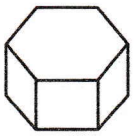
Name _____ Date _____

Exploring Solid Figures

Name each solid. Then write the number of vertices (V), edges (E), and faces (F).

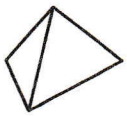
1. 

V _____

E _____

F _____

_____

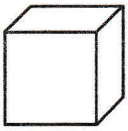
2. 

V _____

E _____

F _____

_____

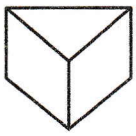
3. 

V _____

E _____

F _____

_____

4. 

V _____

E _____

F _____

_____

Name the shapes needed and the number of each you would use to build the solid.

5. cylinder

_____

6. square pyramid

_____

7. rectangular prism

_____

Solve.

8. Shawn has four congruent triangles. What solid figure can he make?

_____

9. Add the number of faces and vertices in each figure in Exercises 1-4. Compare this sum to the number of edges. What do you notice?

_____

_____

_____

10. Janna has four congruent triangles and a square. What solid figure can she make?

_____

LOGICAL REASONING

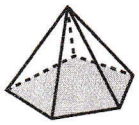
11. Kasa, Lola, and Leroy live in Kentucky, Iowa, and Louisiana. No one lives in a state that begins with the same letter as the person's name. Lola and the person from Iowa went to the same university. Where does each person live?

_____

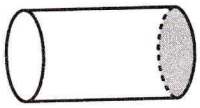
Name _____ Date _____

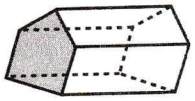
Three-Dimensional Figures

Name each figure.

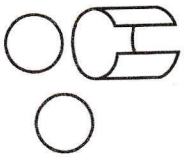
1. 
_____

2. 
_____

3. 
_____

4. 
_____

The faces, or surfaces, of some three-dimensional figures are shown. Name the figure. Is each a polyhedron? Write *yes* or *no*.

5. 
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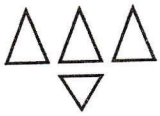
_____

6. 
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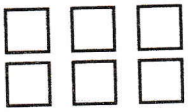
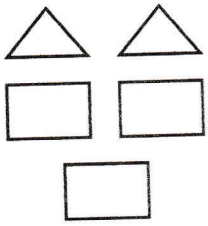
_____

7. 
_____
_____

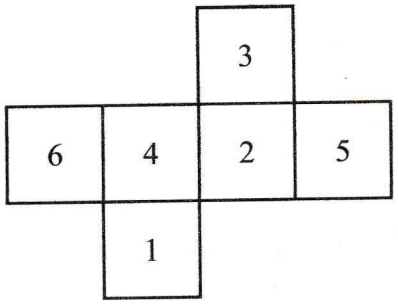
8. 
_____
_____

Complete the table.

	Polyhedron	Number of Faces	Number of Vertices	Number of Edges
9.	pentagonal prism			
10.	*pentagonal pyramid*			
11.	*octagonal prism*			
12.	octagonal pyramid			

VISUAL THINKING

Imagine a cube formed by folding the pattern shown.



13. Which faces would be opposite each other? Write the pairs of numbers of these faces.

_____