Visualizing shapes Ex 19.1 Q1

Answer :

The least number of planes that can enclose a solid is 4.
Tetrahedron is a solid with four planes (faces).

Visualizing shapes Ex 19.1 Q2

Answer :

(i)
No, because in order to complete a polyhedron, we need at least four triangular faces.
(ii)
Yes, a polyhedron with 4 triangular faces is a tetrahedron.
(iii)
Yes, with the help of a square bottom and four triangle faces, we can form a pyramid.

Visualizing shapes Ex 19.1 Q3

Answer :

Yes, it is possible to have a polyhedron with any number of faces.
The only condition is that there should be at least four faces.
This is because there is no possible polyhedron with 3 or less faces.

Visualizing shapes Ex 19.1 Q4

Answer :

Yes, a square prism and a cube are the same.
Both of them have 6 faces, 8 vertices and 12 edges.
The only difference is that a cube has 6 equal faces, while a square prism has a shape like a faces, one at the top and the other at the bottom and with, possibly, 4 rectangular faces in

********** END **********