## Geometry Study Guide - ANSWER KEY

Match the word with the correct definition.

| G | 1. polygon | a. a polygon that has all sides and angels equal |
| :--- | :--- | :--- |
| I | 2. triangle | b. a five-sided polygon |
| F | 3. quadrilateral | c. a ten-sided polygon |
| B | 4. pentagon | d. a polygon in which NOT all sides and angles are equal |
| E | 5. hexagon | e. a six-sided polygon |
| H | 6. octagon | f. a four-sided polygon |
| C | 7. decagon | g. a closed figure with straight sides |
| A | 8. regular polygon | h. an eight-sided polygon |
| D | 9. irregular polygon | i. a three-sided polygon |

## TRIANGLES

Write the name of the triangle in box.

| Sides |  |  | Angles |  |  |
| :--- | :---: | :---: | :--- | :--- | :--- |
| $\begin{array}{l}\text { 10. SCALENE } \\ \text { TRIANGLE }\end{array}$ | all acute |  |  |  |  |
| angles |  |  |  |  |  |$]$

16. How many right angles can a triangle have? 1
17. How many obtuse angles can a triangle have? 1

## Classify the triangles based on their sides and angles.

18. acute, equilateral triangle

19. obtuse, isosceles triangle

20. right, scalene triangle

21. right, isosceles triangle


## QUADRILATERALS

quadrilateral -4 sides, 4 angles, 4 vertices
trapezoid - at least 1 set of parallel sides
parallelogram - 2 pairs of parallel sides, opposite sides are congruent rectangle - 2 pairs of parallel sides, opposite sides are congruent, 4 right angles rhombus - 2 pairs of parallel sides, 4 congruent sides
square -2 pairs of parallel sides, 4 congruent sides, 4 right angles

## Identify each shape

22. trapezoid

23. rhombus

24. parallelogram

25. trapezoid

26. quadrilateral

27. rectangle



Use the diagram above to help you answer the questions.

| STATEMENT | TRUE | FALSE |
| :--- | :---: | :---: |
| 18. All rectangles are quadrilaterals. | X |  |
| 19. A rhombus is always a square. |  | X |
| 20. All trapezoids are parallelograms. |  | X |
| 21. All parallelograms are trapezoids. | X |  |
| 22. A trapezoid is sometimes a square. | X |  |
| 23. A parallelogram is sometimes a rhombus. | X |  |
| 24. A square is always a rectangle. | X |  |
| 25. A trapezoid is sometimes a square. |  |  |

