

Name: _____

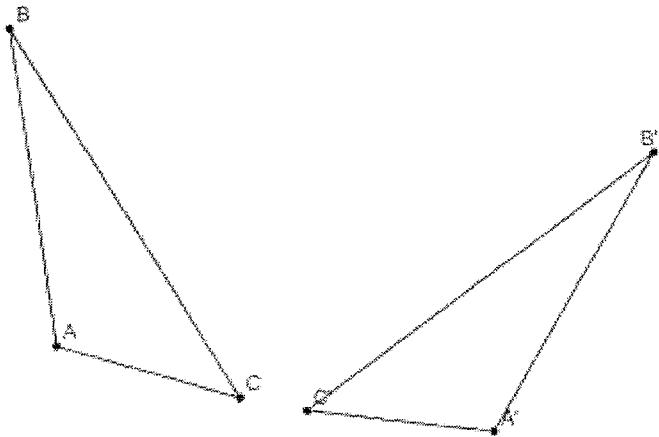
Date: _____

Construct the line of reflection

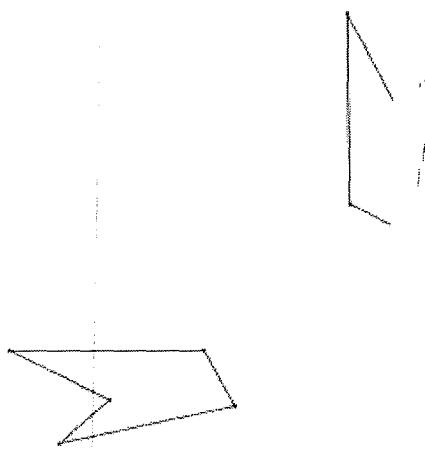
Remember the steps for constructing the line of reflection...

1. Construct a segment connecting a point on the pre-image and the corresponding point on the image.
2. Construct the perpendicular bisector of that segment

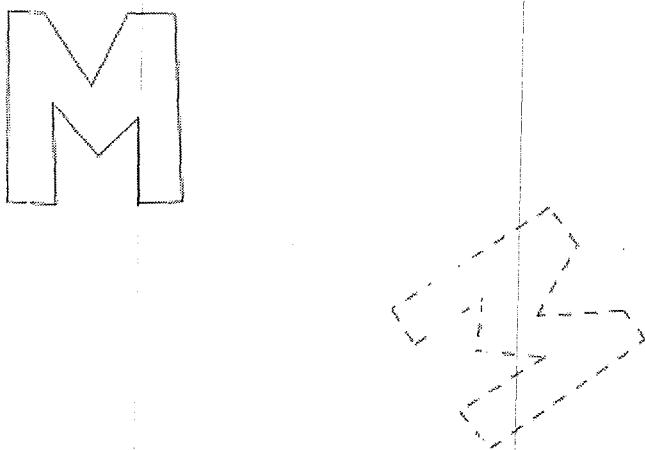
1.



2.

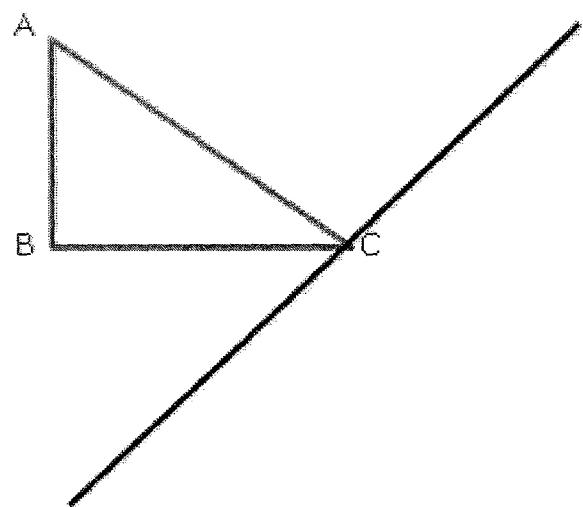


3.

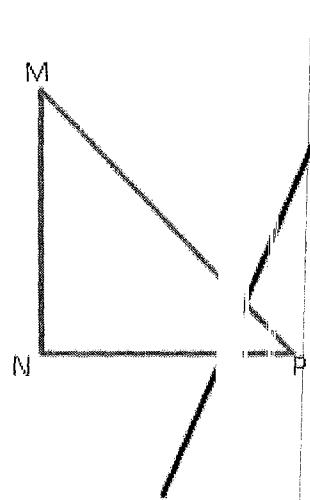


Using constructions, reflect the image over the given line

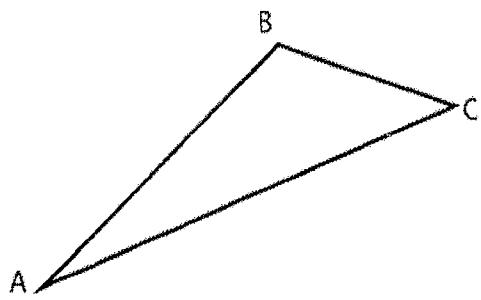
1.



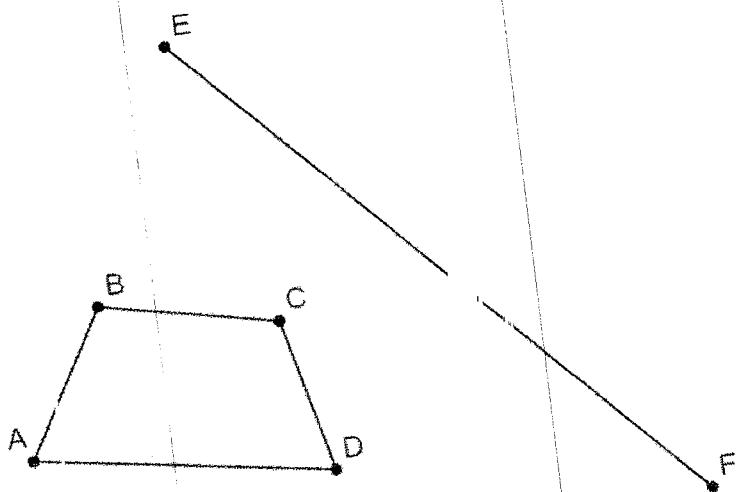
2.



3.



4.

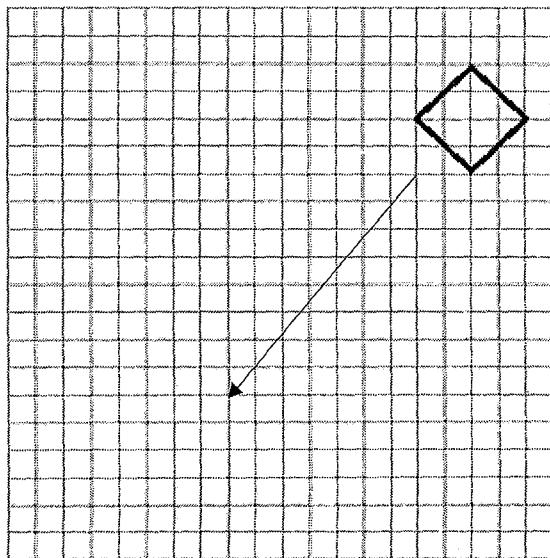
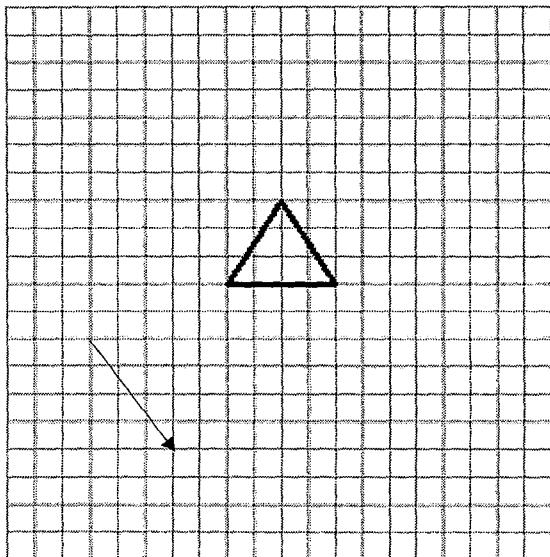


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Constructing a Translation

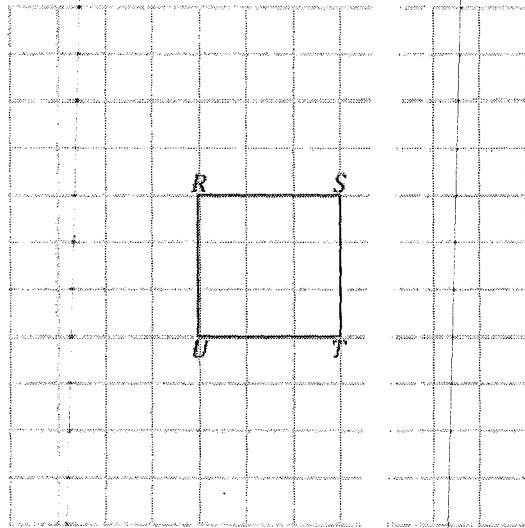
Using a compass and straightedge, translate the figures below. Use the given vectors to perform the translations.



Translate each figure according to the instructions provided.

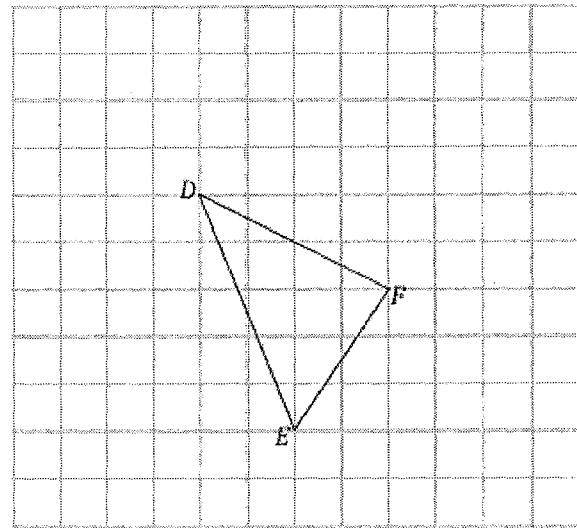
1. 2 units down and 3 units left

Draw the vector that defines the translation.

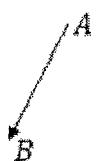
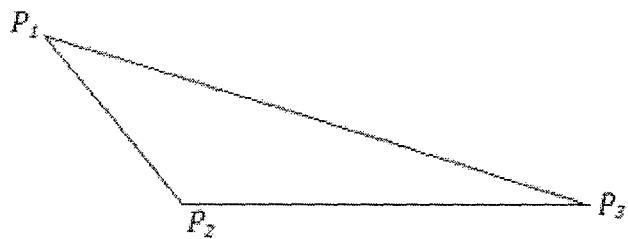


2. 1 unit up and 2 units right

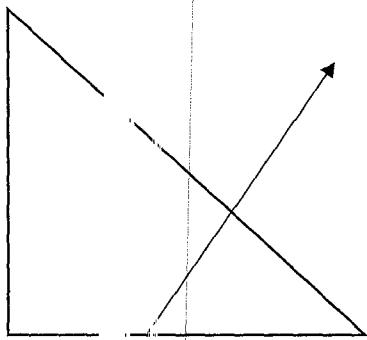
Draw the vector that defines the translation.

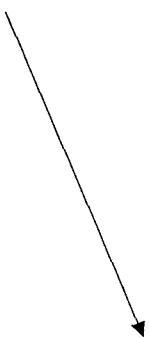
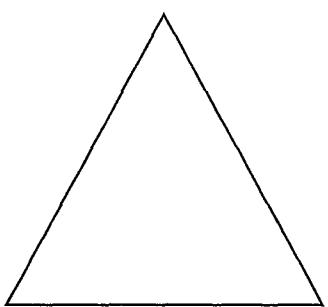


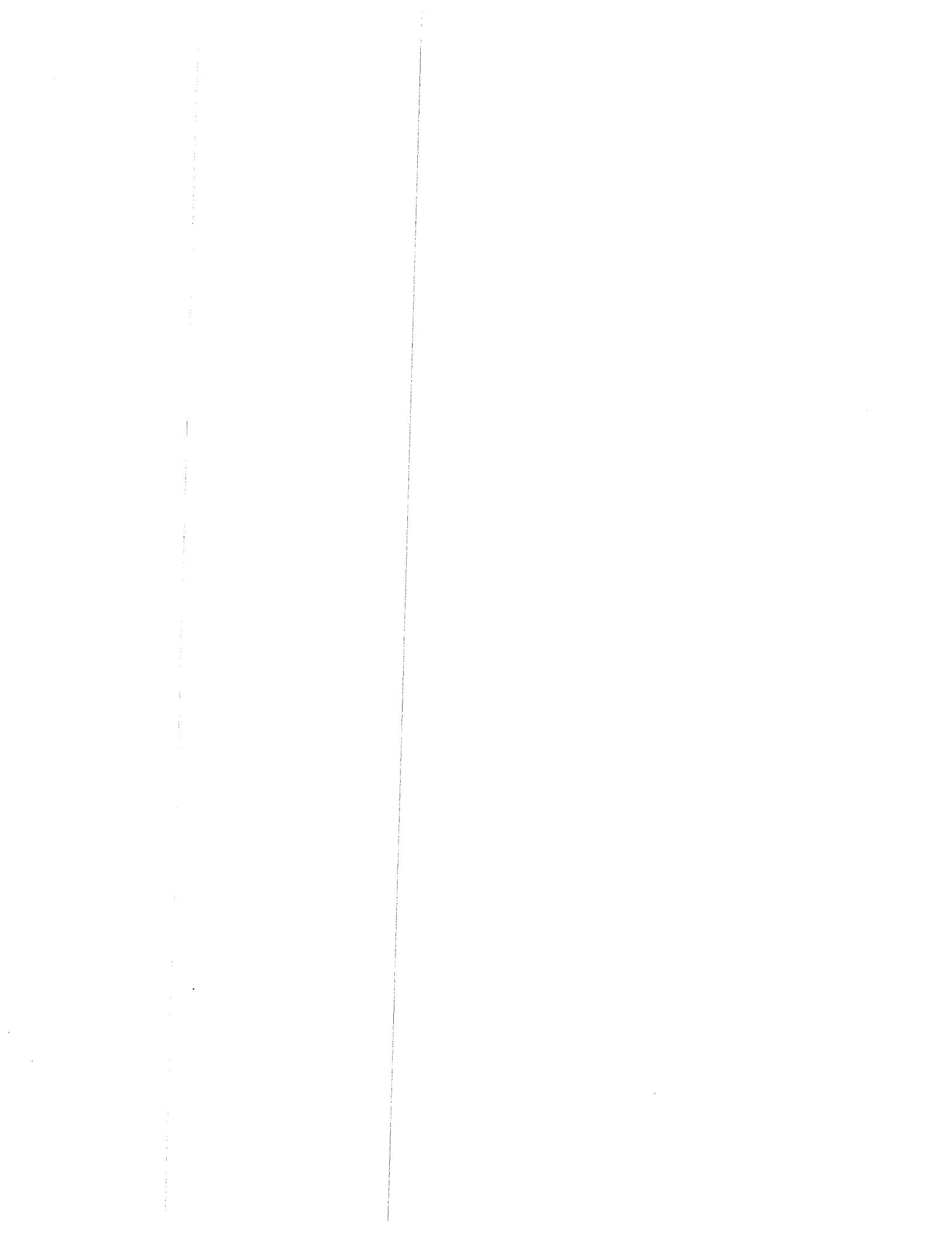
Use a compass and a straightedge to apply the translation below.



Use a compass and straightedge to translate the given triangle. Use the given vector to perform the translation.



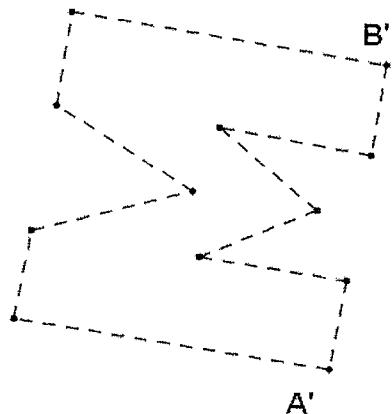
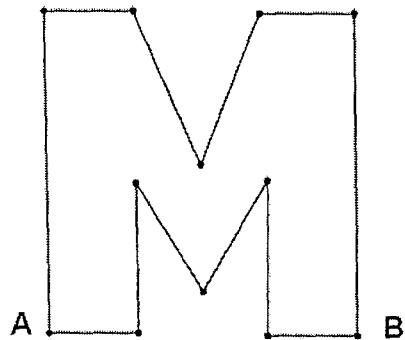




Finding the point of Rotation

Name: _____

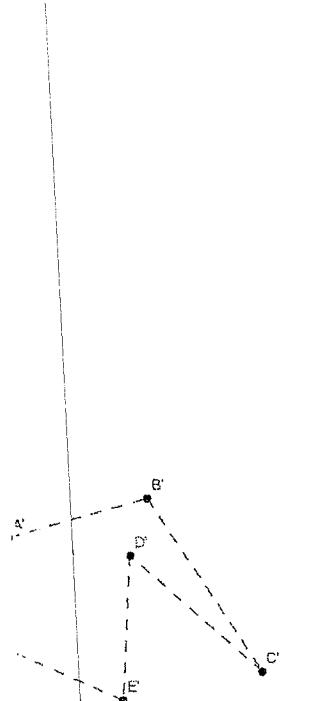
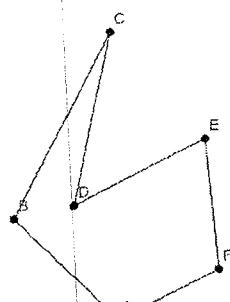
1.



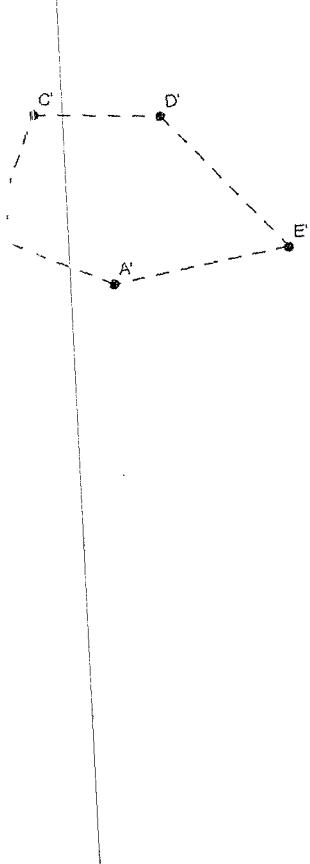
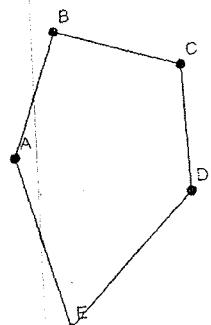
- a. Draw a segment connecting points A and A' .
- b. Using a compass and straightedge, find the perpendicular bisector of this segment.
- c. Draw a segment connecting points B and B' .
- d. Find the perpendicular bisector of this segment.

The point of intersection of the two perpendicular bisectors is the center of rotation. Label this point P .

2.



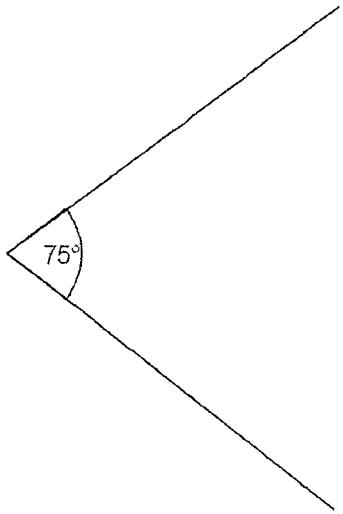
3.



Other Rotation Constructions:

Name: _____

1. Rotate triangle ABC 75° around point F using a compass and straightedge only.



2. Rotate triangle ABC 60° around point F using a compass and straightedge only.

