

DO NOW – On the back of this packet

Name _____

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

(1) **Equilateral Triangles**

pen/pencil

(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?

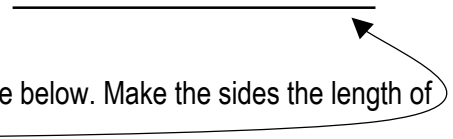
The boys will form an _____ triangle because _____

(2) **Notes:**

notes
page,
compass

(a) Obtain "C1 Equilateral Triangle"

(b) Use the steps and notes to construct an equilateral triangle in the space below. Make the sides the length of the segment above.



(3) **Equilateral Triangles**

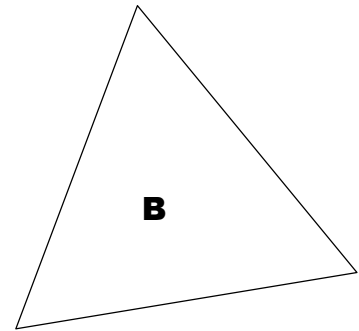
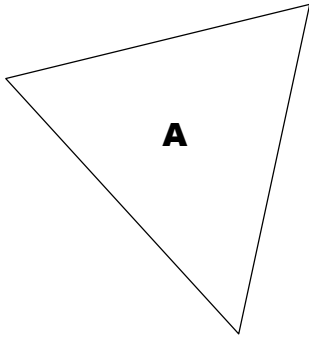
compass

Use a compass and straightedge to construct an **equilateral** triangle. Use side length of your choosing.

 (4) **Equilateral Triangles?**

compass

Are both triangles below equilateral? **SHOW/JUSTIFY** by showing construction arcs and explain how you know.



(5) **Equilateral Triangles**

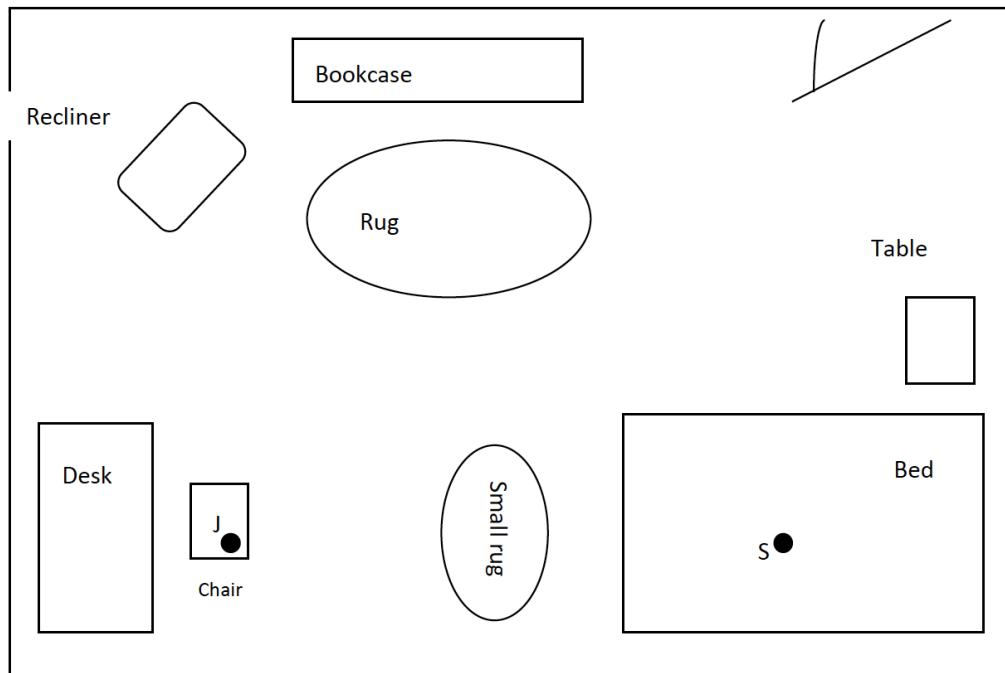
compass Use a compass and straightedge to construct 2 **equilateral** triangles that share a side. Use side length of your choosing.

(6) **Exit Ticket**

ON THE LAST PAGE

(7) **Homework**

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.



(7) **Equilateral Triangles**

compass

(2) Review notes and use a compass and straightedge to construct 3 to 5 equilateral triangles below.

Exit Ticket Name _____ Date _____ Per _____

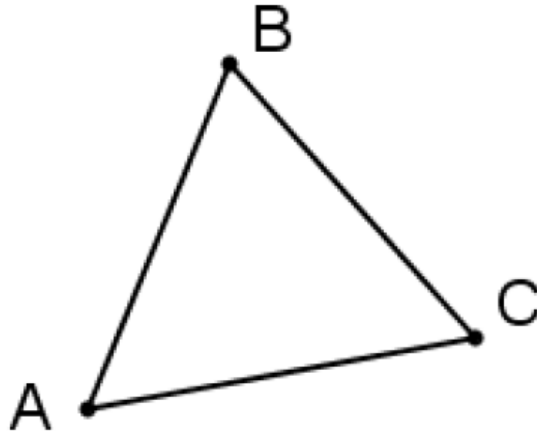
8.2L

Exit Ticket

(1) The LO (Learning Outcomes) are written below your name on the front of this packet. Demonstrate your achievement of these outcomes by doing the following:

Triangle ABC is shown below. Is it an equilateral triangle? Use your compass to show marks that justify your response.

Note: The test will not suggest this. It will merely say "justify" and you will need to know that construction marks will need to be shown.



DO NOW Name _____ Date _____ Per _____

8.2L

(1) Use your notes to:

(a) Draw line segment TU. Mark the midpoint of the segment and label it M.

(b) Draw ray VW.

(c) Draw line XY

Show all of the points that are the distance RE from point X.
(Measure RE with a compass and construct a circle with center X.)



X •

(3) How many triangles are drawn? Describe them.

