Name _____

Unit 9 Review

Review due on Friday, March 4, 2016

Test on Monday, March 7, 2016

1. Mary draws a polygon with four congruent sides and two pairs of parallel sides. She also notices that two angles are acute and two angles are obtuse. What word best describes Mary's polygon?

2. The next day Mary draws a 3-sided polygon with exactly 2 congruent sides and 2 congruent angles. What is Mary's polygon?

3. A is a type of B. B is a type of C. C is a parallelogram. What could A be?

   a. Square
   b. Trapezoid
   c. Rhombus
   d. Quadrilateral

4. Why is a square also a rhombus?

Name _____

In 5 - 11, tell whether each statement is true or false. If false, correct to make it true.

5. Every rhombus is a parallelogram.

6. Parallelograms are special rectangles.

7. A trapezoid can be square.

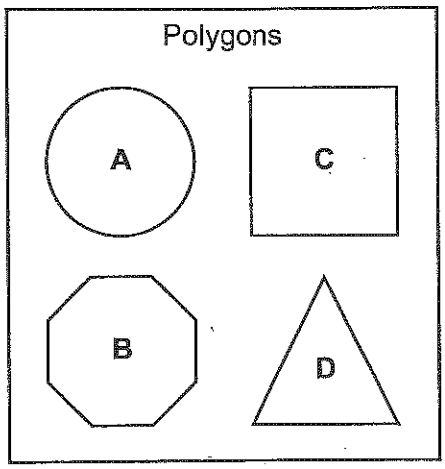
8. All rhombuses are rectangles.

9. Every trapezoid is a quadrilateral.

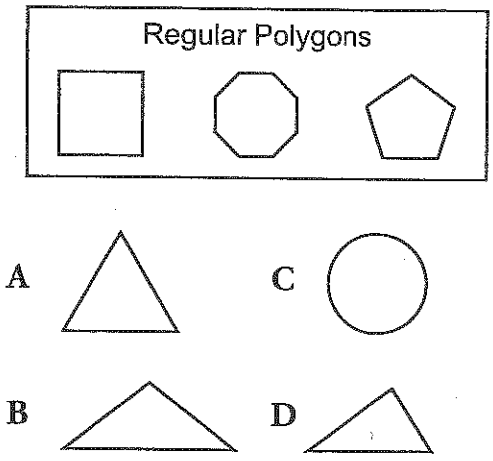
10. All rectangles are quadrilaterals.

11. All rectangles are squares.

12. Each shape belongs in the diagram below **EXCEPT**—



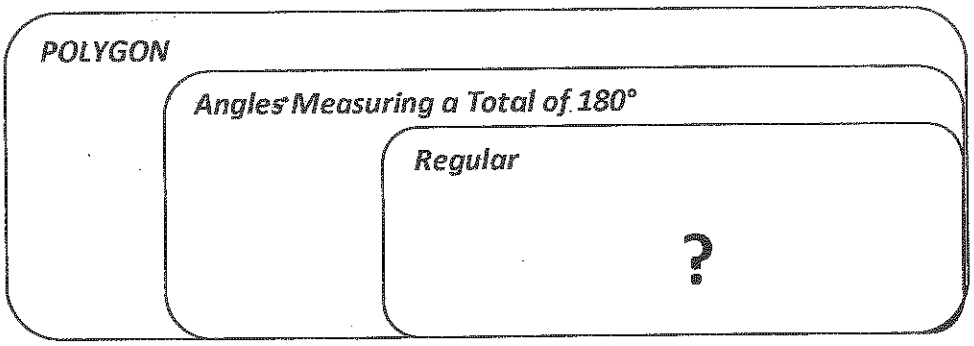
13. Which shape can be added to the box below?



14. Marisol draws a polygon with four congruent sides and two pairs of parallel sides. She also notices that two angles are acute and two angles are obtuse. What word best describes Marisol's polygon?

15.

A model is shown below.



Which figure has all of the attributes shown in the diagram?

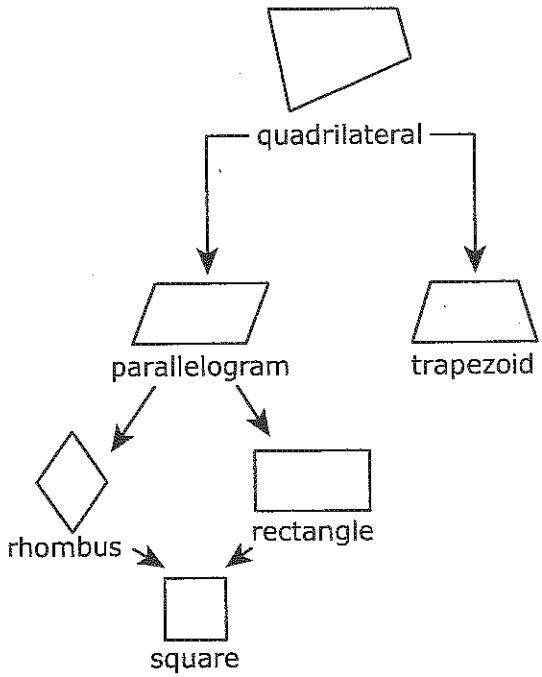
A. A square

B. An isosceles triangle

C. A quadrilateral

D. An equilateral triangle

16.



Which of the following polygons can always be classified as a rhombus?

Ⓐ Quadrilateral

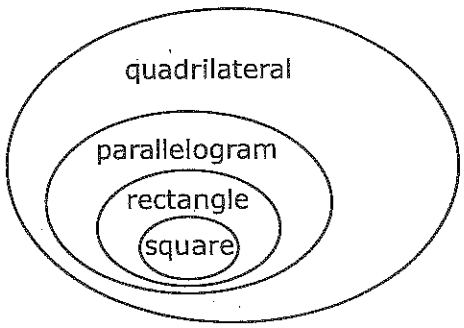
Ⓑ Trapezoid

Ⓒ Rectangle

Ⓓ Square

17.

Ashley correctly draws this Venn diagram to show the relationships between quadrilaterals, parallelograms, rectangles, and squares.



Ashley knows that every rectangle has 2 pairs of parallel sides. According to the diagram, which of these statements must also be true?

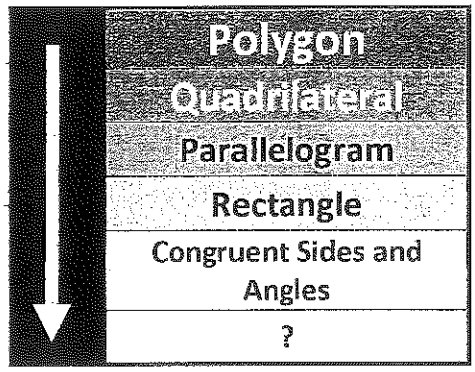
Ⓐ Every quadrilateral has 2 pairs of parallel sides.

Ⓑ Every square has 2 pairs of parallel sides.

Ⓒ Every parallelogram has all of the attributes of a square.

Ⓓ A parallelogram can never have 4 congruent sides.

18. Which figure is described by the geometry model below?



F. Rhombus

G. Trapezoid

H. Square

J. Equilateral triangle

19. Which of the following is **NOT** a true statement?

Ⓕ A quadrilateral with 2 pairs of parallel sides is a parallelogram.

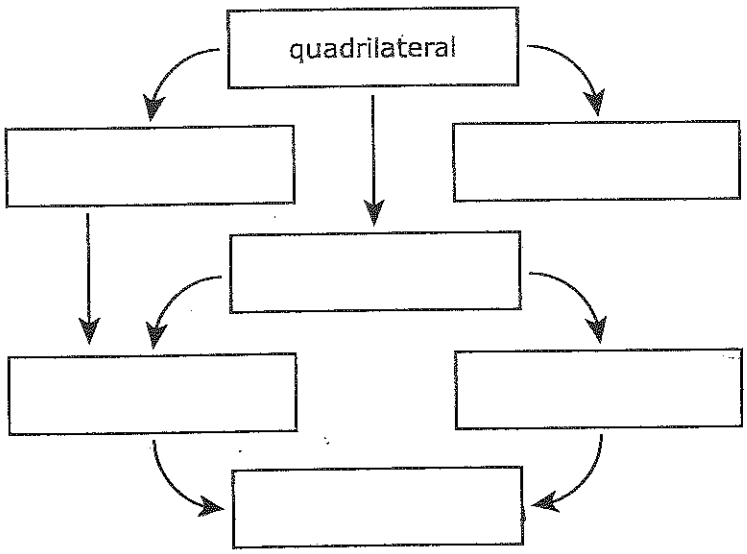
Ⓖ Every rhombus has 2 pairs of parallel sides.

Ⓗ Every quadrilateral with 4 right angles is both a rectangle and a rhombus.

Ⓙ Every rectangle is also a parallelogram.

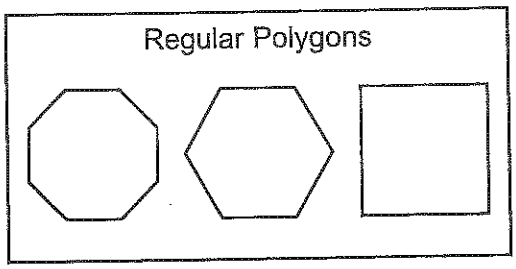
20. Finish the diagram to show the relationships between these polygons.

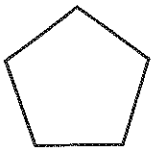
rhombus, rectangle, parallelogram, square, kite, trapezoid

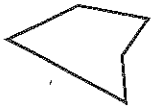


21 Use words and pictures to explain why all squares are rectangles, but not all rectangles are squares.

22 Which shape could be placed in the diagram below?



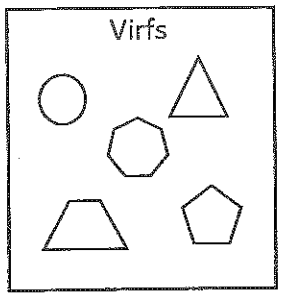
A 

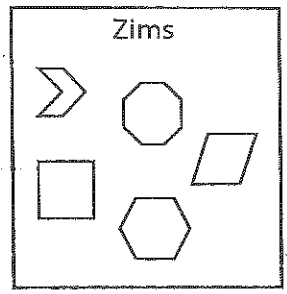
B 

C 

D 

23 Two sets are shown below.





Which figure below is a Zim, and why?

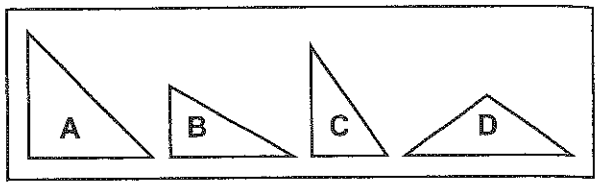
A.  is a Zim because Zims are polygons.

B.  is a Zim because Zims are quadrilaterals.

C. is a Zim because Zims have more than one set of parallel sides.

D.  is a Zim because Zims have acute angles.

Each shape belongs in the diagram below **EXCEPT**—



A Shape A
B Shape B
C Shape C
D Shape D