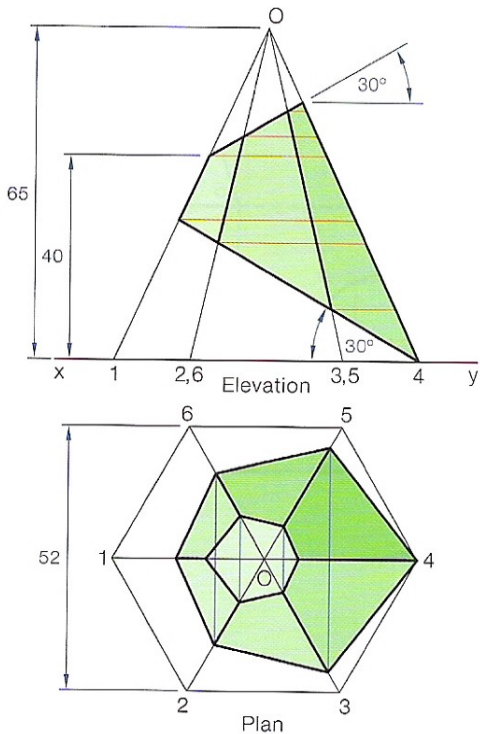


- (1) Draw the plan and elevation of the cut pyramid.
- (2) Develop the surface of the complete pyramid.



The plan and elevation of a hexagonal-based pyramid which is cut top and bottom at an angle of 30° . Draw the complete surface development. Fig. 11.15

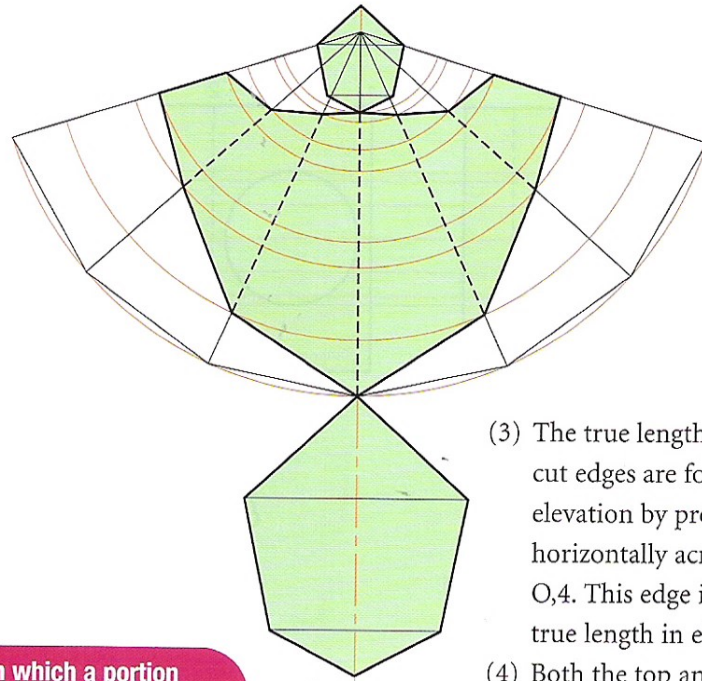


Fig. 11.15

- (3) The true length of all the cut edges are found in elevation by projecting horizontally across to edge O,4. This edge is seen as a true length in elevation.
- (4) Both the top and base are found by taking lengths from the elevation and widths from the plan.

The elevation of a right circular cone from which a portion has been cut away by a cylindrical surface is shown in Fig. 11.16. Draw the surface development of the curved surface of the cone.

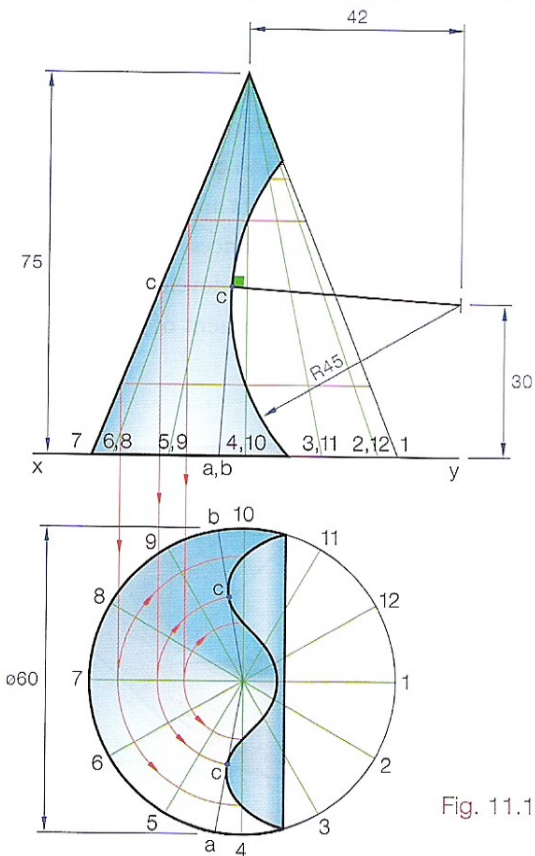
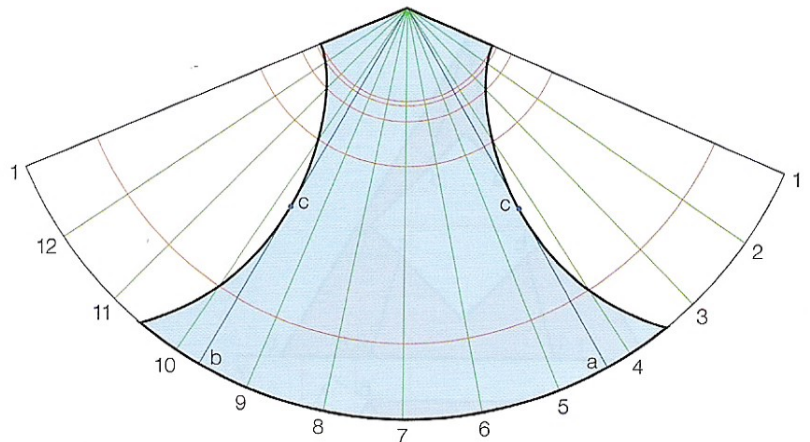


Fig. 11.16



- (1) Divide the plan into 12 equal parts giving generators.
- (2) Develop the full curved surface of the cone.
- (3) Where generators are cut in, elevation will find points in the plan.
- (4) The true length of each cut generator must be found before locating points on the development.
- (5) An extra generator is found as a tangent to the arc in elevation to find an extra point c both in plan and on the development.

Activities

Q1. TO Q3.

Figures 11.17 to 11.19 show pictorial views of solids. In each case draw a plan and elevation and a complete surface development.

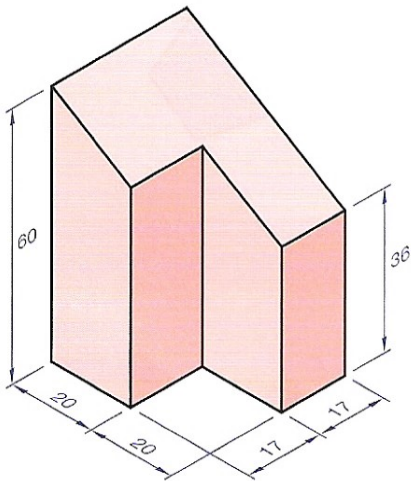


Fig. 11.17

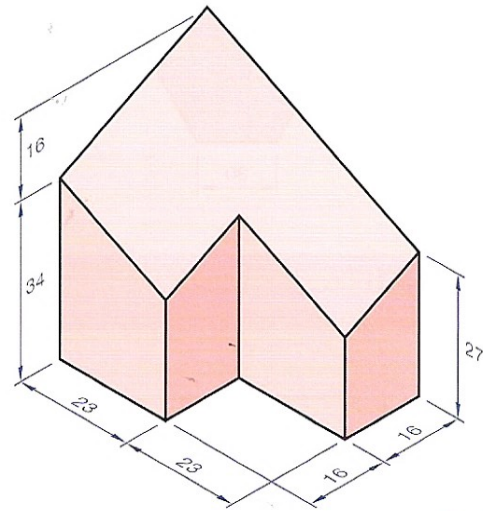


Fig. 11.18

Q1. Fig. 11.17

Q2. Fig. 11.18

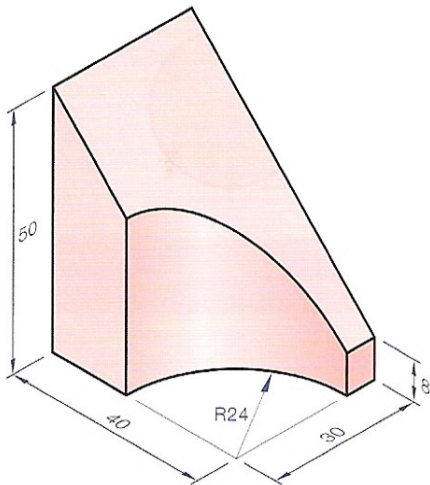


Fig. 11.19

Q3. Fig. 11.19

Q4. TO Q11.

Figures 11.20 to 11.27 show the plans and elevations of prisms and cylinders. In each case draw the given views and draw the surface development of the solids.

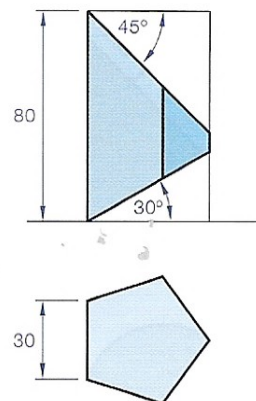


Fig. 11.20

Q4. Fig. 11.20

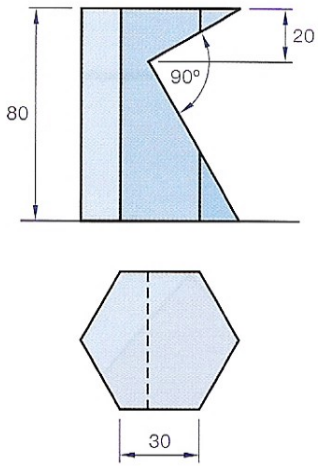


Fig. 11.21

Q5. Fig. 11.21

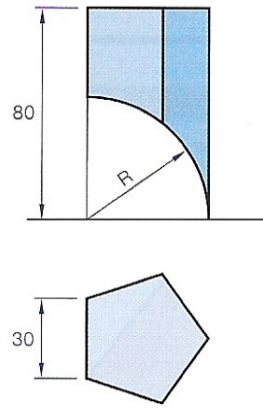


Fig. 11.22

Q6. Fig. 11.22

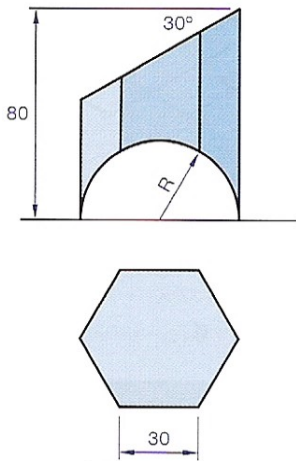


Fig. 11.23

Q7. Fig. 11.23

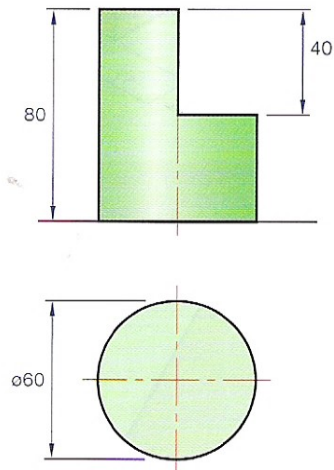


Fig. 11.24

Q8. Fig. 11.24

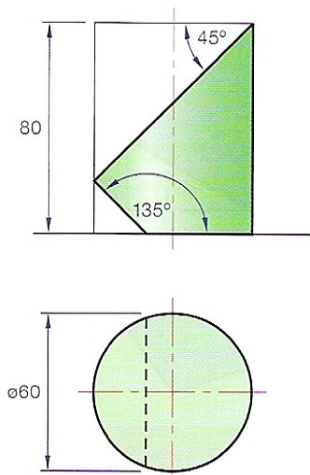


Fig. 11.25

Q9. Fig. 11.25

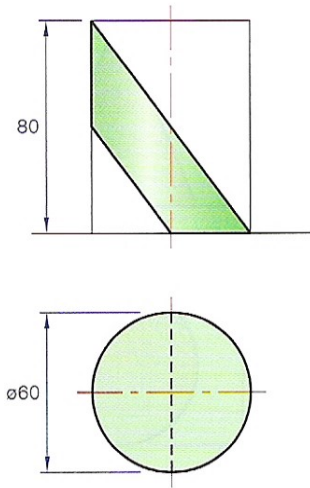


Fig. 11.26

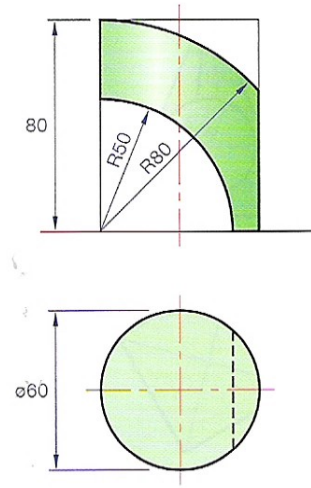


Fig. 11.27

Q10. Fig. 11.26

Q11. Fig. 11.27

Q12. TO Q19.

Figures 11.28 to 11.35 show incomplete plans and elevations of pyramids and cones. In each case complete the given views and draw the surface development of the solid.

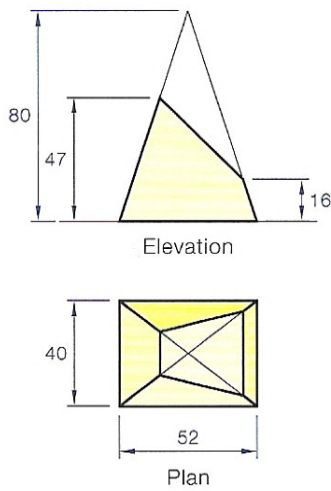


Fig. 11.28

Q12. Fig. 11.28

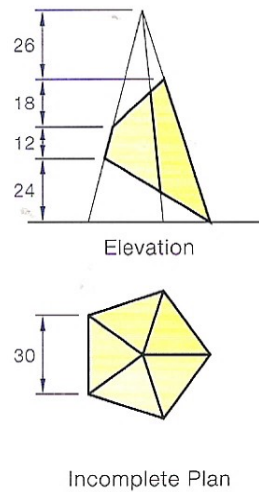


Fig. 11.29

Q13. Fig. 11.29

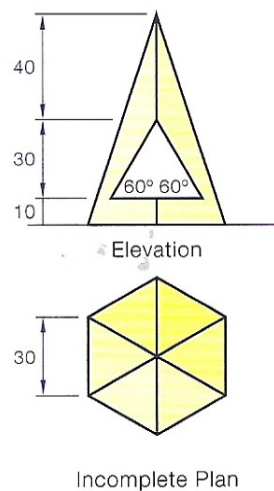


Fig. 11.30

Q14. Fig. 11.30

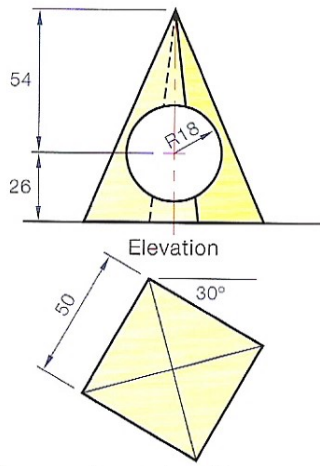


Fig. 11.31 Incomplete Plan

Q15. Fig. 11.31

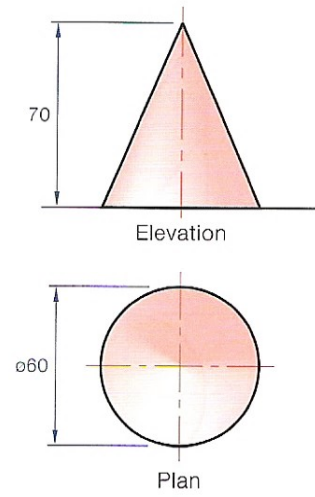


Fig. 11.32

Q16. Fig. 11.32

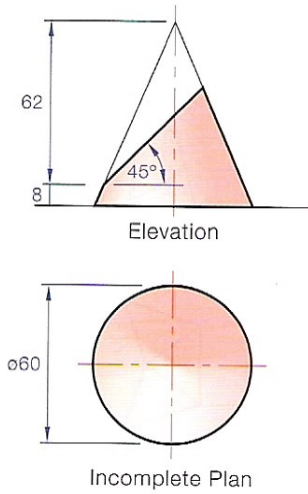


Fig. 11.33

Q17. Fig. 11.33

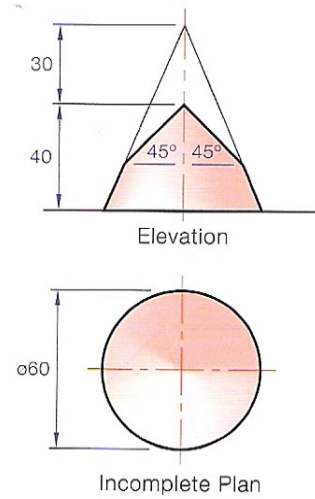


Fig. 11.34

Q18. Fig. 11.34

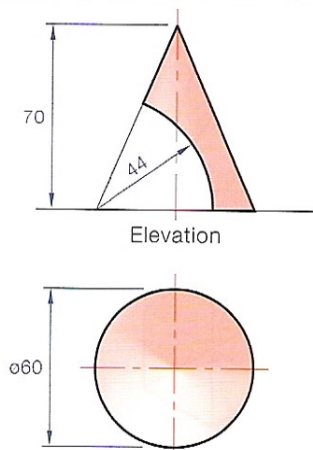


Fig. 11.35 Incomplete Plan

Q19. Fig. 11.35