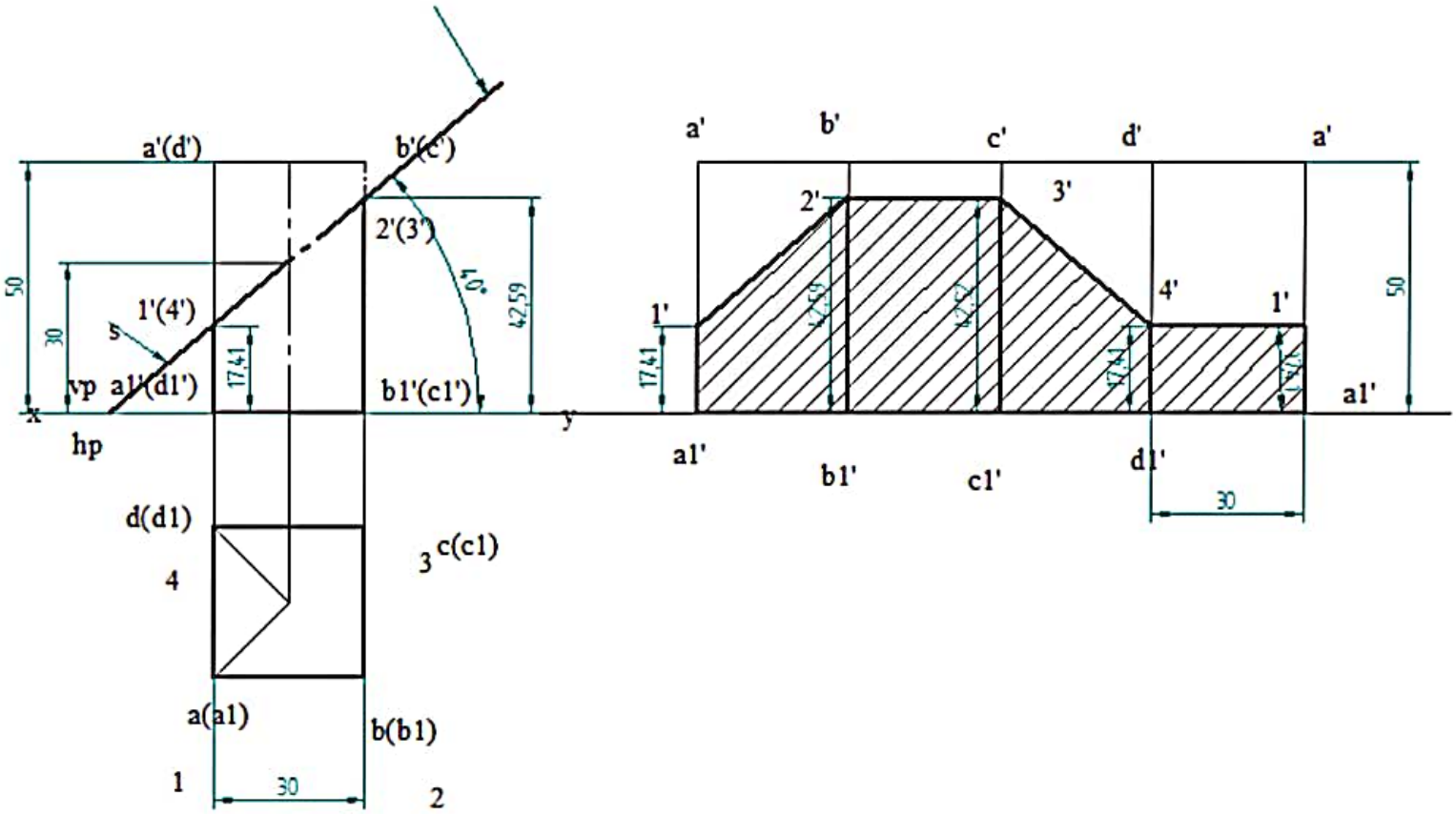
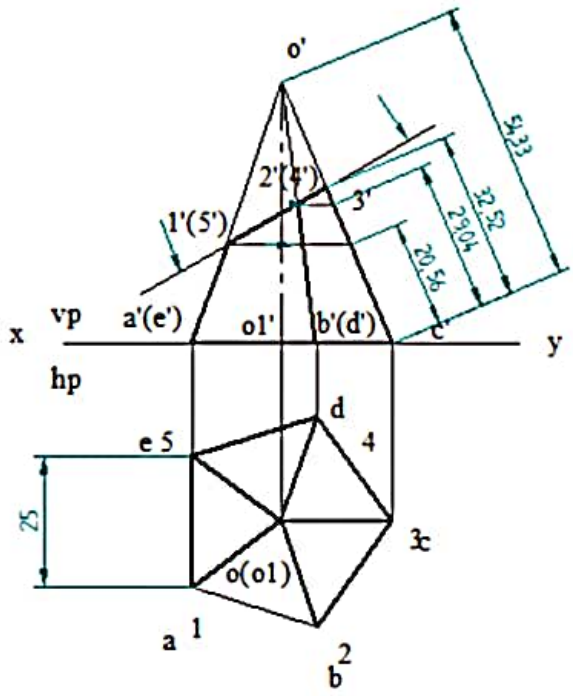
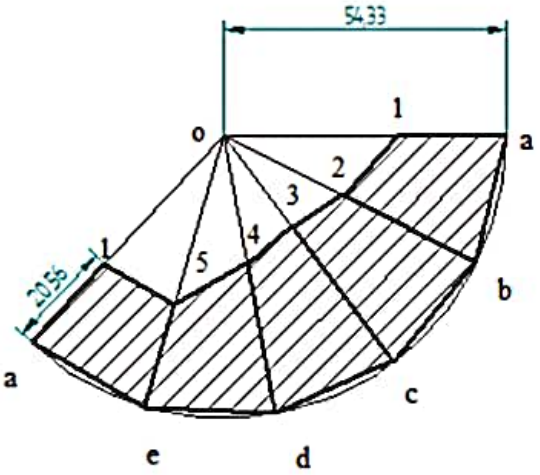
A square prism of base side 30 mm and axis length 50 mm is resting on HP on its base with two of its vertical faces perpendicular to VP. It is cut by a section plane inclined at 40 degrees to HP and perpendicular to VP and passing at a distance of 30 mm from the base along the axis. Draw the development of the lower portion of the prism.

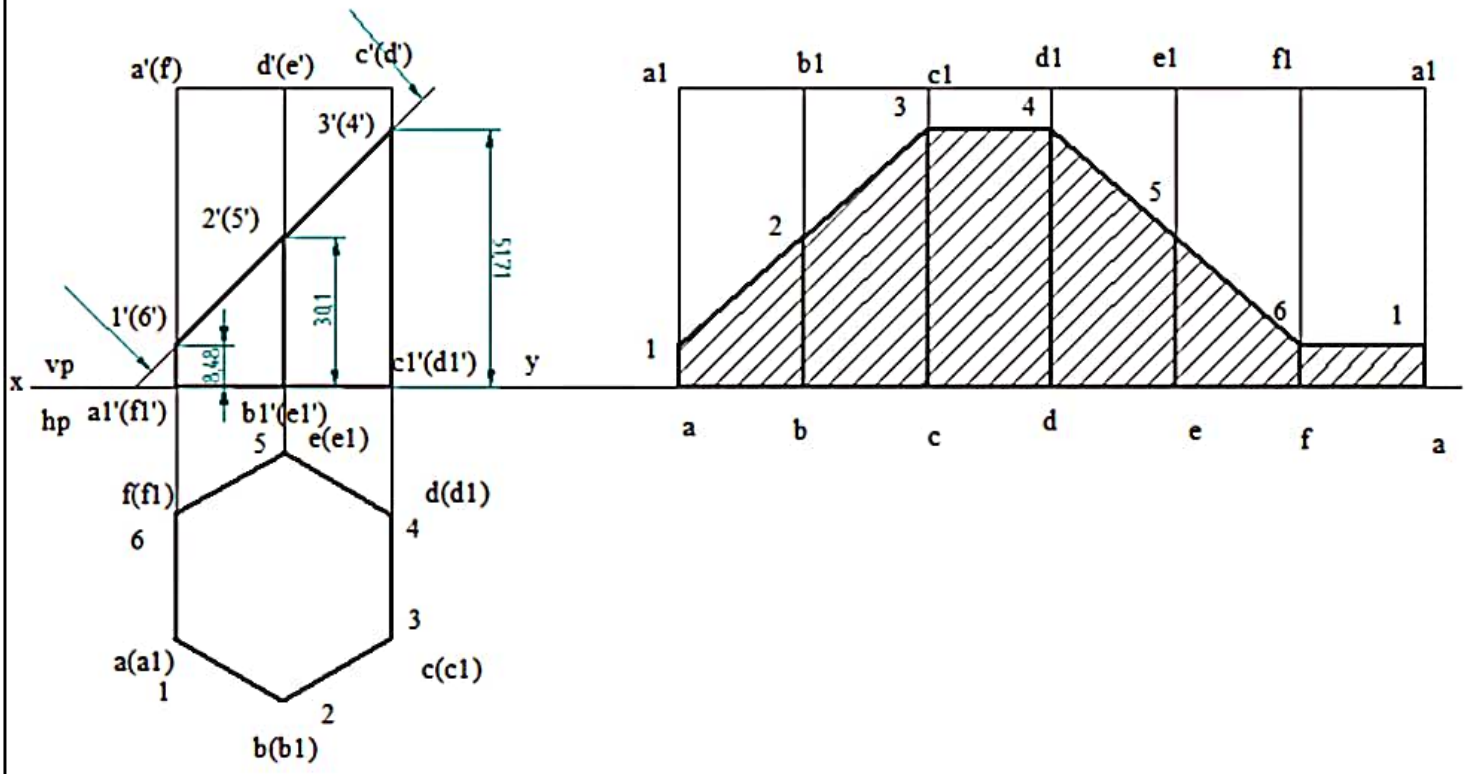


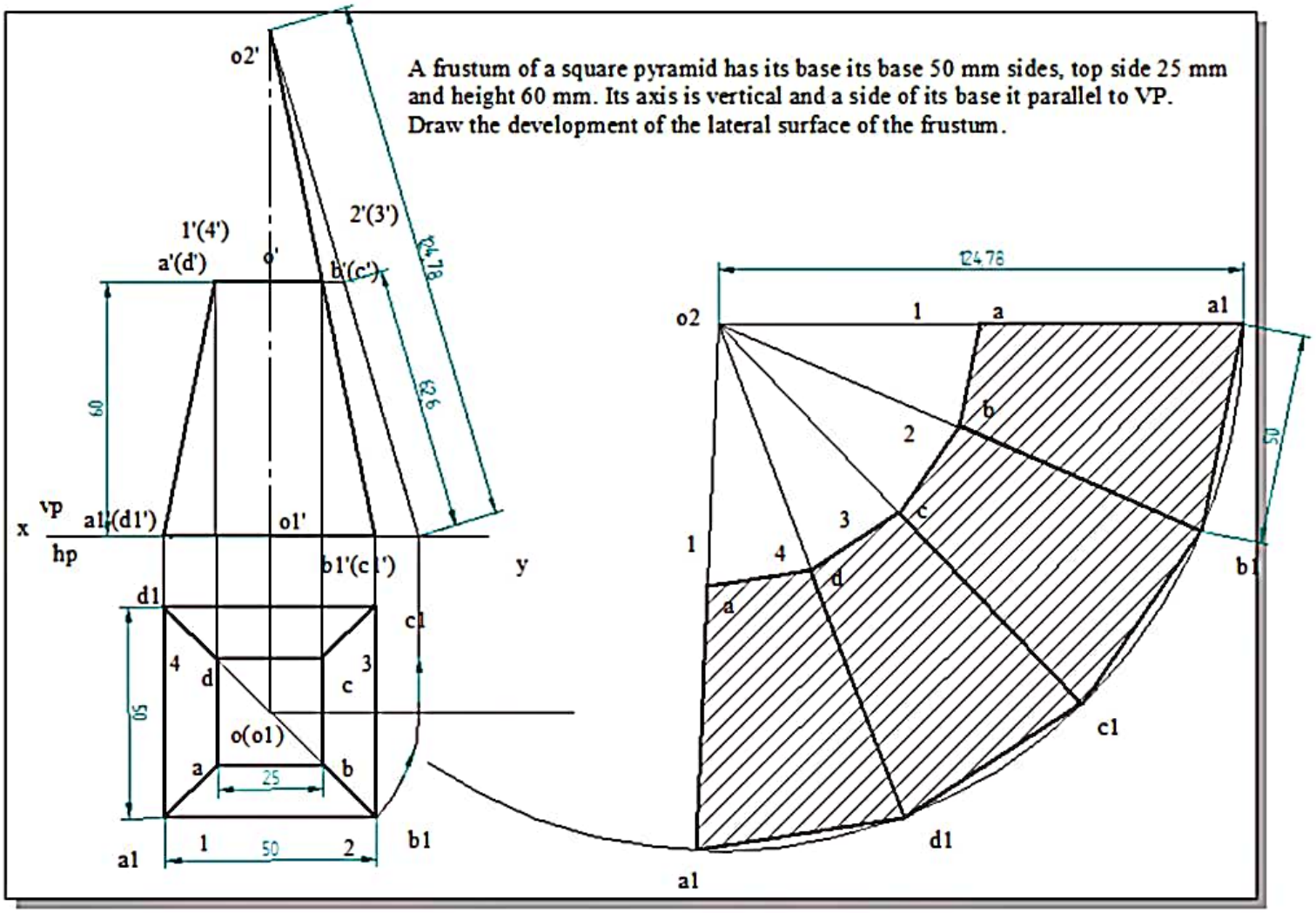
A pentagonal pyramid of base side 25 mm and altitude 50 mm is resting on HP on its base with an edge of the base perpendicular to VP. The pyramid is cut by a section plane inclined at 30 degree to HP, perpendicular to VP and bisecting the axis. Draw the development of the lower portion of the pyramid.



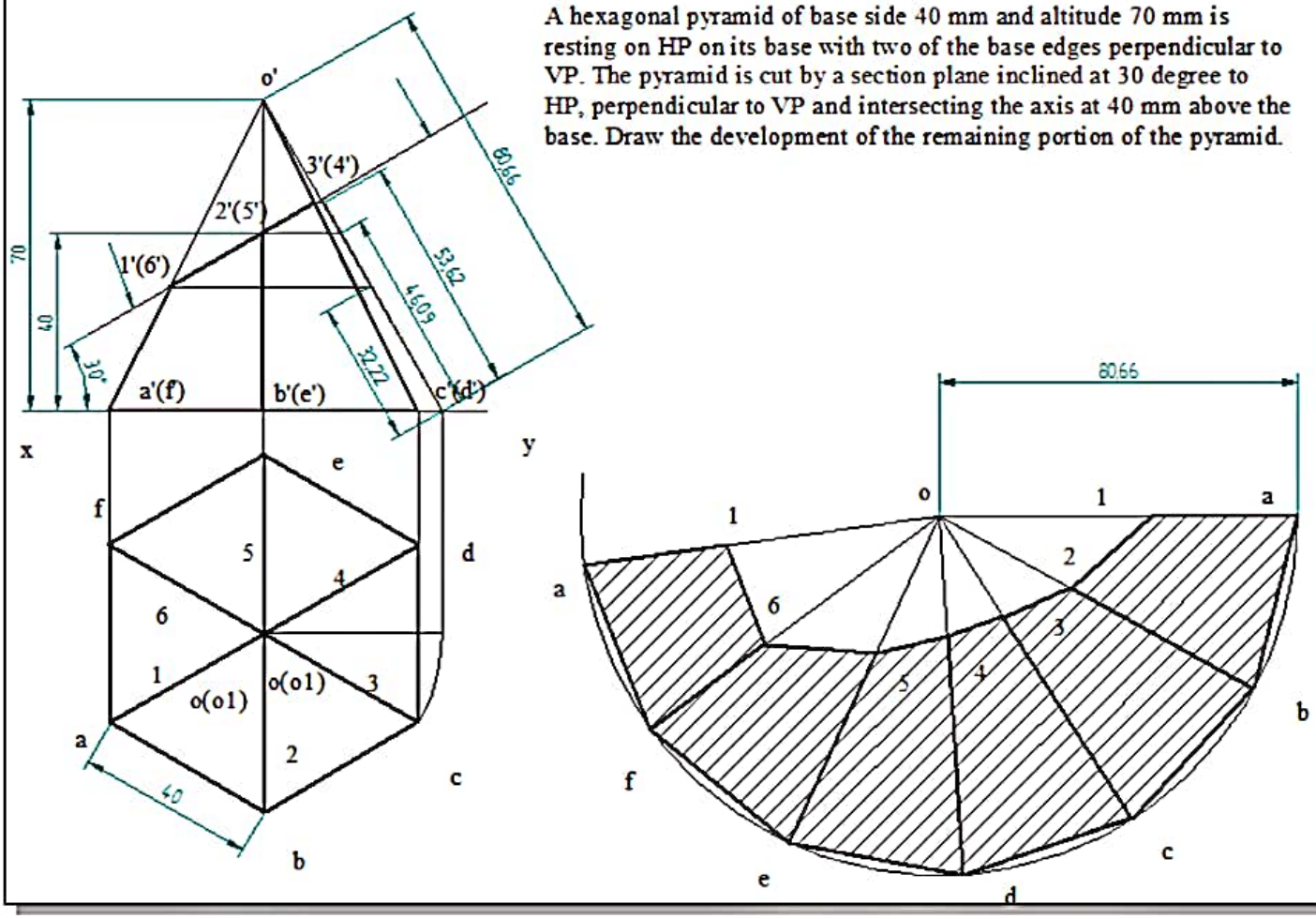


A hexagonal prism of base side 25 mm and axis length 60 mm is resting on HP on its base with two of its vertical faces perpendicular to VP. It is cut by a section plane inclined at 45 degrees to HP and perpendicular to VP and bisecting the axis. Draw the development of the lower portion of the prism.

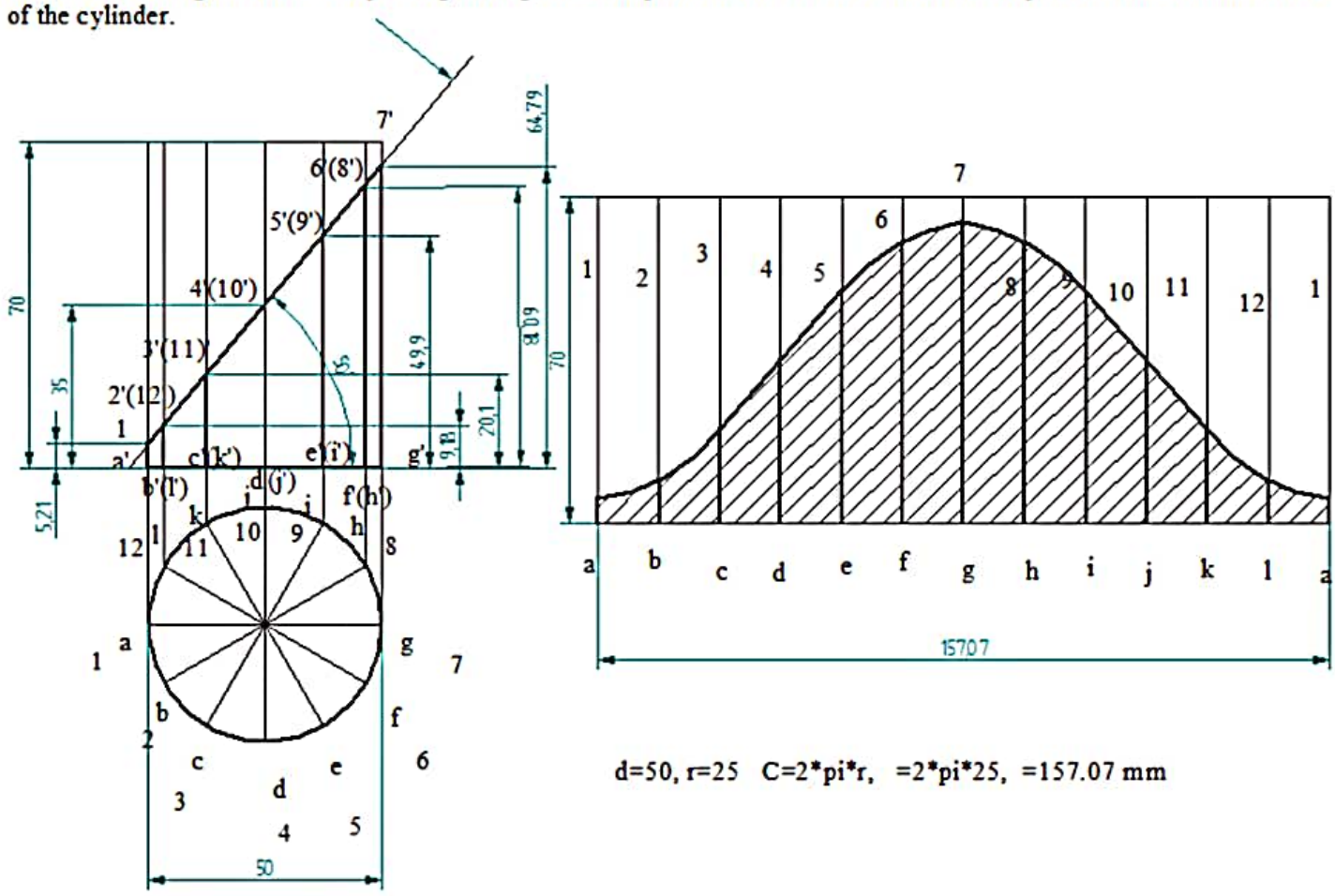



A frustum of a square pyramid has its base its base 50 mm sides, top side 25 mm and height 60 mm. Its axis is vertical and a side of its base it parallel to VP. Draw the development of the lateral surface of the frustum.
o2'
1'(4')
2'(3')
a'(d')
o'
b'(c')
124.78
123.6
60
x
VP
a1'(d1')
o1'
hp
b1'(c1')
y
d1
c1
4
d
3
c
50
o(o1)
a
25
b
a1
1
50
2
b1
o2
1
a
a1
124.78
2
b
50
3
c
1
4
d
a
c1
b1
d1
a1

A hexagonal pyramid of base side 40 mm and altitude 70 mm is resting on HP on its base with two of the base edges perpendicular to VP. The pyramid is cut by a section plane inclined at 30 degree to HP, perpendicular to VP and intersecting the axis at 40 mm above the base. Draw the development of the remaining portion of the pyramid.

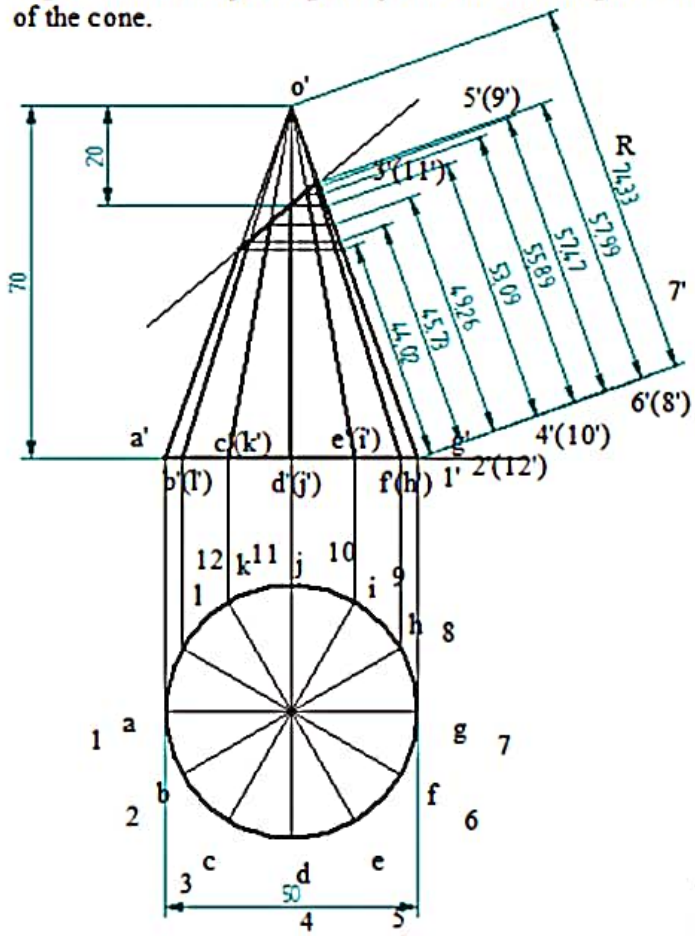


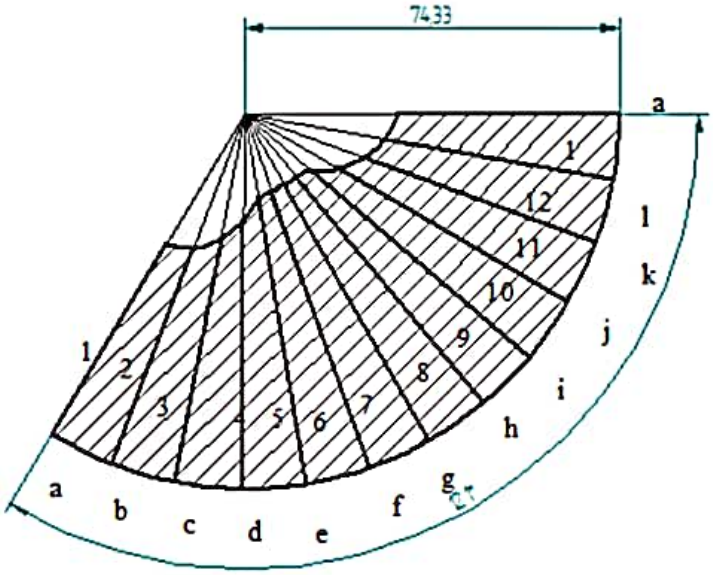
A vertical cylinder of base diameter 50 mm and axis length 70 mm is cut by a section plane perpendicular to VP, inclined at 50 degree to HP and passing through the mid point of the axis. Draw the development of the lateral surface of the cylinder.



d=50, r=25 C=2*pi*r, =2*pi*25, =157.07 mm

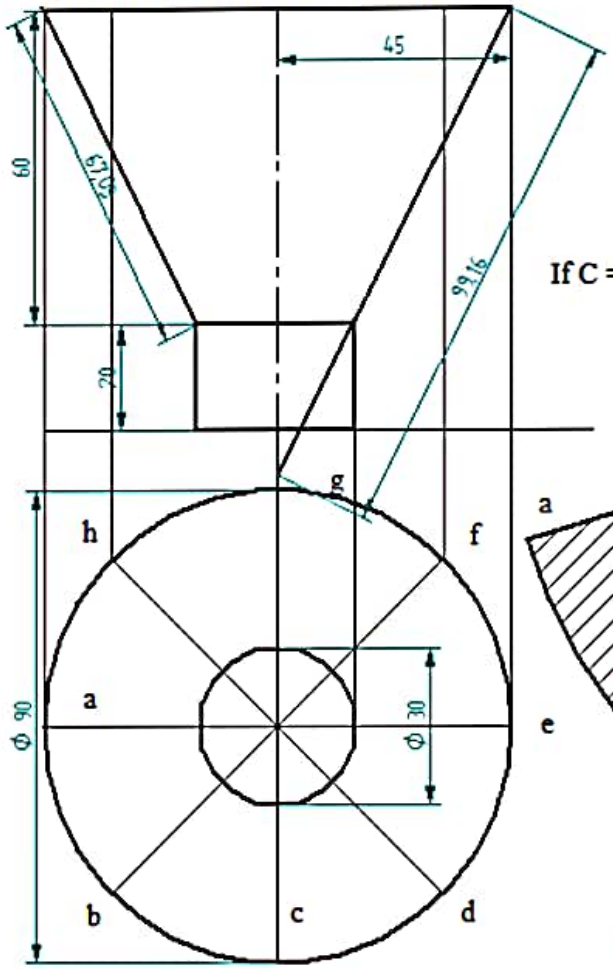
A cone base diameter 50 mm and axis length 70 mm is cut by a section plane perpendicular to VP, inclined at 40 degree to HP and passing at a point 20 mm along the axis from the apex. Draw the development of the lateral surface of the cone.

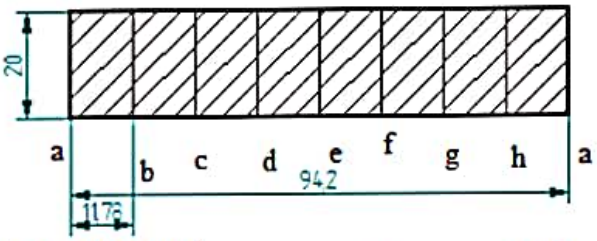




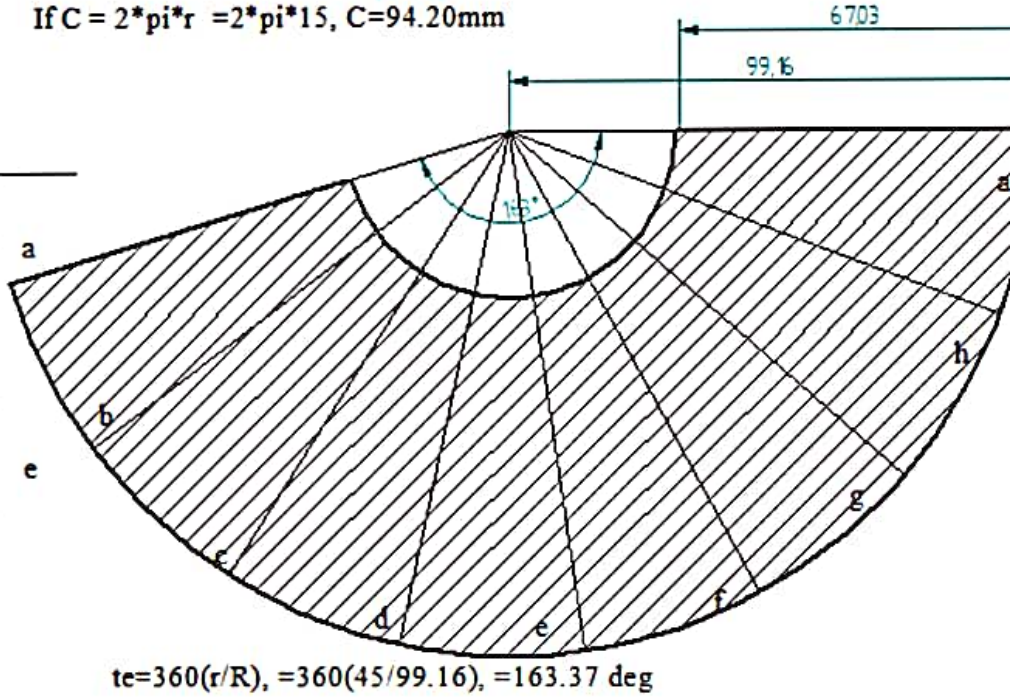
d=50 r=25 R=74.33, te= 360*(r/R) = 360*(25/74.33), =121.08

Draw the development of the lateral surface of the funnel consisting of a cylinder and frustum of a cone. The diameter of the cylinder is 30 mm and top face diameter of the funnel is 90 mm. The height of the frustum of the cone and cylinder are equal to 60 mm and 20 mm respectively.



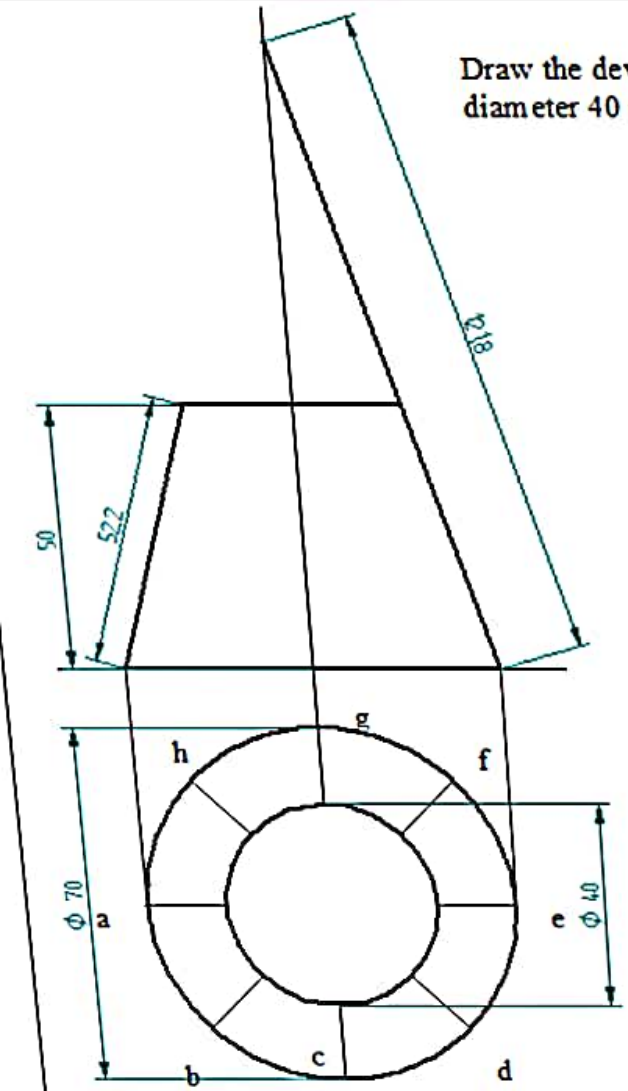


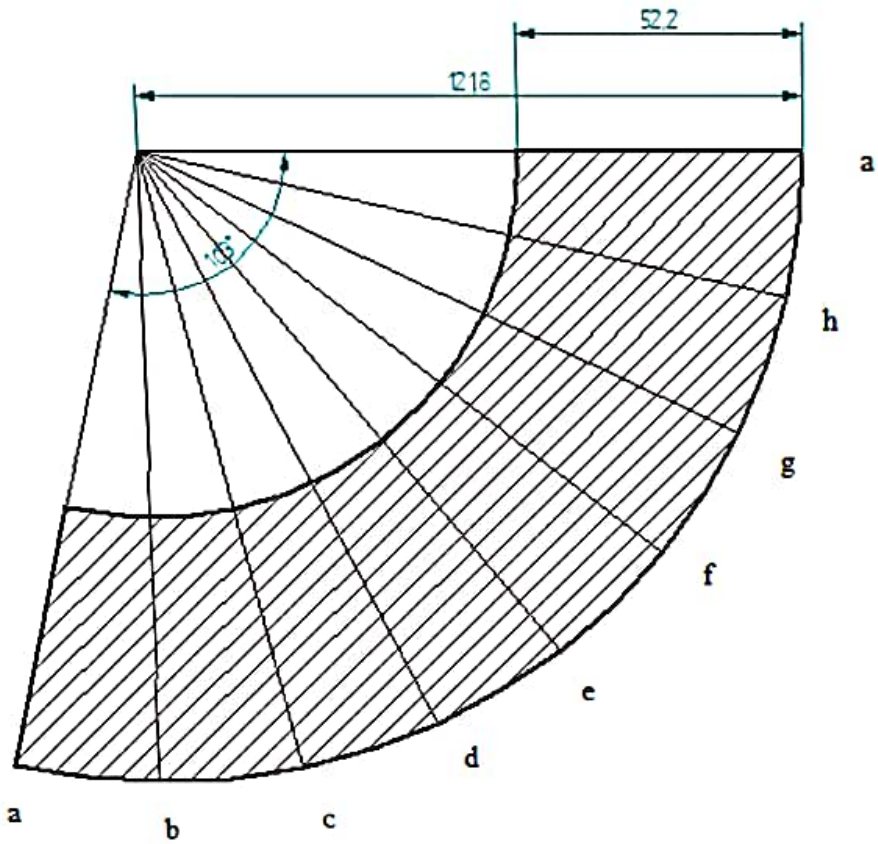
If C = 2*pi*r =2*pi*15, C=94.20mm



te=360(r/R), =360(45/99.16), =163.37 deg

Draw the development of a frustum of a cone of base diameter 70 mm, top diameter 40 mm and height 50 mm.





te=360*(r/R), =360(35/121.8), =103.45deg

A rectangular prism of base side 20 mm x 40 mm and axis length 60 mm is resting on HP on its base such that the longer edge is parallel to VP. It is cut by a section plane inclined at 40 degrees to HP, perpendicular to VP and passing through midpoint of the axis. Draw the development of the truncated prism