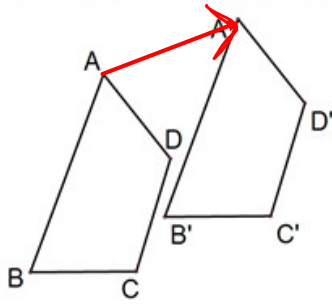
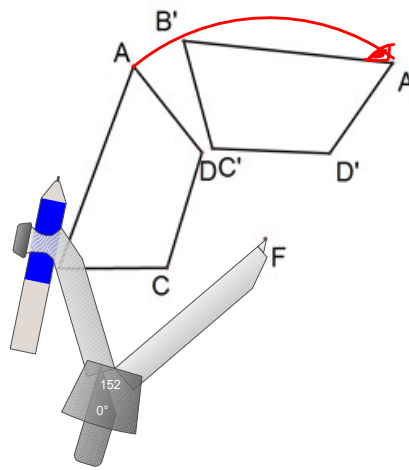


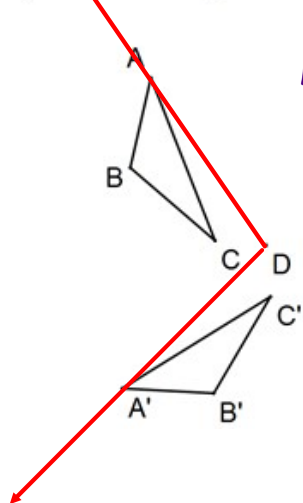
1) Sketch the translation vector.



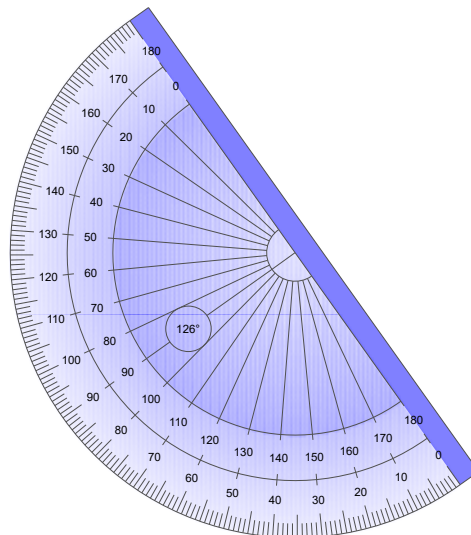
2) Construct the rotation vector



3) Find the degree measure of the angle of rotation.



100 or 100 CCW



4) Construct the Center of rotation

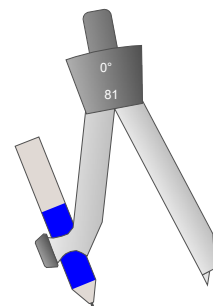
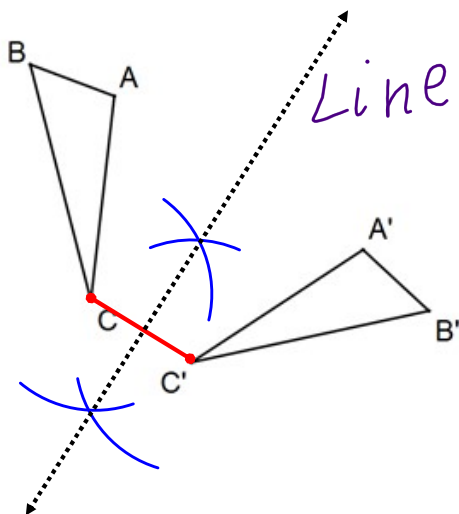
center of rotation

\perp bisectors
of AA' & CC'

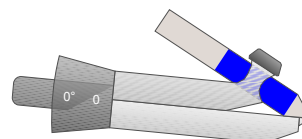
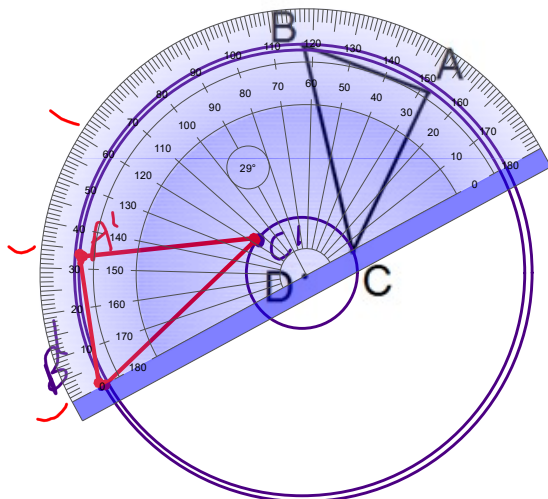
4) Construct the Center of rotation

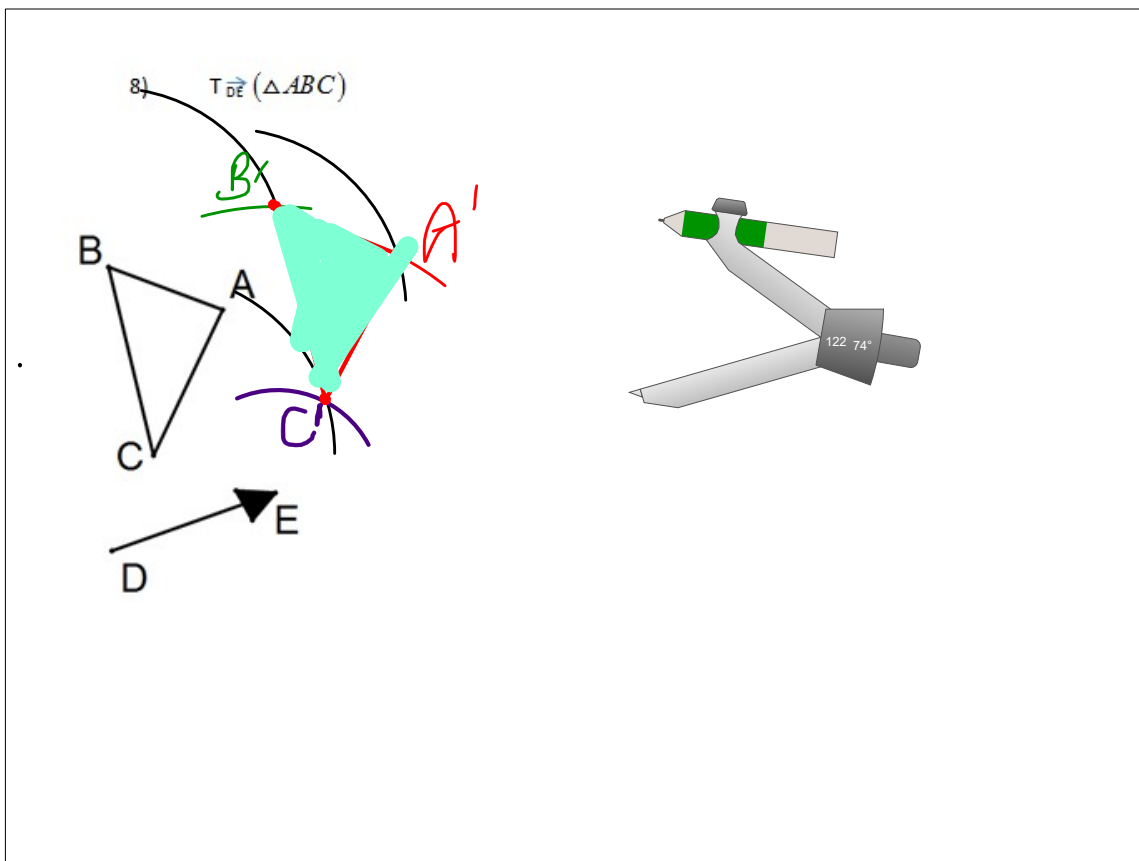
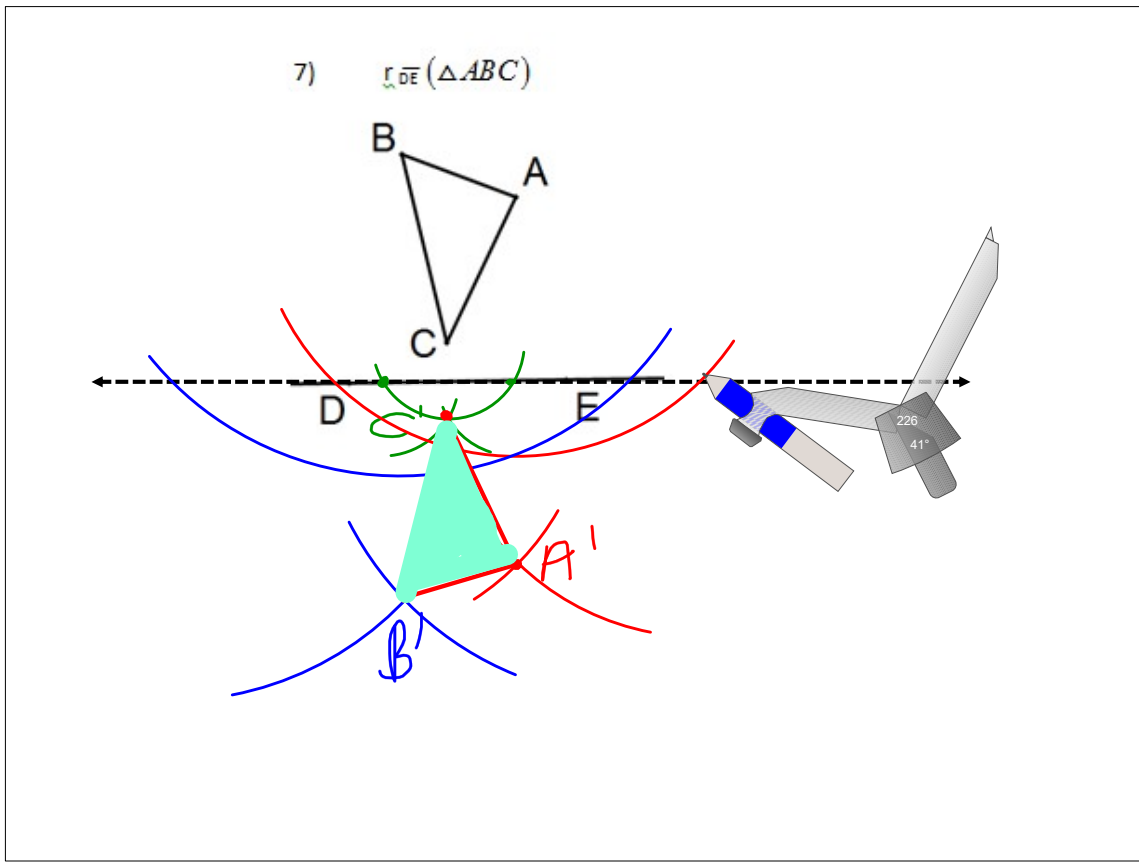
33°
179°

5) Construct the Line of Reflection. | \perp bisector
Line of reflection



120 CCW 6) $R_{120}(\triangle ABC)$





Discussion Questions.

- 9) What does it mean if the angle of rotation is written as -130° ?
- 10) What paths do the points travel when an object is rotated?
- 11) The paths the points travel on a translation are _____ and _____.
- 12) The paths the points travel on a reflection are _____ but not _____.

- 9) It means the object will rotate 130° degrees in a clockwise direction
- 10) They travel in circular paths.
- 11) parallel, congruent
- 12) parallel, but not congruent

- 13) The circles created by the paths the points take in a rotation are _____.
- 14) Why is the perpendicular bisector so important?
- 15) What happens to the preimage when it is reflected two times across intersecting lines?
- 16) What are the types of rigid motions?

- 13) circular
- 14) It is used to find the line of reflection as well as the center of rotation.
- 15) omit
- 16) translation, reflection, rotation

17) Describe the composite transformation of the following.

rotation, reflection, translation

