

Stage 5 Mathematics 0096
Cambridge – 3D Shapes – Orientations (5Gg.04)
Wednesday 7 October 2026

Section A: Knowledge and Comprehension (Questions 1–5)

1. Name the 3D shape that looks like a circle when viewed from directly above, but like a triangle when viewed from the side. (1 mark)

Answer: _____

2. State what shape a cylinder appears to be when viewed directly from the top. (1 mark)

Answer: _____

3. True or False: Rotating a 3D shape changes its actual physical properties (such as its number of faces and vertices). (1 mark)

Answer: _____

4. State the 2D shape you see if you look directly at the front face of a cube. (1 mark)

Answer: _____

5. Describe how a rectangular cuboid appears when viewed from the end (side view) compared to its front view if dimensions differ. (1 mark)

Answer: _____

Section B: Application, Analysis, and Synthesis (Questions 6–10)

6. A building block model made of stacked cubes is viewed from above. If the top view shows a 3×3 square grid filled completely, state how many unit cubes form the top layer. (2 marks)

Answer: _____ cubes

7. A cone is placed upright on a table. A student sketches two views: View A is a circle, and View B is a triangle. Identify which view represents the top view. (2 marks)

Answer: View _____

8. A rectangular block is 5 cm high, 4 cm wide, and 2 cm deep. If you sketch the front view, calculate the area of that 2D rectangular projection. (2 marks)

Answer: _____ cm^2

9. A student builds a 3D structure using 4 interlocking cubes arranged in an L-shape. If viewed from the front, 3 squares are visible. If viewed from the top, how many squares are visible? (2 marks)

Answer: _____ squares

10. A square-based pyramid is viewed from directly above. Describe the 2D shape of this top projection, including its internal lines. (2 marks)

Answer: _____