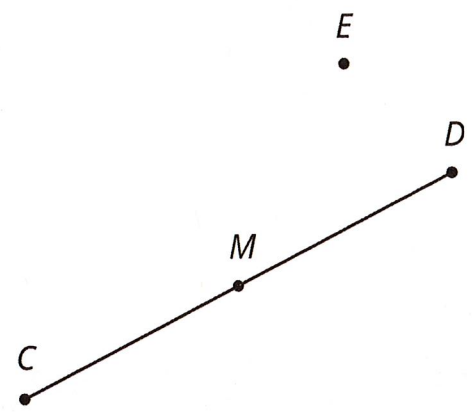


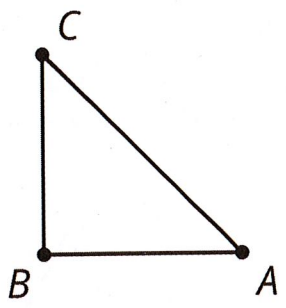
1. For the figure shown here,



- a. Rotate segment  $CD$   $180^\circ$  around point  $D$ .
- b. Rotate segment  $CD$   $180^\circ$  around point  $E$ .
- c. Rotate segment  $CD$   $180^\circ$  around point  $M$ .

2. Here is an isosceles right triangle:

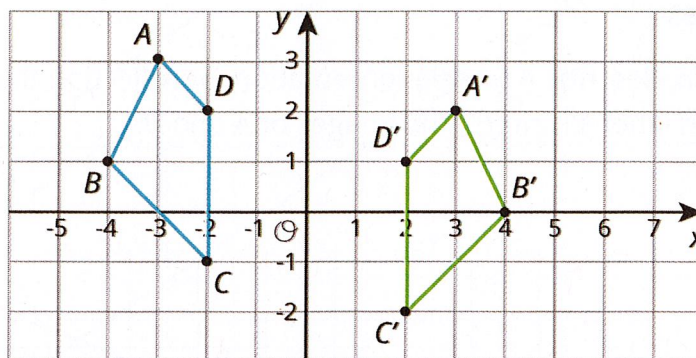
Draw these three rotations of triangle  $ABC$  together.



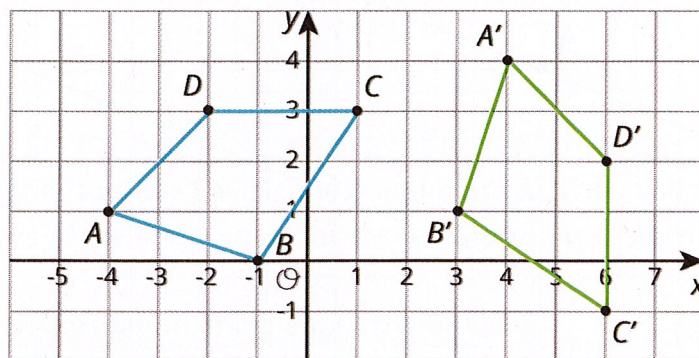
- a. Rotate triangle  $ABC$  90 degrees clockwise around  $A$ .
- b. Rotate triangle  $ABC$  180 degrees around  $A$ .
- c. Rotate triangle  $ABC$  270 degrees clockwise around  $A$ .

3. Each graph shows two polygons  $ABCD$  and  $A'B'C'D'$ . In each case, describe a sequence of transformations that takes  $ABCD$  to  $A'B'C'D'$ .

a.



b.



4. Lin says that she can map Polygon A to Polygon B using *only* reflections. Do you agree with Lin? Explain your reasoning.

