Class 8
Important Formulas

Chapter 10 - Visualising Solid Shapes

I. A solid shape bounded by polygons is called a polyhedron.

2. Polygons forming a polyhedron are known as its faces.

3. Line segments common to intersecting faces of a polyhedron are known as its edges.

4. Points of intersection of edges of a polyhedron are known as its vertices.

5. A polyhedron is said to be a regular polyhedron if its faces are made up of regular polygons and the same number of faces meet at each vertex.

6. If the line segment joining any two points on the surface of a polyhedron entirely lies inside or on the polyhedron, then it is said to be a convex polyhedron.

7. A prism is a solid, whose side faces are parallelograms and whose ends (or bases) are congruent parallel polygons.

8. A prism is called a regular prism if ends are regular polygons.

9. A prism is called a right prism if its lateral edges are perpendicular to its ends (bases). Otherwise it is said to be an oblique prism.

10. A prism is called a triangular prism if its ends are triangles.

11. A right prism is called a right triangular prism if its ends are triangles.

12. A pyramid is a polyhedron whose base is a Polygon of any number of sides and whose other faces are triangles with a common vertex.

13. A pyramid is said to right pyramid if the perpendicular dropped from the vertex on the base meets the base at its central point i.e. the centre of the inscribed or circumscribed circle. In other words, the vertex of the pyramid lies on the perpendicular to the base drawn through its centre. Otherwise, the pyramid is called an oblique prism

14. A pyramid is said to be a regular pyramid if its base is a regular figure i.e. all sides of its base are equal.

15. A pyramid is called a triangular pyramid if its base is a triangle. A triangular pyramid is also called a tetrahedron

16. A pyramid is called a quadrilateral pyramid if its base is a quadrilateral.

17. A platonic solid is a polyhedron. There are exactly five platonic solids.

18. A net for a 3-D shape is a sort of Skelton-outline in two dimension which, when folded, results in three dimensional shape.