Guide to: 3D shapes

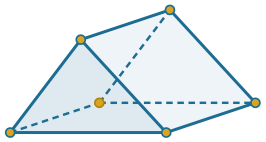
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Explanation:

On any 3D polyhedron, **Faces (*F*)** are the flat 2D surfaces, **Edges (*E*)** are the lines where two faces meet, and **Vertices (*V*)** are the corner points where edges meet. You can check your count using Euler's formula: $F + V - E = 2$.

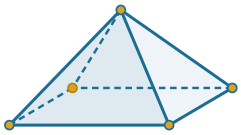
A **prism** has the same cross-section all the way through its length (e.g. cuboid, triangular prism, cylinder), whereas a **pyramid** has a polygon base with triangular faces meeting at a single apex point at the top.

Example 1: Write down the faces, edges, and vertices of a **triangular prism**.



- **Faces:** 2 triangles + 3 rectangles = **5**
- **Edges:** 3 + 3 + 3 = **9**; **Vertices:** 3 + 3 = **6**

Example 2: Write down the faces, edges, and vertices of a **square-based pyramid**.



- **Faces:** 1 square base + 4 triangles = **5**
- **Edges:** 4 + 4 = **8**; **Vertices:** 4 + 1 apex = **5**

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