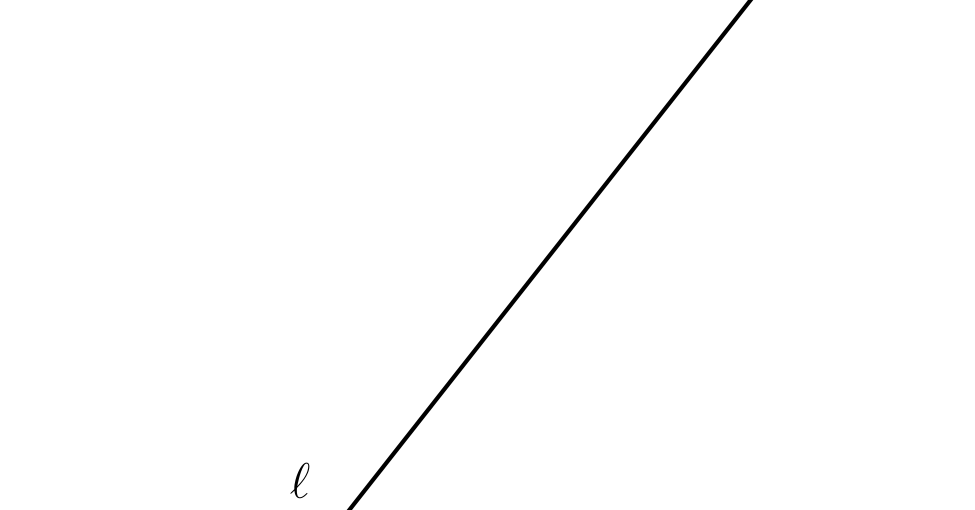
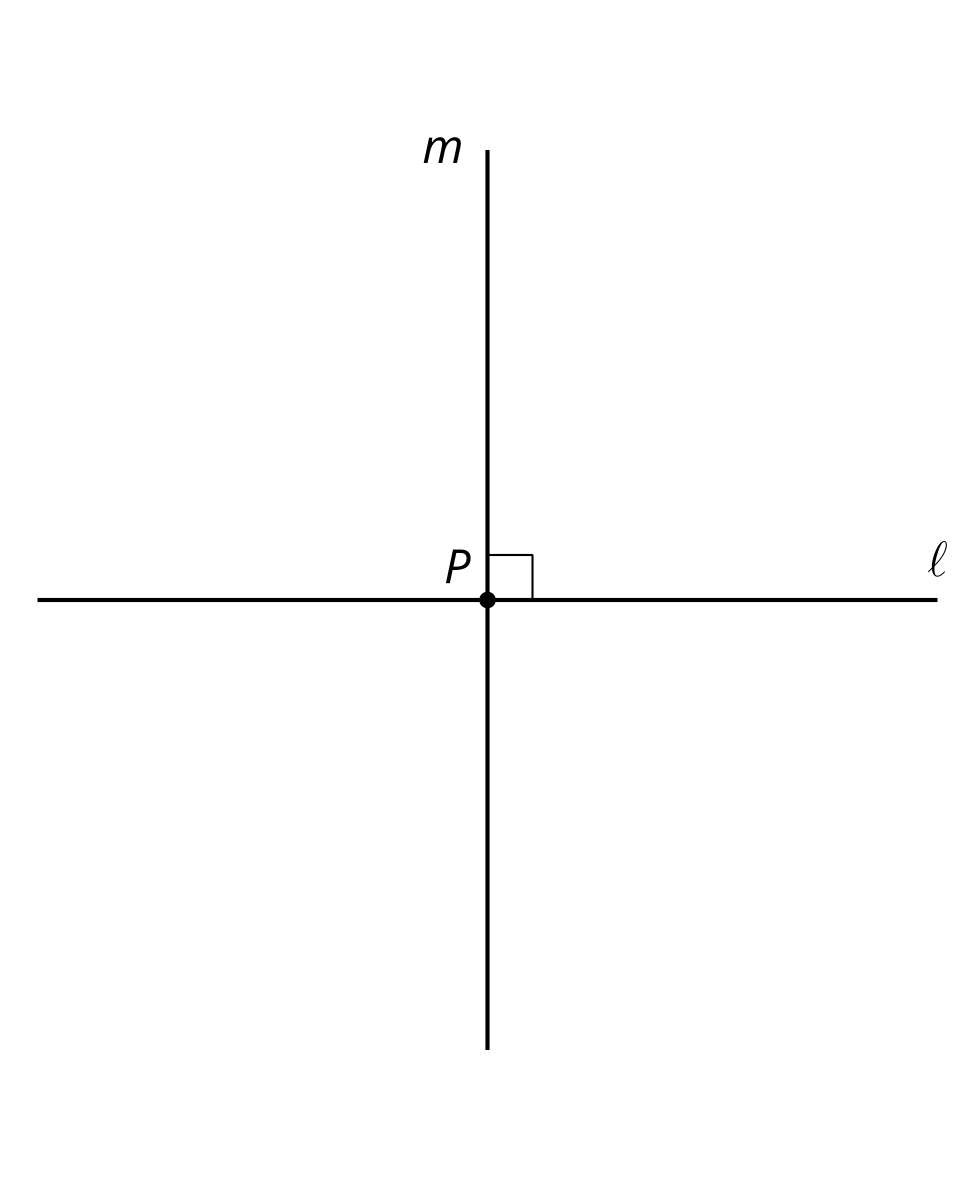
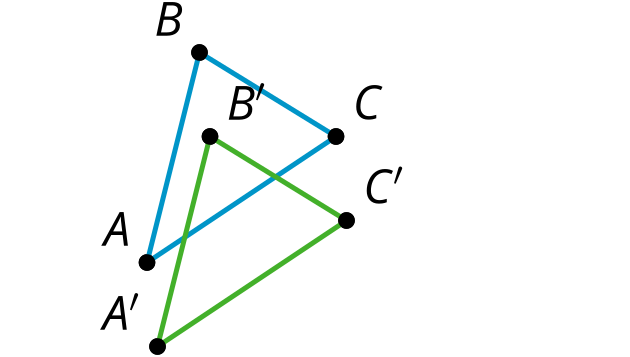
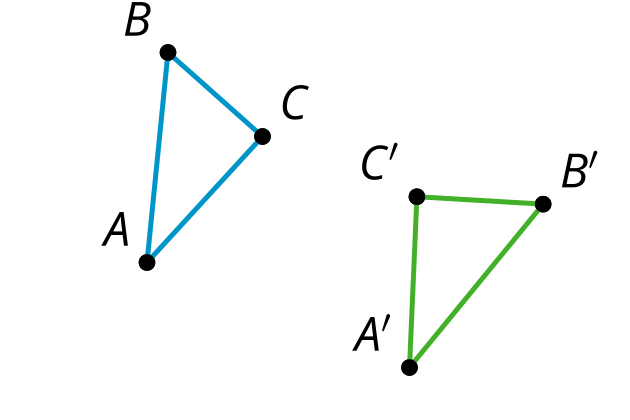
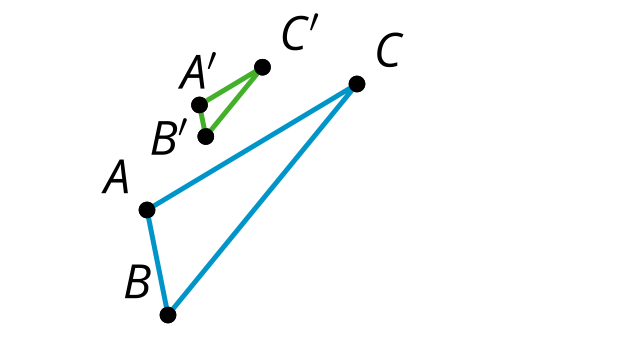
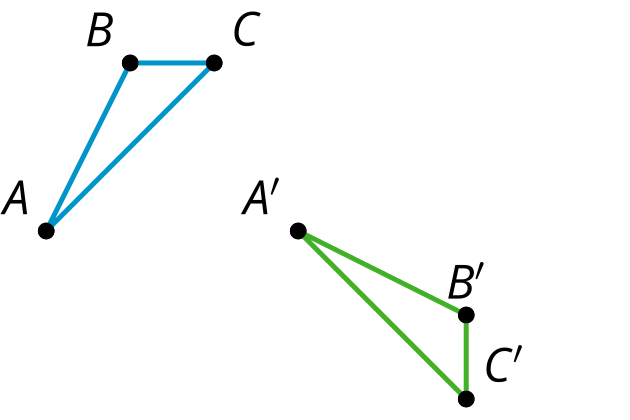
### Lesson 11 Practice Problems

1. Which of these constructions would construct a line of reflection that takes the point to point ?
   1. Construct the perpendicular bisector of segment .
   2. Construct a line through perpendicular to segment .
   3. Construct the line passing through and .
   4. Construct a line parallel to line .
2. A point stays in the same location when it is reflected over line .

* What can you conclude about ?
* 

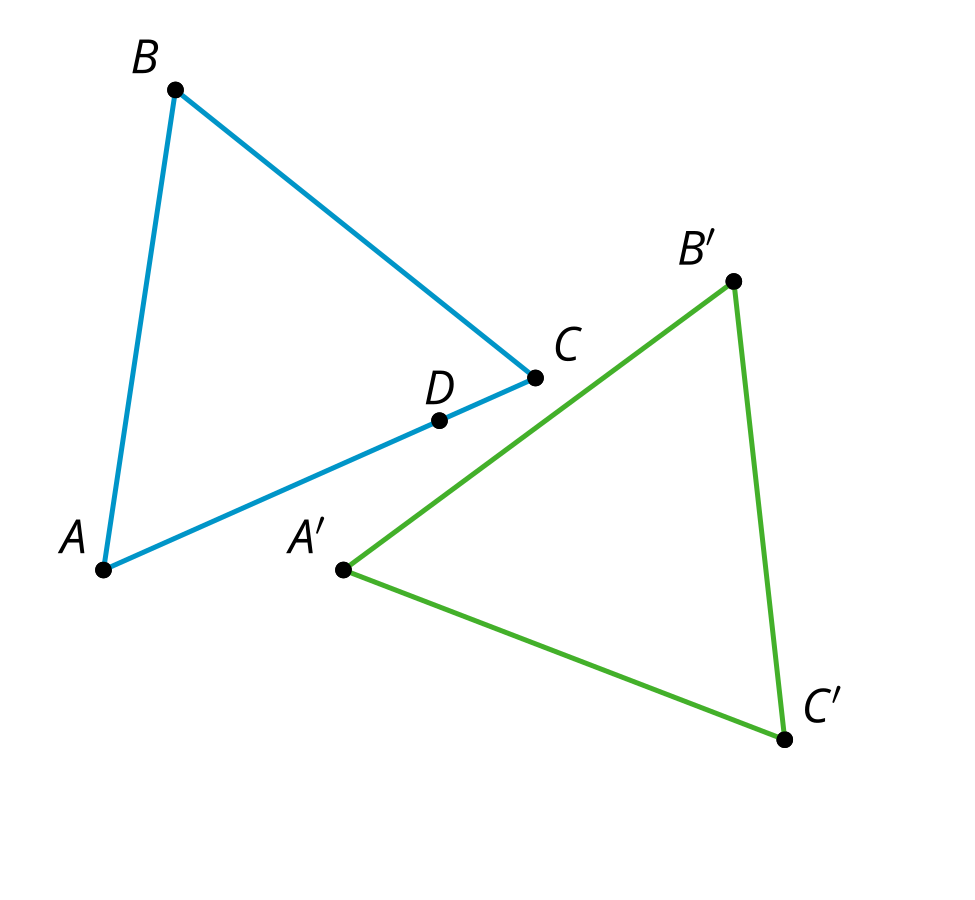
1. Lines and are perpendicular with point of intersection .

* Noah says that a 180 degree rotation, with center , has the same effect on points in the plane as reflecting over line . Do you agree with Noah? Explain your reasoning.
* 

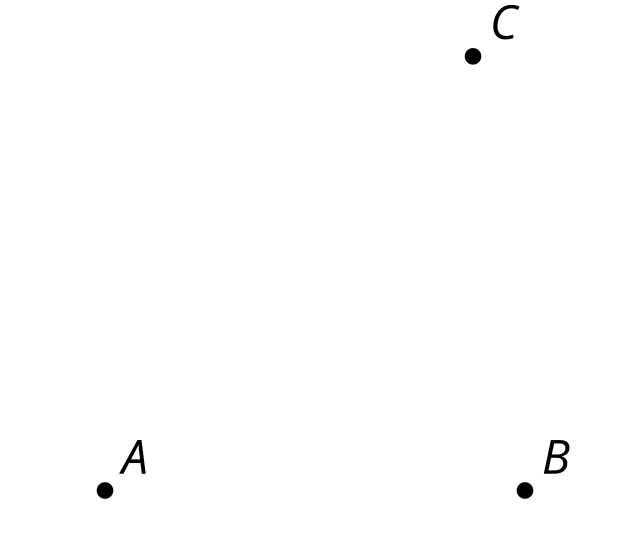
1. Here are 4 triangles that have each been transformed by a different transformation. Which transformation is *not* a rigid transformation?
   1. 
   2. 
   3. 
   4. 

* (From Unit 1, Lesson 10.)

1. There is a sequence of rigid transformations that takes to , to , and to . The same sequence takes to . Draw and label :

* 
* (From Unit 1, Lesson 10.)

1. Here are 3 points in the plane. Explain how to determine whether point is closer to point or point .

* 
* (From Unit 1, Lesson 9.)

1. Diego says a quadrilateral with 4 congruent sides is always a regular polygon. Mai say it never is one. Do you agree with either of them?

* (From Unit 1, Lesson 7.)



© CC BY 2019 by Illustrative Mathematics®