Name: _____

_____1. Which of these quadrilaterals cannot be a parallelogram?
A. rhombus   B. rectangle   C. trapezoid   D. square

_____2. Which quadrilaterals have four equal sides?
A. trapezoid, square   B. rectangle, square
C. rectangle, square, rhombus   D. square, rhombus

_____3. Which of these statements describes a similarity between a rectangle and a trapezoid?
A. They are both parallelograms.   B. They are both quadrilaterals.
C. They both have 4 congruent sides.   D. They both have 4 right angles.

_____4. Which statement is true?
A. All rectangles are squares.   B. Squares and rectangles have 4 congruent sides.
C. Squares and rectangles are quadrilaterals. D. Squares and rectangles are both trapezoids.

_____5. Which statement is true?
A. All quadrilaterals are squares.   B. All squares are rectangles.
C. All rectangles are squares.   D. All rhombuses are squares.

_____6. Which of these statements is always true?
A. Squares have four equal sides.
B. Rectangles have four equal sides.
C. Both squares and rectangles have four equal sides.
D. Neither squares nor rectangles have four equal sides.

_____7. Which of these figures can never be a rectangle?
A. trapezoid   B. square   C. parallelogram   D. quadrilateral

_____8. Which figure is the same as a parallelogram with four right angles?
A. rhombus   B. trapezoid   C. hexagon   D. rectangle

_____9. Which quadrilateral has only one pair of parallel sides?
A. rectangle   B. trapezoid   C. rhombus   D. square

_____10. Which figure must be a rectangle?
A. rhombus   B. trapezoid   C. square   D. parallelogram

Use the following to answer questions 8-10.
   1. *square*   **2.** *rectangle*   **3.** *parallelogram*   **4.** *trapezoid*   **5.** *rhombus*
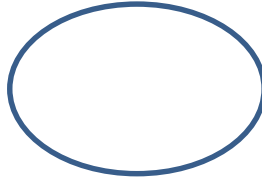
_____11. Which of these quadrilaterals must have 4 congruent sides?
A. 1,5   B. 1,2   C. 1,3   D. 1

_____12. Which of these quadrilaterals have at least 2 congruent sides?
A. 3,4,5   B. 1,2,3,5   C. 2,3,4,5   D. 4,5

_____13. Which of these quadrilaterals may not have any congruent sides?
A. 3,5   B. 4,5   C. 4   D. 3,4,5
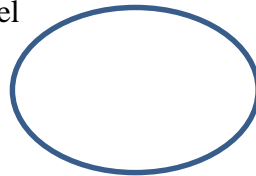
Answer the following.

14. John is cutting out a shape that has four congruent sides. One set of opposite angles has measures of 60° and another set of opposite angles with measures of 120° each. What is the specific name for the quadrilateral shape John is cutting out? (hint—sketch a figure)

_____

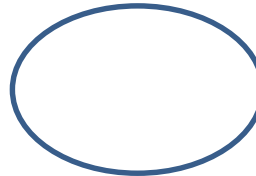15. Sketch each of the following quadrilaterals in the circle and write the best name for each.

a) A quadrilateral with exactly one pair of parallel sides and one right angle

_____

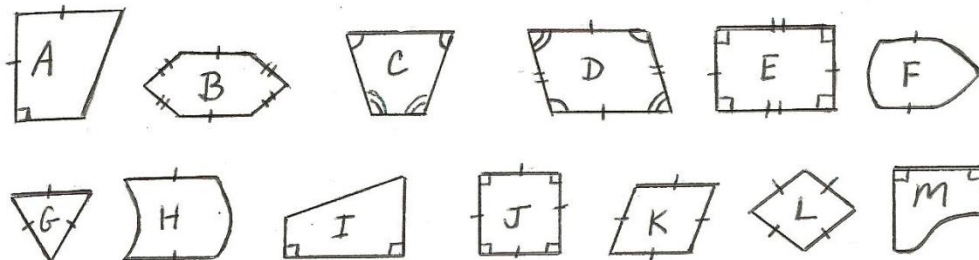b) A quadrilateral with opposite sides parallel and congruent, and four right angles

_____

c) Parallelogram with four congruent sides and opposite angles congruent

_____

16. Describe how a ***trapezoid*** and a ***parallelogram*** are different.

_____

_____

17. Describe what makes a ***rhombus*** different from a ***square***.

_____

_____

From the figures above, list the letter(s) for each of the following.
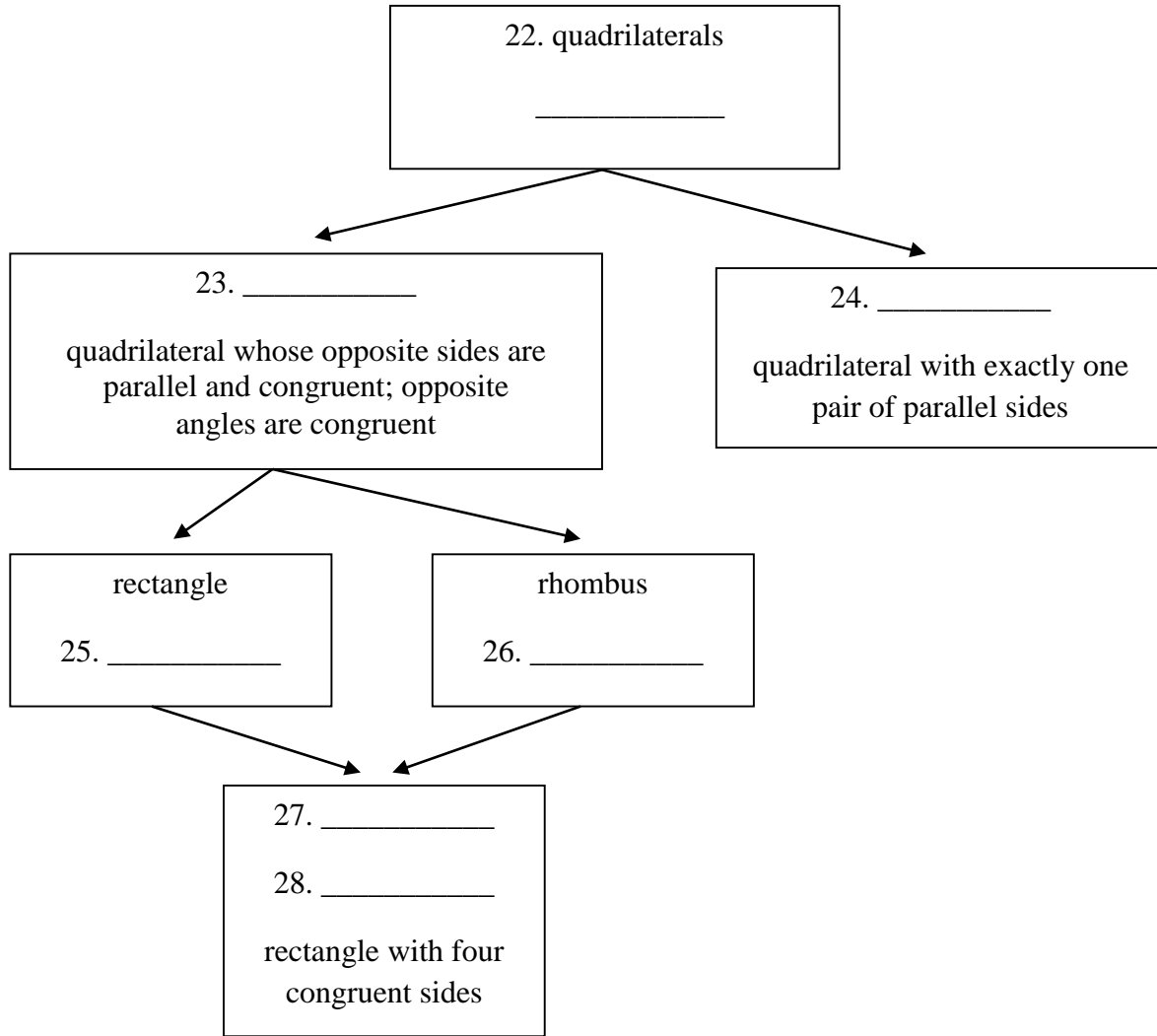
18. trapezoid _____   19. parallelogram _____

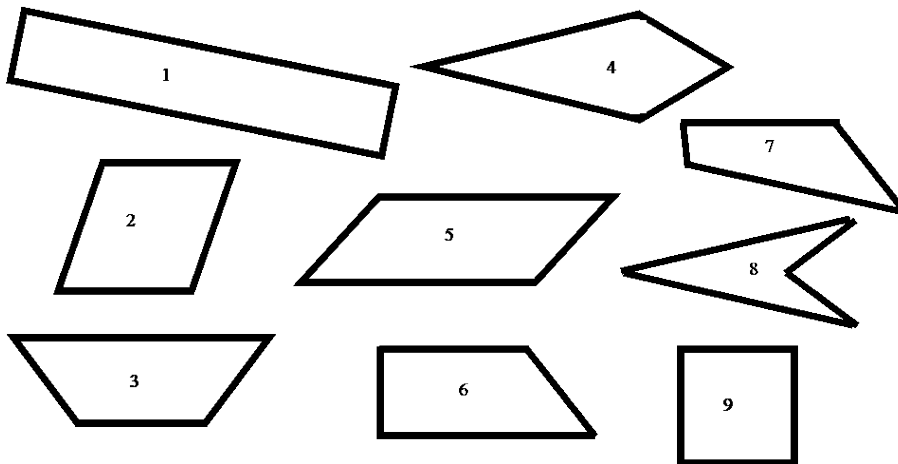20. rhombus _____   21. rectangle _____

Complete the following chart using the words/phrases below. Place letters in the correct square.

A. square   B. parallelogram   C. trapezoid
D. four-sided closed plane figure   E. parallelogram with four congruent sides
F. rhombus with four right angles   G. parallelogram with four right angles

22. quadrilaterals

_____

23. _____

quadrilateral whose opposite sides are parallel and congruent; opposite angles are congruent

24. _____

quadrilateral with exactly one pair of parallel sides

rectangle

25. _____

rhombus

26. _____

27. _____

28. _____

rectangle with four congruent sides

29. Put the number of each figure into **all** of the classification boxes it belongs. Some figures will be used more than once.
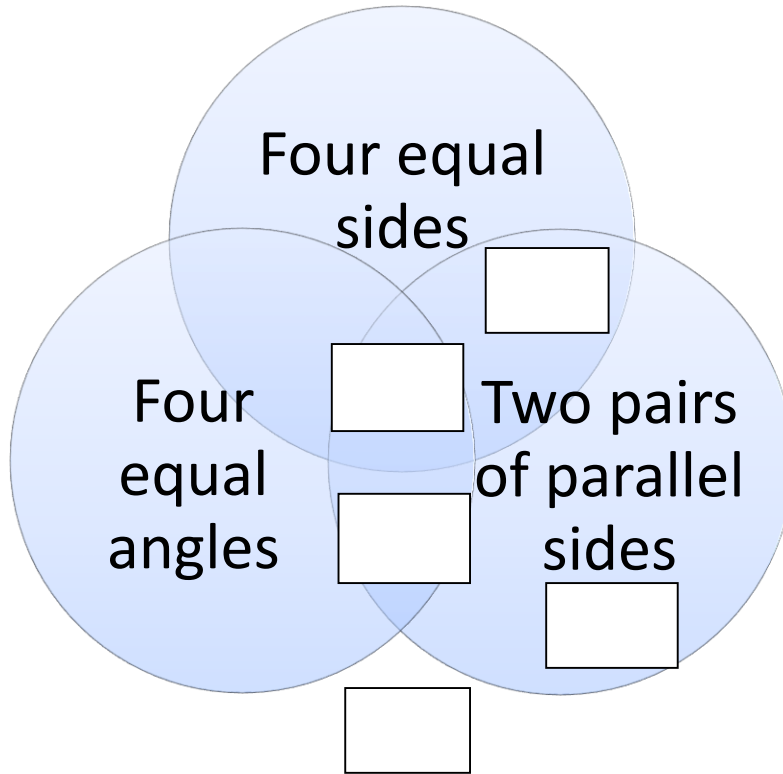
quadrilateral	
parallelogram	
rectangle	
rhombus	
square	
trapezoid	

30. Complete the Venn Diagram by placing the letter of each of the quadrilaterals in the correct box.

A. square   B. parallelogram   C. rectangle
D. rhombus   E. trapezoid

Math SOL 7.7—Quadrilaterals
Answer Key

1. C
2. D
3. B
4. C
5. B
6. A
7. A
8. D
9. B
10. C
11. A
12. B
13. C
14. Rhombus
15. a) trapezoid; drawing may vary
    b) rectangle; drawing may vary
    c) rhombus; drawing may vary
16. Answers may vary
17. Answers may vary
18. A, C, I
19. D, E, J, K, L
20. J, K, L
21. E, J
22. D
23. B
24. C
25. G
26. E
27. A
28. F
29. quadrilateral: 1, 2, 3, 4, 5, 6, 7, 8, 9
    parallelogram: 1, 2, 5, 9
    rectangle: 1, 9
    rhombus: 2, 9
    square: 9
    trapezoid: 3, 6

30.