Algebra and Geometry Review 9

1. Find the slope of the line that contains the points (-5, 3) and (2, 7).

2. Is AAA a method that can be used to prove triangles congruent? Explain.

3. If f(x) = x² + 2 and g(x) = 3x -1, what is the value of:

$$\frac{f(2)}{g(-1)}$$

4. True or False?

   A. The diagonals of a parallelogram are congruent.

   B. The diagonals of a rhombus are perpendicular.

5. What is the x-intercept of the graph of the function y = 2x + 5?

6. What is the name of the polygon that has 35 diagonals?

7. What numbers come next?

   1, 4, 9, 16, 25, 36, _____, _____, _____

8. If a square has a perimeter of 24, what is its area?

9. At a certain ice cream shop there are 23 flavors. If you want a triple scoop of ice cream and can only use each flavor once in your order, how many different ways can you order your ice cream? (the order of scoops in your cup does not matter)

10. Find the total surface area of the right triangular prism.