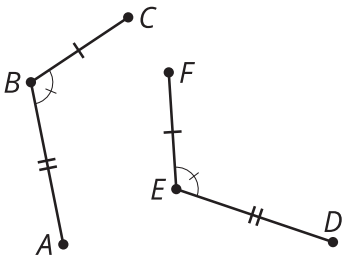
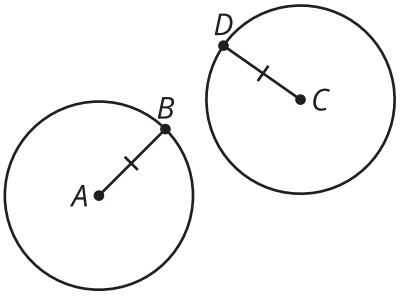
Lesson 5 Practice Problems

1. Write a sequence of rigid motions to take figure ABC to figure DEF.



2. Prove the circle centered at A is congruent to the circle centered at C.

$AB = CD$



3. Which conjecture is possible to prove?

   A. All quadrilaterals with at least one side length of 3 are congruent.

   B. All rectangles with at least one side length of 3 are congruent.

   C. All rhombuses with at least one side length of 3 are congruent.

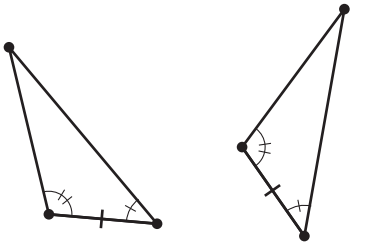
   D. All squares with at least one side length of 3 are congruent.

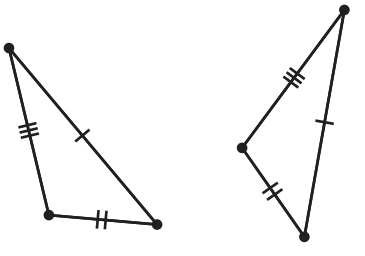
4. Match each statement using only the information shown in the pairs of congruent triangles.

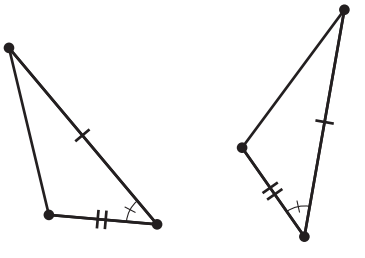
   A. The 2 sides and the included angle of one triangle are congruent to 2 sides and the included angle of another triangle.

   B. The 2 angles and the included side of one triangle are congruent to 2 angles and the included side of another triangle.

   C. In the 2 triangles there are 3 pairs of congruent sides.

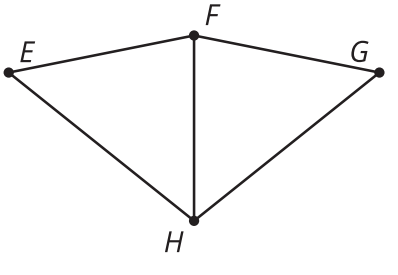
1. 

2. 

3. 

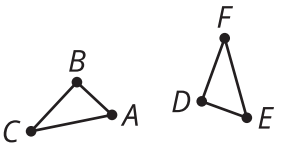
(From Unit 2, Lesson 4.)

5. Triangle HEF is the image of triangle HGF after a reflection across line FH. Write a congruence statement for the 2 congruent triangles.



(From Unit 2, Lesson 2.)

6. Triangle ABC is congruent to triangle EDF. So, Lin knows that there is a sequence of rigid motions that takes ABC to EDF.



Select **all** true statements after the transformations:

A. Angle A coincides with angle F.

B. Angle B coincides with angle D.

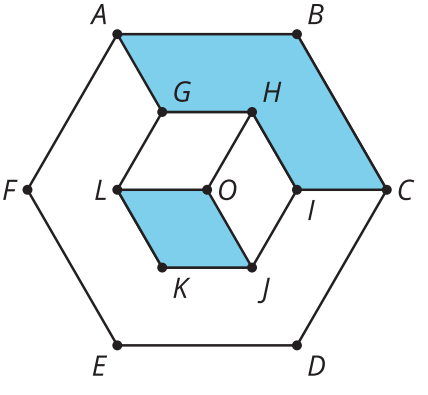
C. Angle C coincides with angle E.

D. Segment BA coincides with segment DE.

E. Segment BC coincides with segment FE.

(From Unit 2, Lesson 3.)

7. This design began from the construction of a regular hexagon. Is quadrilateral $JKLO$ congruent to the other 2 quadrilaterals? Explain how you know.



(From Unit 1, Lesson 22.)