

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

(2) Copy and complete each sentence below:

(a) *The line assumption states that* _____.

(b) *Equilateral means* _____.

(c) *A radius is* _____.

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

Name _____ Per _____

SLO: I can construct reflected triangles and explain how the compass makes this possible.

(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 two of the notes (the word at the top should be “distance/length assumption”)

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

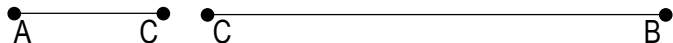
(d) Glue or tape down the descriptions for page 1

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

(2) **Constructing Reflected Triangles**

compass
highlight-
ers

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



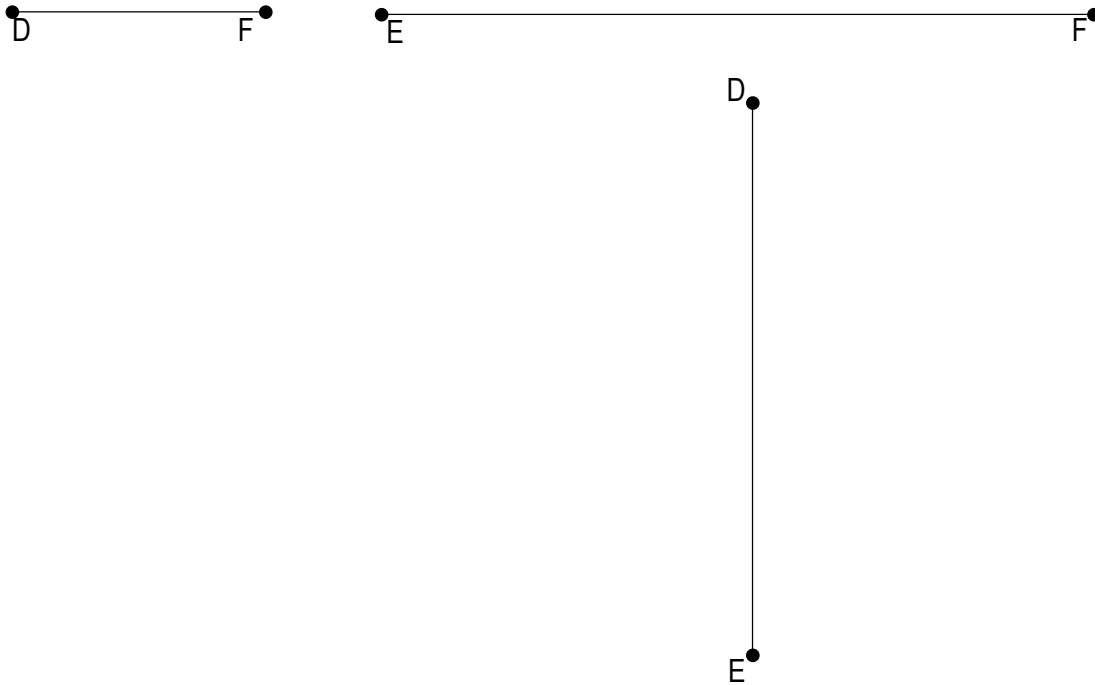
(b) Now use the same segments to construct triangle ABC below segment \overline{AB} .

(c) Are the two triangles you constructed in (a) and (b) the same? Why do you think they are or are not?

(3) **Constructing Reflected Triangles again**

compass

(a) 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.



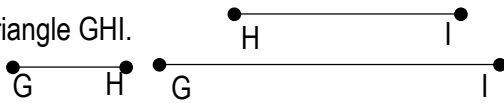
(b) Now use the same segment lengths to construct triangle DEF to the right of segment \overline{DE} .

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

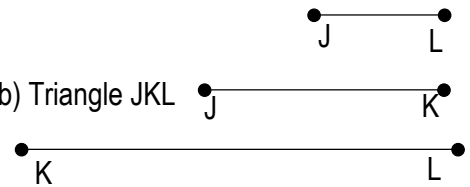
(4) **Construct triangles given the lengths below.**

compass

(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.

(5) **Exit Ticket**

compass

Describe how to construct a triangle. You may include sketches and you may complete the statements below if it helps you to explain. To construct a triangle, I have to start with a _____. Then I have to _____ the distance between the _____ of a second side length and construct a _____ centered at an _____. I need to repeat _____ for the third side. I know the location for the third point of the triangle because it is where the _____.

 (6) **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) 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) Describe the 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?

