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
В	4. pentagon	d. a polygon in which NOT all sides and angles are equal
E	5. hexagon	e. a six-sided polygon
Н	6. octagon	f. a four-sided polygon
С	7. decagon	g. a closed figure with straight sides
Α	8. regular polygon	h. an eight-sided polygon
D	9. irregular polygon	i. a three-sided polygon

TRIANGLES

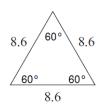
Write the name of the triangle in box.

Sides			Angles		
10. SCALENE TRIANGLE	*******	no congruent side	13. ACUTE TRIANGLE		all acute angles
11. ISOSCELES TRIANGLE	\triangle	two congruent sides	14. RIGHT TRIANGLE		one right angle
12. EQUILATERAL TRIANGLE	\triangle	all congruent sides	15. OBTUSE TRIANGLE		one obtuse angle

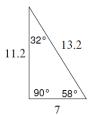
- 16. How many right angles can a triangle have? 1
- 17. How many obtuse angles can a triangle have? 1

Classify the triangles based on their sides and angles.

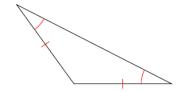
18. acute, equilateral triangle



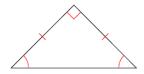
19. right, scalene triangle



20. obtuse, isosceles triangle



21. right, isosceles triangle



QUADRILATERALS

<u>quadrilateral</u> – 4 sides, 4 angles, 4 vertices

<u>trapezoid</u> – at least 1 set of parallel sides

<u>parallelogram</u> – 2 pairs of parallel sides, opposite sides are congruent

rectangle – 2 pairs of parallel sides, opposite sides are congruent, 4 right angles

<u>rhombus</u> – 2 pairs of parallel sides, 4 congruent sides

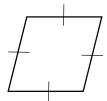
square – 2 pairs of parallel sides, 4 congruent sides, 4 right angles

Identify each shape

22. trapezoid



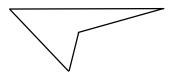
23. rhombus



24. parallelogram



25. quadrilateral

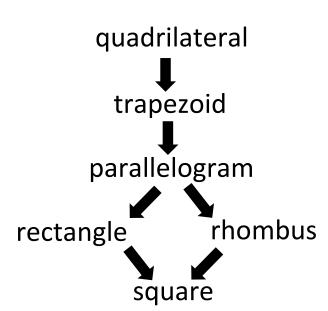


26. trapezoid



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.	X	