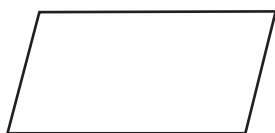Name _____

Chapter Review

1. Fran drew a triangle with 3 sides of different lengths and 1 right angle. Which term accurately describes the triangle? Mark all that apply.

Ⓐ isosceles   Ⓒ acute

Ⓑ scalene   Ⓓ right

2. Jenvieve draws a quadrilateral with 2 pairs of opposite sides that are parallel. The figure has no right angles. Draw and name two figures that she could have drawn.

3. Mr. Delgado sees this sign while he is driving. For numbers 3a–3b, choose the values and term that correctly describes the shape Mr. Delgado saw.

YIELD
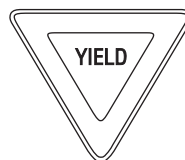
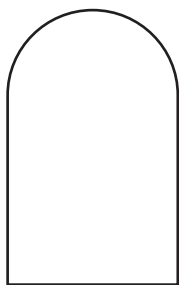3a. The figure has | 3 / 4 / 5 | sides and | 0 / 2 / 3 | vertices.

3b. All of the sides are the same length, so the figure is | not a polygon / a regular polygon / not a regular polygon | .

4. Is this figure a polygon? Explain.

_____

5. Match each figure with its number of vertices. Not every number of vertices will be used.

trapezoid　　　●　　　　　● 2 vertices

quadrilateral　●　　　　　● 3 vertices

obtuse scalene ●　　　　　● 4 vertices
triangle
rhombus　　　●　　　　　● 5 vertices

6. Chuck is making a poster about polyhedrons for his math class. He will draw figures and organize them in different sections of the poster.

Part A

Chuck wants to draw three-dimensional figures whose lateral faces are rectangles. He says he can draw prisms and pyramids. Do you agree? Explain your answer.

Part B

Chuck says that he can draw a cylinder on his polyhedron poster because it has a pair of bases that are the same size and shape. Is Chuck correct? Explain your reasoning.

7. Javier drew the shape shown. For numbers 7a–7b, choose the values and term that correctly describe the shape Javier drew.
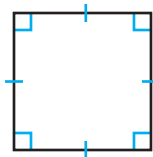
7a.   The figure has | 2 / 3 / 4 | sides and | 1 / 2 / 4 | angles.
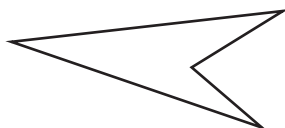
7b.   The figure is a | regular triangle / regular polyhedron / regular quadrilateral | .

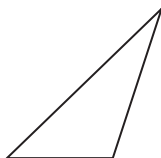**8.** Which words describe this figure? Mark all that apply.

(A)   triangle

(B)   quadrilateral

(C)   trapezoid

(D)   polygon

9. Nathan drew a scalene, obtuse triangle. For numbers 9a–9c, choose Yes or No to indicate whether the figure shown could be the triangle that Nathan drew.
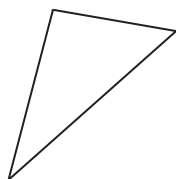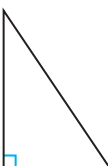
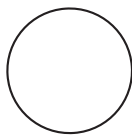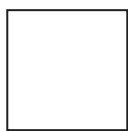9a.   ○ Yes   ○ No

9b.   ○ Yes   ○ No

9c.   ○ Yes   ○ No

10. Tell whether the figure is a *polygon*, a *polyhedron*, or *neither*.
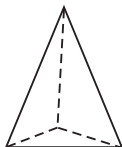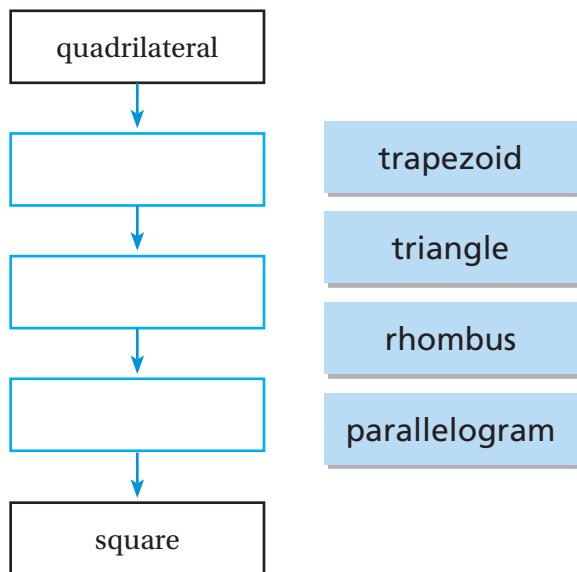
10a. ⭘ _____

10b. ▢ _____

10c. △ _____

11. Mario is making a diagram that shows the relationship between different kinds of quadrilaterals. In the diagram, each quadrilateral on a lower level can also be described by the quadrilateral(s) above it on higher levels.

Part A

Complete the diagram by writing the name of one figure from the tiles in each box. Not every figure will be used.
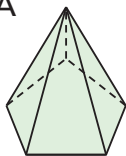
```
┌─────────────────┐
│  quadrilateral  │
└────────┬────────┘
         ↓
┌─────────────────┐       ┌──────────────┐
│                 │       │  trapezoid   │
└────────┬────────┘       └──────────────┘
         ↓
┌─────────────────┐       ┌──────────────┐
│                 │       │  triangle    │
└────────┬────────┘       └──────────────┘
         ↓
┌─────────────────┐       ┌──────────────┐
│                 │       │  rhombus     │
└────────┬────────┘       └──────────────┘
         ↓                ┌──────────────┐
┌─────────────────┐       │ parallelogram│
│     square      │       └──────────────┘
└─────────────────┘
```

Part B

Mario claims that a rhombus is *sometimes* a square, but a square is *always* a rhombus. Is he correct? Explain your answer.
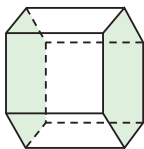
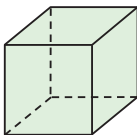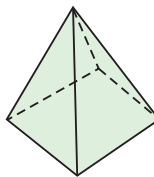**12.** Write the letter in the box that correctly describes the three-dimensional figure.

A   B   C   D

Prism		Pyramid

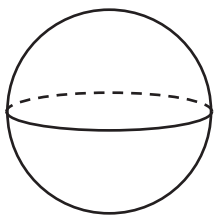**13.** How can you classify the triangle? Give all possibilities. Explain.

    13a. a triangle with two sides that are 7.3 cm long

_____

_____

    13b. a triangle with an acute angle

_____

_____

14. **14a.** Classify the three-dimensional figures. Write *cone, cylinder,* or *sphere.*

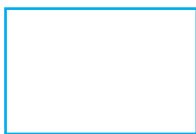_____   _____   _____
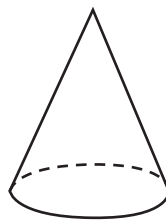
    14b. Why are these figures *not* polyhedrons?

_____

15. For numbers 15a–15c, write the name of one quadrilateral from the tiles to complete a true statement. Use each quadrilateral once only.
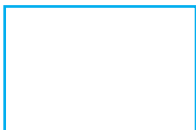
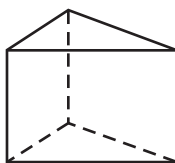15a. A [ ] is always a parallelogram.

15b. A [ ] is always a rhombus.

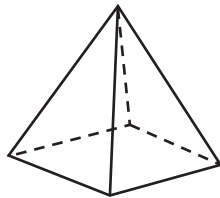15c. A [ ] is sometimes a parallelogram.
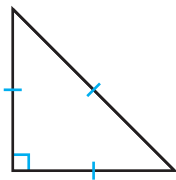
<div>

square

trapezoid

rectangle

</div>

16. How many lateral faces does this polyhedron have? What is the shape of the lateral faces?

_____

17. How many bases does this polyhedron have? What is the shape of the base?

_____

18. Select True or False for each statement about the figure.

18a. The figure has no right angles.   ○ True   ○ False

18b. The figure has two acute angles.   ○ True   ○ False

18c. The figure has two sides of equal length. ○ True   ○ False

18d. The figure is an equilateral triangle.   ○ True   ○ False