Practice
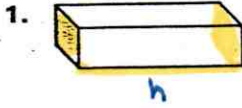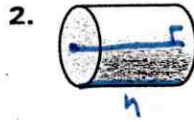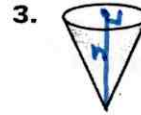**12.1** For use with pages 792–801

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

1.

Rectangular
Prism

2.

cylinder

3.

Cone

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

4. Faces: n
   Vertices: 4
   Edges: 6

5. Faces: 10
   Vertices: n
   Edges: 24

6. Faces: 14
   Vertices: 24
   Edges: n

Sketch the polyhedron.

7. Triangular pyramid

8. Pentagonal pyramid

9. Hexagonal prism
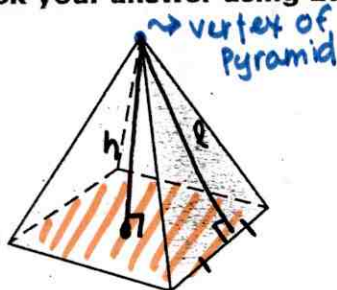
Name _____   Date _____

shade the base

~~Find the number of faces, vertices, and edges of the polyhedron.~~ Name the solid
~~Check your answer using Euler's Theorem.~~
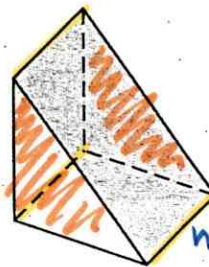
10.
→ vertex of pyramid

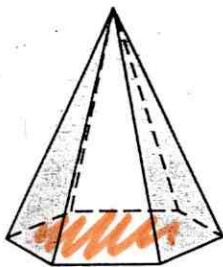h ℓ n

Rectangular Pyramid
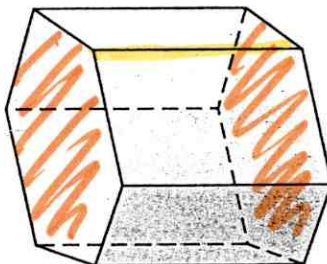
11.
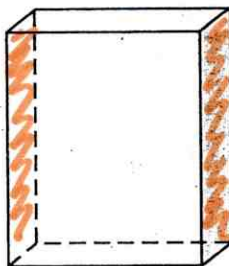
Rectangular Prism

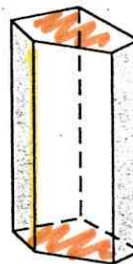12.

n

Triangular Prism

13.
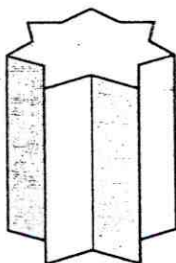
Hexagonal Pyramid

14.

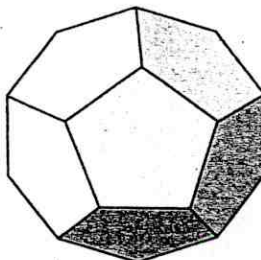Hexagonal Prism

15.

Pentagonal Prism

16. **Visual Thinking** An architect is designing a contemporary office building in the shape of a pyramid. The building will have eight sides. What is the shape of the base of the building?

Determine whether the solid is *convex* or *concave*.

17.

18.

19.