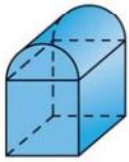


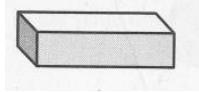
Unit 12- Worksheet #1: Exploring Solids

Determine whether the solid is a polyhedron. If it is, name the polyhedron. Explain your reasoning.

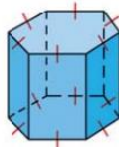
1.



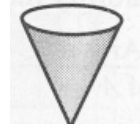
2.



3.



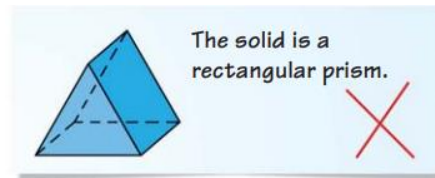
4.



5.



6. Describe and correct the error in identifying the solid.



Use Euler's Theorem to find the value of n .

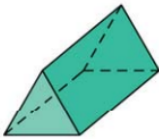
7. Faces: n
 Vertices: 4
 Edges: 6

8. Faces: 10
 Vertices: n
 Edges: 24

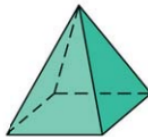
9. Faces: 14
 Vertices: 24
 Edges: n

Name the polyhedron then find the number of faces, vertices and edges of the polyhedron. Check your answers using Euler's Theorem.

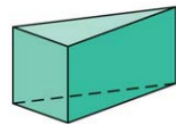
10.



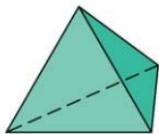
11.



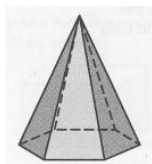
12.



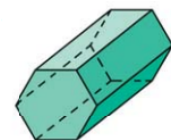
13.



14.

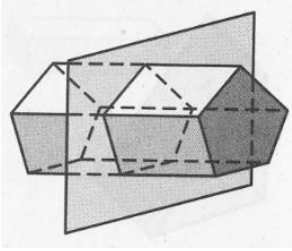


15.

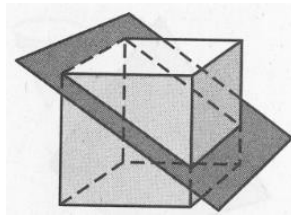


Describe the cross section formed by the intersection of the plane and the solid.

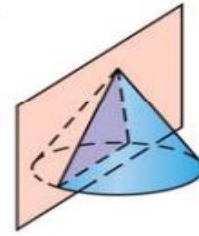
16.



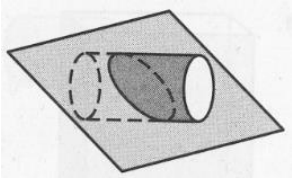
17.



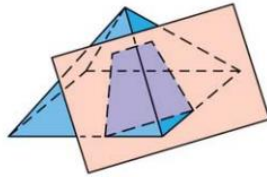
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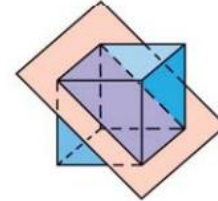
19.



20.



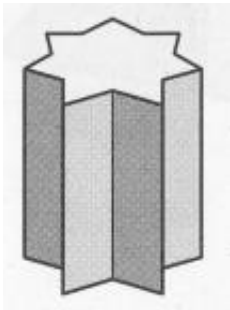
21.



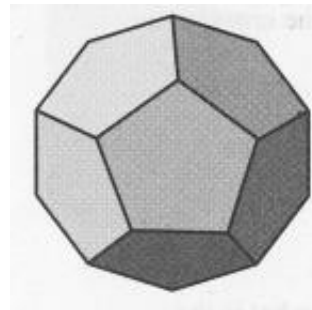
22. Describe and correct the error in determining that a tetrahedron has 4 faces, 4 edges and 6 vertices.

Determine whether the solid is convex or concave.

23.



24.



Sketch the polyhedron.

25. Square pyramid

26. Square prism