

**Due: 6/7/17 at 4:00PM**

**Instructions:** Your answers to the following questions do not need to be lengthy or written in complete sentences, but should reflect preparation for our discussion about Chapter 4 at the beginning of class.

**Questions:**

1. Which of the following is not possible: (a) a scalene acute triangle, (b) an equilateral right triangle, (c) an isosceles obtuse triangle, (d) a scalene right triangle, or (e) an isosceles right triangle?
2. Can an interior angle and an exterior angle of a triangle with the same vertex ever be congruent? If so, when?
3. If two pentagons (5-sided figures) are congruent, how many pairs of corresponding congruent parts will there be? Describe them.
4. Which combinations of three congruent sides and/or angles guarantee that two triangles will be congruent? Which combinations do not guarantee congruence?
5. Why is the AAS congruence condition a theorem, while SSS, SAS, and ASA are postulates?
6. What does "cpoctac" mean? How is it used in triangle congruence proofs?
7. How can the Isosceles Base Angles Theorem and its converse be combined into one biconditional statement?
8. Every equilateral triangle is an isosceles triangle, but the terms base, legs, base angles, and vertex angle are rarely used when talking about equilateral triangles. Why do you think this is so?

**Muddiest Point:**

What questions do you have about the notes you took in Chapter 4, or anything from this week?



**MML Homework Questions:**

Are there any MML homework problems from Chapter 4 that you would like to discuss?