

(1) Follow the directions of another student's exit ticket write-up to construct an equilateral triangle.

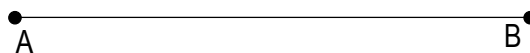
- What kinds of problems did you have as you followed your classmate's directions?
- Think about ways to avoid these problems. What criteria, or expectations, for writing steps in constructions should be included in a rubric for evaluating your writing? List at least three criteria below:

↴ CONSTRUCTION ↴

(2) Words that we will use today are listed below. Non-bolded words should be in your notes already. Bold words will be added to your notes today. If you are absent for notes, several Geometry glossary links are on Ms. Lomac's website that you can use to define, draw examples, name & write notation, and draw non-examples.

location	distance (length)	point	line segment	endpoint
congruent	compass	construction	equilateral	equidistant
reflection				

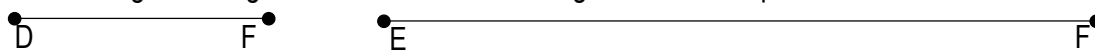
(3) Use the segments below to construct triangle ABC so that point C is above \overline{AB} . \overline{AB} is drawn for you.



Now use the same segments to construct triangle ABC below segment \overline{AB} .

(4) Are the two triangles you constructed in #3 the same? Why do you think they are or are not?

(5) Use the segment lengths below to construct triangle DEF so that point F is to the left of \overline{DE} . \overline{DE} is drawn for you.

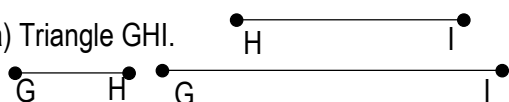


Now use the same segment lengths to construct triangle DEF to the right of segment \overline{DE} .

(6) Are the two triangles you constructed in #5 the same? Why do you think they are or are not?

(7) Construct triangles given the lengths below.

a) Triangle GHI.



b) Triangle JKL

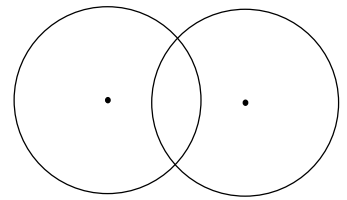
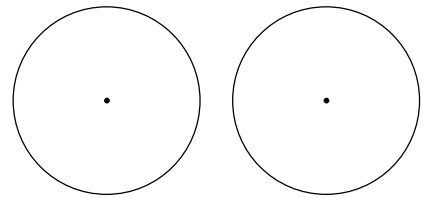
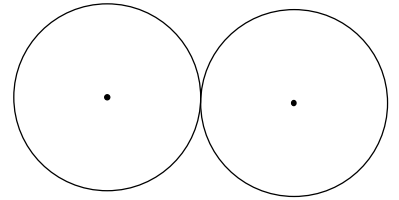


Were you able to construct triangle GHI? _____ If so, describe the triangle. If not, describe why not.

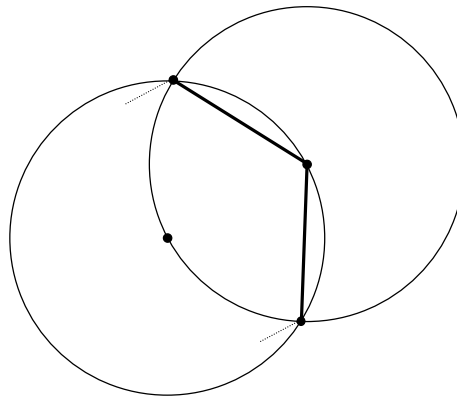
Were you able to construct triangle JKL? _____ If so, describe the triangle. If not, describe why not.

- (1) At right, pairs of circles are drawn. (#8 from classwork will help you with this problem.)
 (a) Label the circles on the left with center A and radius AB and the circles on the right with center C and radius CD.
 A, B, C, and D should be collinear

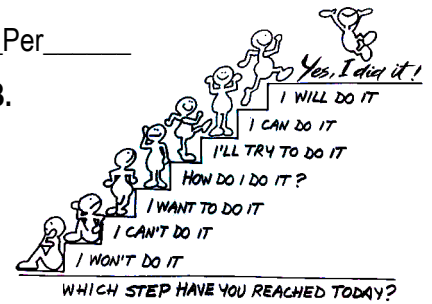
- (b) Under what conditions (in terms of distances AB, CD and AC) do the circles have
 i) One point in common?
 ii) No points in common?
 iii) Two points in common?
 iv) More than 2 points in common? Why?



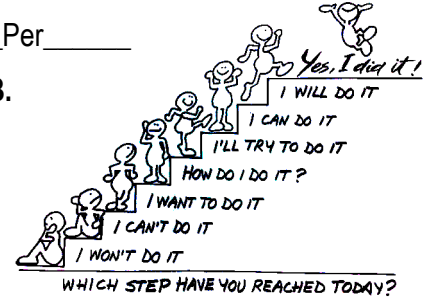
Use the skills you have learned in making equilateral triangles from Unit 2 Activity #1 to complete the construction below of a **regular hexagon**. A regular hexagon has all sides and angles congruent and has 6 sides.



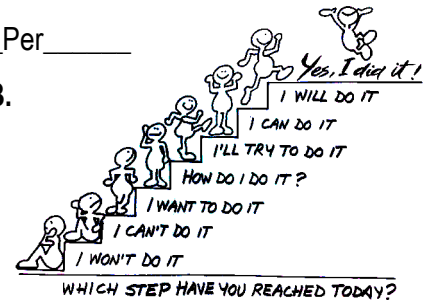
Use segment AB to make scalene triangle ABC and its reflection across segment AB.



Use segment AB to make scalene triangle ABC and its reflection across segment AB.



Use segment AB to make scalene triangle ABC and its reflection across segment AB.



Use segment AB to make scalene triangle ABC and its reflection across segment AB.

