

CLASS 8 · HOTS · OLYMPIAD PREPARATION · DPP SHEET

Chapter 13: HOTS: Exploring Some Geometric Themes (Class 8)

Daily practice problems: 8 questions with an answer key

Try every question on your own first. The answer key is on the last page.

1. Find the number of faces, edges and vertices of a triangular pyramid (tetrahedron).
2. A solid has 8 vertices and 6 faces. How many edges does it have?
3. How many shaded triangles are left in a Sierpinski triangle after 4 steps?
4. A Koch step multiplies the length by $\frac{4}{3}$. Find the length of a segment of length 1 after 3 steps.
5. How many rectangles are there in the net of a cuboid?
6. A solid has 12 edges and 6 faces. Find the number of vertices.
7. How many faces does a prism with a hexagonal base have?
8. What is the top view of a cone standing on its base?

Answer Key

1. 4 faces, 6 edges and 4 vertices.
2. 12.
3. 81.
4. $\frac{64}{27}$.
5. 6.
6. 8.
7. 8 (two hexagons and six rectangles).
8. A circle (with the tip at its centre).

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