Name: _____

Math 1316: Sample Mastery Quiz (Version A)

Please show all your work for computations, and write your final answers in the boxes.

1. A circle increases in size so that its radius doubles. By how much does the circumference increase? By how much does the area increase? Explain your answers.

2. Give an example of two triangles which are not similar and explain why they are not similar, or explain why all triangles are similar.

3. You measure the angles in two pentagons (5-sided polygons) and see that the two pentagons have the same five angles. Does this allow you to conclude the two pentagons are similar? Explain why or why not.

4. A right triangle has a hypotenuse of length 10 and a leg of length 7. Find the length of the third side of the triangle.

length =

5. You measure the three sides of a triangle and find they have lengths 5, 8, and 11. Determine whether this triangle is a right triangle. Justify your answer with a calculation.

Is the triangle right?