of the cone. Obtain the development of the lateral surface of the truncated cone.



$\theta = R / L * 360$
$= 27.5 / 79.88 * 360$
$= 123.94°$

DEVELOPMENT OF LATERAL SURFACES

10.9 A hexagonal prism side of base 30mm and height 60mm is cut as shown in the fig. Draw the development of the lateral surface of the prism.



DEVELOPMENT OF LATERAL SURFACES

10.10 Draw the development of the lateral surface of the pyramid shown in fig.