# Lesson 11 Practice Problems

1. Which of these constructions would construct a line of reflection that takes the point A to point B?

   A. Construct the perpendicular bisector of segment AB.

   B. Construct a line through B perpendicular to segment AB.

   C. Construct the line passing through A and B.

   D. Construct a line parallel to line AB.

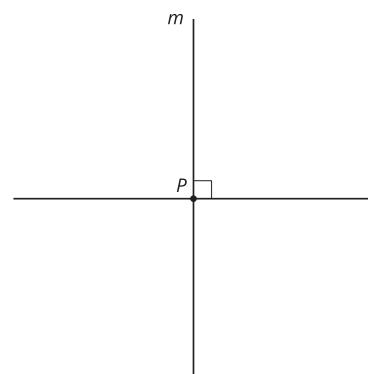2. A point P stays in the same location when it is reflected over line ℓ.

   What can you conclude about P?
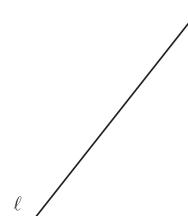
3. Lines ℓ and m are perpendicular with point of intersection P.

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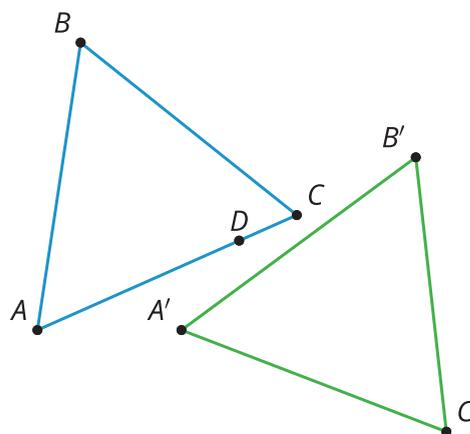
$m \perp \ell$

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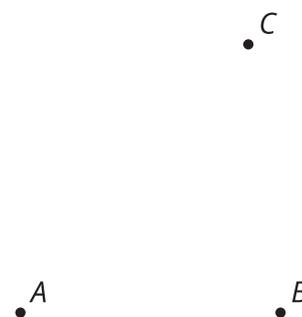
A.

B.

C.

D.
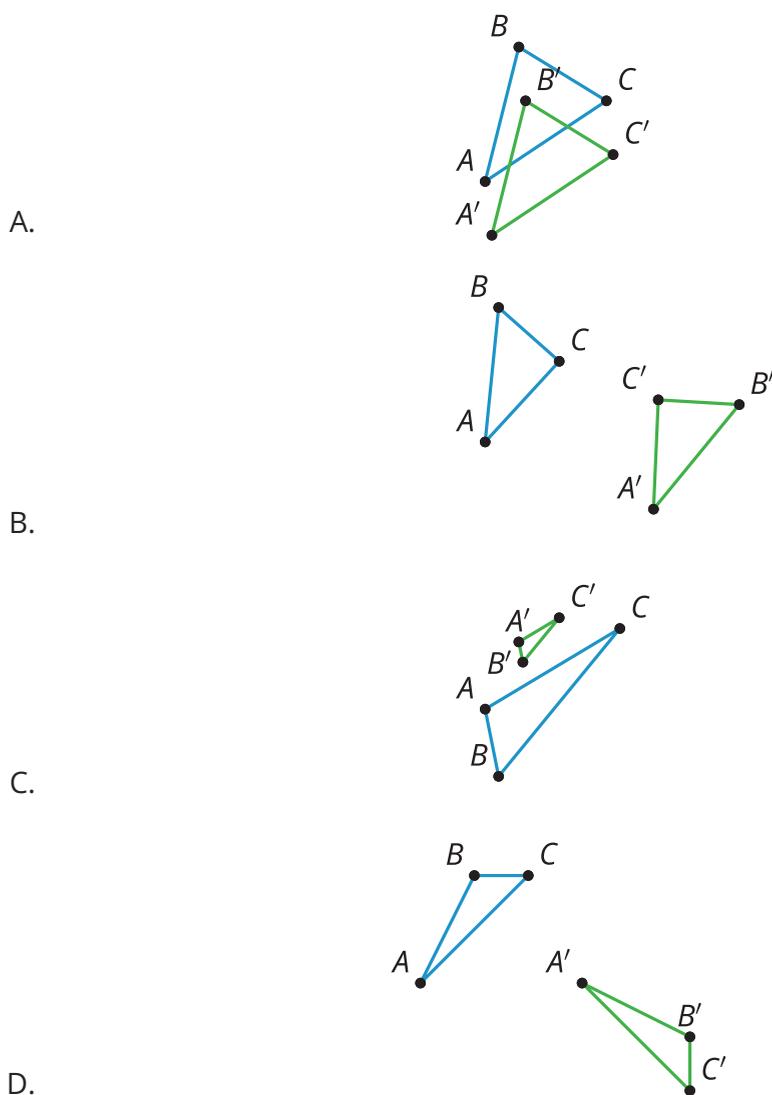
(From Unit 1, Lesson 10.)

5. There is a sequence of rigid transformations that takes A to A', B to B', and C to C'. The same sequence takes D to D'. Draw and label D':

(From Unit 1, Lesson 10.)

6. Here are 3 points in the plane. Explain how to determine whether point C is closer to point A or point B.

(From Unit 1, Lesson 9.)

7. 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.)