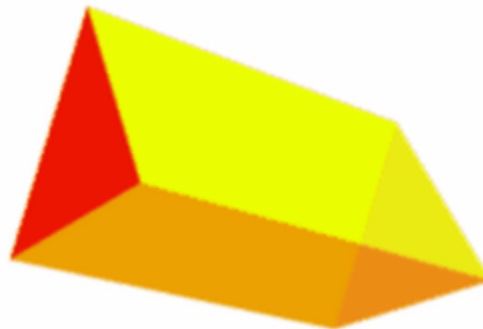
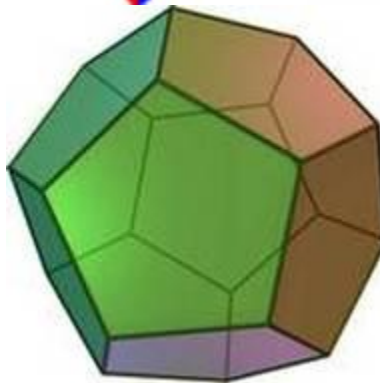
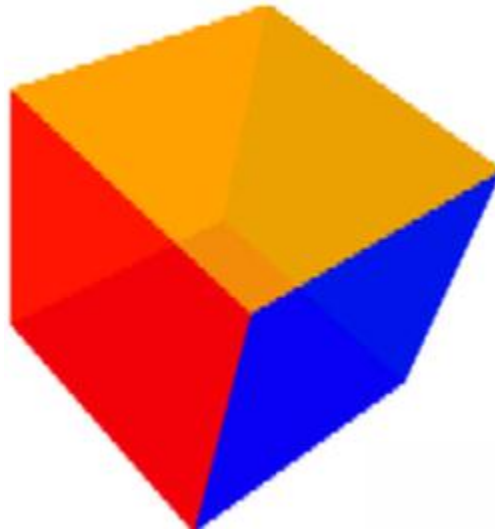
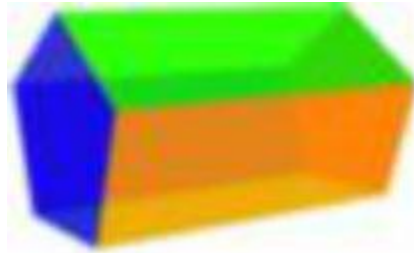


# Polyhedrons

- A **polyhedron** is a solid with flat faces
- (from Greek poly- meaning "many" and -edron meaning "face").
- So, to be a polyhedron there should be **no curved surfaces**.



## That's Interesting

- Counting Faces, Vertices and Edges

If you count the number of faces (the flat surfaces), vertices (corner points), and edges of a polyhedron, you can discover an interesting thing:

The number of **faces** *plus* the number of **vertices** *minus* the number of **edges** equals **2**

This can be written neatly as a little equation:

$$F + V - E = 2$$

## Examples of the above equations



This cube has:

- 6 Faces
- 8 Vertices (corner points)
- 12 Edges

$$F + V - E = 6+8-12 = 2$$

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## Example 2



This prism has:

- 5 Faces
- 6 Vertices (corner points)
- 9 Edges

$$F + V - E = 5+6-9 = 2$$