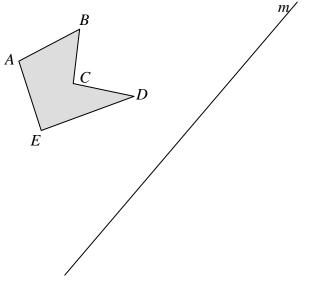
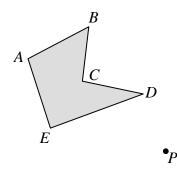
Class Activity for 11-2: Exploring Transformations

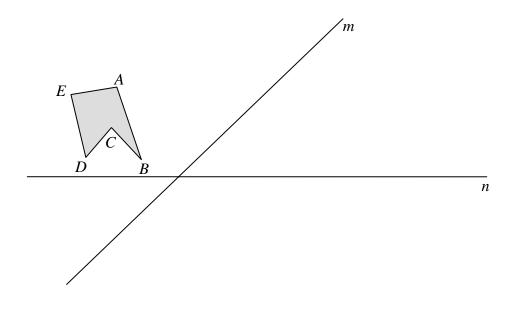
1. Thinking about the idea of reflection, and comparing this to work done on dot paper, devise a method to use compass, straightedge, and protractor (no ruler!) to find the image of this polygon for a reflection about line *m*. You should produce the image (carefully!) and also general instructions that could tell someone else how to accomplish the task.



2. Think about the idea of rotations, and devise a method to rotate this polygon 60° clockwise about point *P*. Again, you should produce the image (carefully!) and also general instructions that could tell someone else how to accomplish the task.



3. In this diagram find the image of ABCDE for the reflection across m (call the image A B C D E') followed by the reflection of A B C D E' across n, and call the final image A 'B 'C'D'E''. The final image A 'B'C'D'E'' can be produced with one transformation on the original polygon. Completely describe what transformation of ABCDE would produce the same image A 'B'C'D'E''.



4. Repeat the actions above using the diagram below. The lines are parallel. Again, what *single* transformation of *ABCDE* would produce the same image A'B''C'D'E''?

