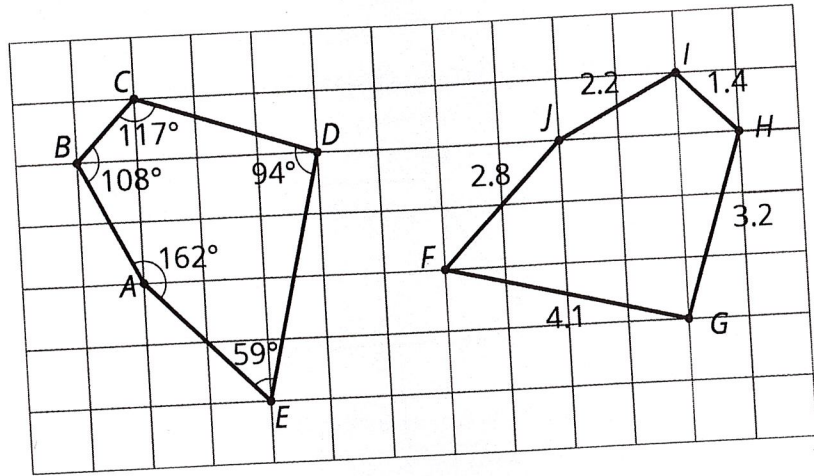


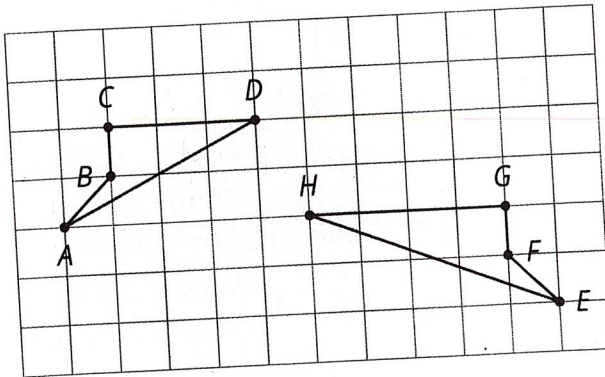
### Lesson 12 Practice Problems

1. a. Show that the two pentagons are congruent.  
 b. Find the side lengths of  $ABCDE$  and the angle measures of  $FGHIJ$ .

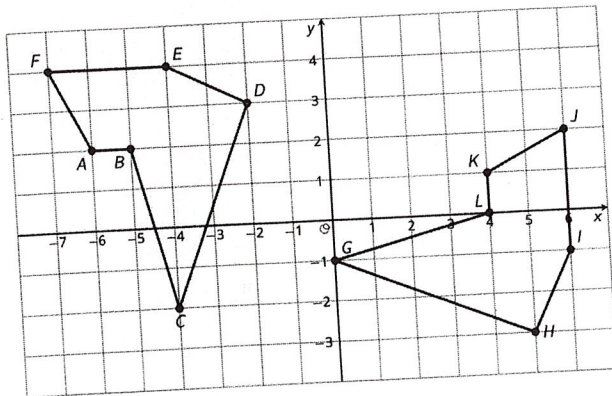


2. For each pair of shapes, decide whether or not the two shapes are congruent. Explain your reasoning.

a.

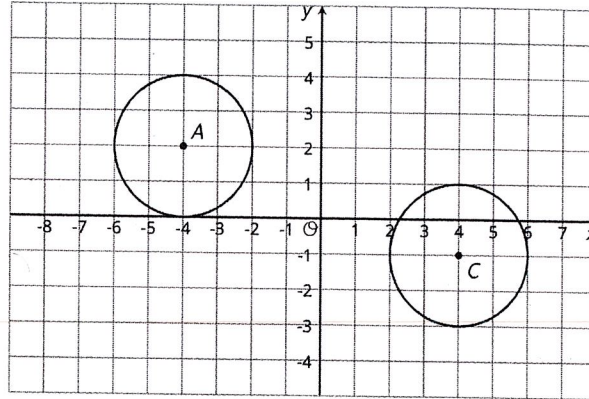


b.





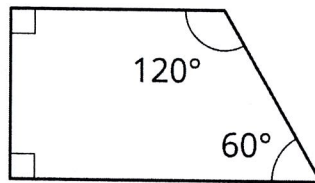
C.



3. a. Draw segment  $PQ$ .

b. When  $PQ$  is rotated  $180^\circ$  around point  $R$ , the resulting segment is the same as  $PQ$ . Where could point  $R$  be located?

4. Here is trapezoid  $ABCD$ .



Using rigid transformations on the trapezoid, build a pattern. Rotate clockwise with  $60^\circ$  as the center. Rotate  $60^\circ$ ,  $120^\circ$ ,  $180^\circ$ ,  $240^\circ$  and  $300^\circ$ .