☐ **DO NOW – Geometry Regents Lomac 2014-2015** **Date** 9/15 **due** 9/16 **Equilateral Triangles** **1.1**

(1) Name, Group Number, Lesson Number, Date

(2) (a) Draw line segment TU. Mark the midpoint of the segment and label it M.
(b) Draw ray VW.
(c) Draw line XY

(3) Put the DO NOW/EXIT TICKET packet away.

Name _____**Per**_____

SLO: I can construct an equilateral triangle and explain how the constructions guarantees an equilateral triangle.

☐ (1) **Notes:**

notes page, descri-ptions, scissors, tape or glue

☐ (a) Obtain "1 Construction Notes Page 1 & 2", a descriptions page, scissors, and tape or glue

☐ (b) Cut out the column of descriptions and match them with the diagrams and terms on page one of the notes (the word at the top should be "circle")

☐ (c) Listen and check your work as we go over it as a class

☐ (d) Glue or tape down the descriptions for page 1

☐ (e) Repeat b through d for column 2 of descriptions and side 2 of the notes

☐ (2) **Equilateral Triangles**

(1) Joe and Marty are playing catch in the park. Tony joins them and the boys want to stand so that the distance between any two of them is the same. Where do they stand? How do they figure this out precisely? What tool or tools could they use?

_____

_____

_____

☐ (3) **Equilateral Triangles**

compass

Use a compass and straightedge to construct an **equilateral** triangle. This is like the triangles we constructed last week, except that the sides of this triangle will be _____. Use a side length of your choosing

☐ (4) Why does this construction guarantee an **equilateral** triangle?

_____

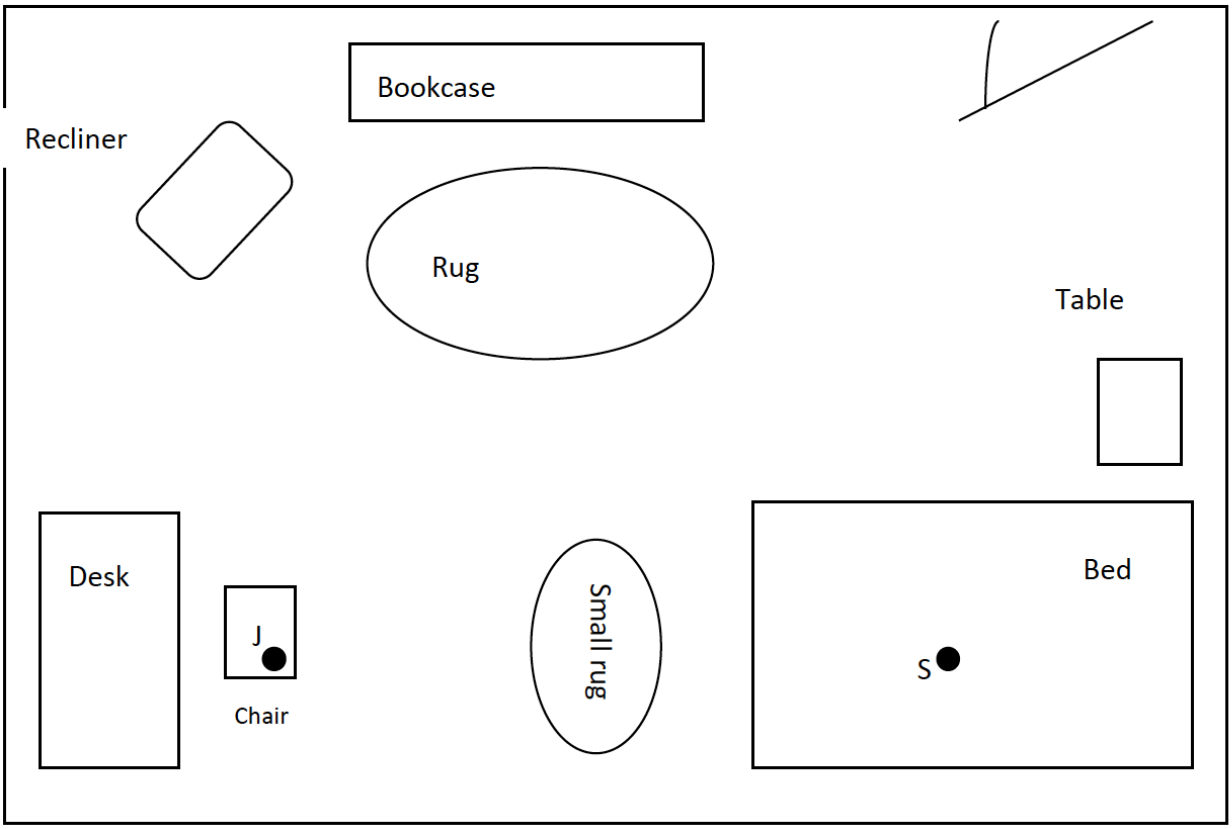
_____

_____

☐ (5) **Equilateral Triangles**

compass

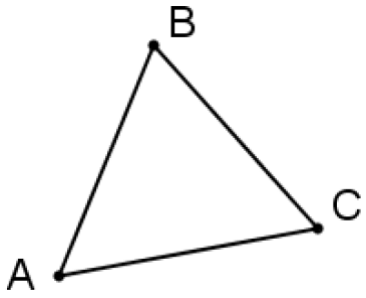
Margie has 3 cats. She has heard that cats in a room position themselves at equal distances from one another and wants to test that theory. Margie notices that Simon is in the center of her bed (at **S**), while Jolo is on her desk chair (at **J**). If the theory is true, where will she find Mack? Use the scale drawing of Margie's room shown below, together with (**only**) a compass and straightedge. Place an **M** where Mack will be if the theory is true.



☐ (6) **Exit Ticket**

compass

Triangle ABC is shown below. Is it an equilateral triangle? Justify your response



☐ (5) **Homework**:.

(1) Use your notes like flashcards. Cover everything but the diagrams and guess the term. Then cover the diagram and term and use the descriptions to guess the term. Then cover everything except the term and picture the diagram and try to describe the term.

(2) Construct 3 to 5 equilateral triangles on a separate sheet of paper. Choose side lengths so that all triangles are equilateral, but no two triangles are the same size. Be sure to put your name, period, and 1.1 HW on the paper.