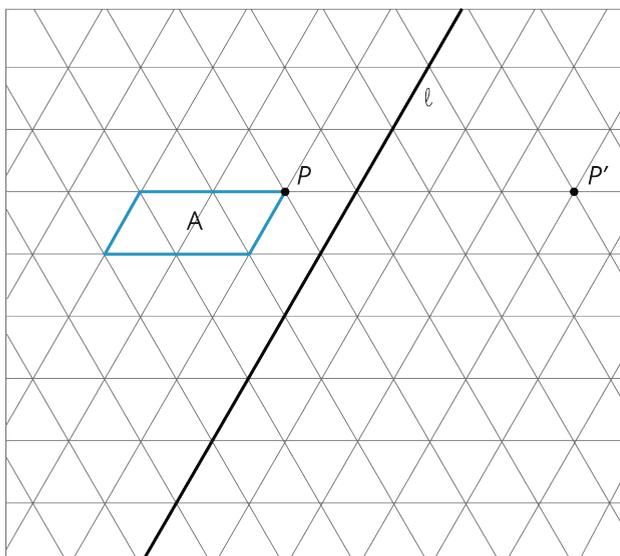
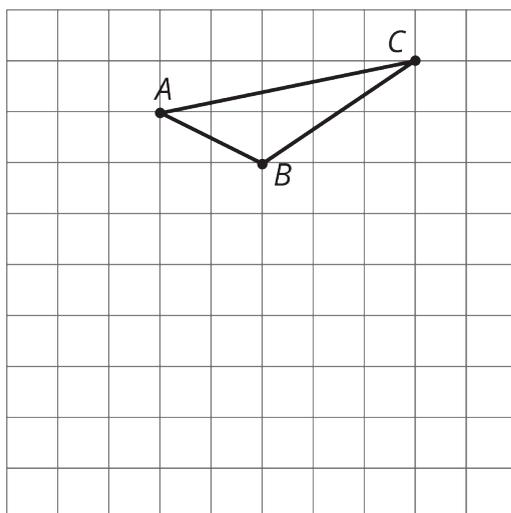


## Lesson 3 Practice Problems

1. Apply each transformation described to Figure A. If you get stuck, try using tracing paper.

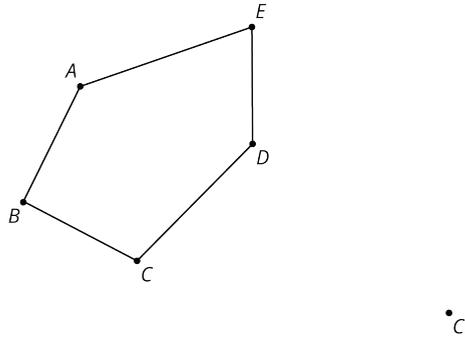


- A translation which takes  $P$  to  $P'$
  - A counterclockwise rotation of  $A$ , using center  $P$ , of 60 degrees
  - A reflection of  $A$  across line  $\ell$
2. Here is triangle  $ABC$  drawn on a grid.

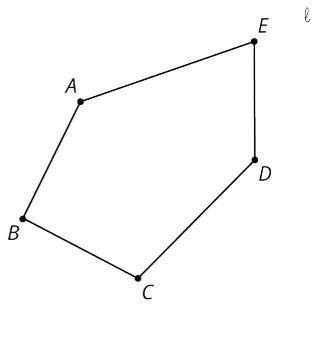


On the grid, draw a rotation of triangle  $ABC$ , a translation of triangle  $ABC$ , and a reflection of triangle  $ABC$ . Describe clearly how each was done.

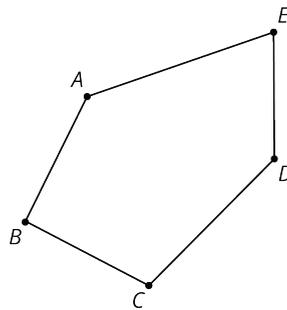
3. a. Draw the translated image of  $ABCDE$  so that vertex  $C$  moves to  $C'$ . Tracing paper may be useful.



- b. Draw the reflected image of Pentagon  $ABCDE$  with line of reflection  $\ell$ . Tracing paper may be useful.



- c. Draw the rotation of Pentagon  $ABCDE$  around  $C$  clockwise by an angle of 150 degrees. Tracing paper and a protractor may be useful.



(From Unit 1, Lesson 2.)