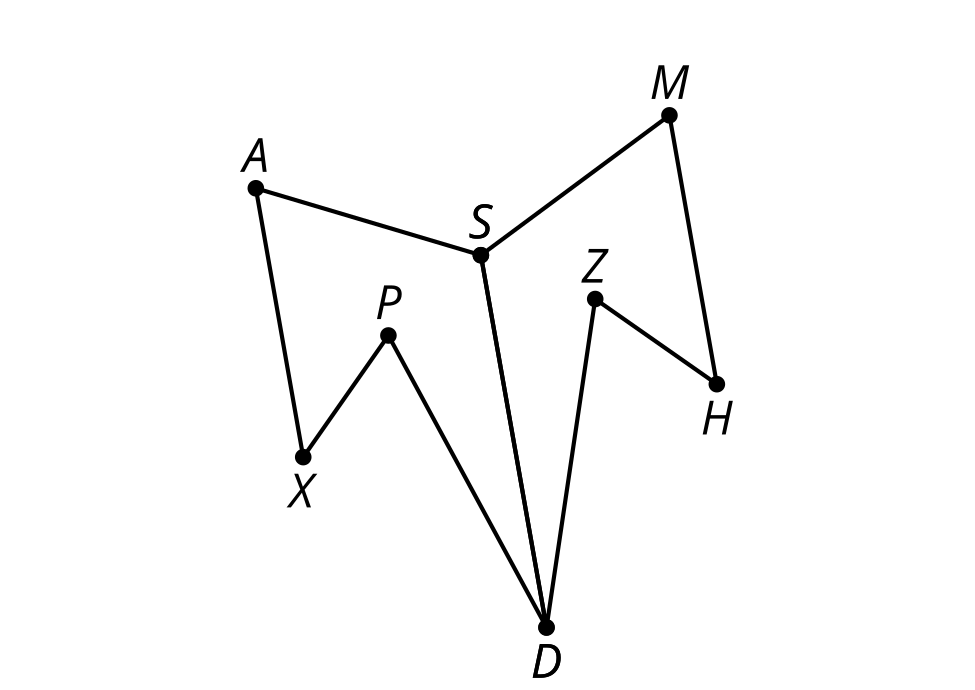
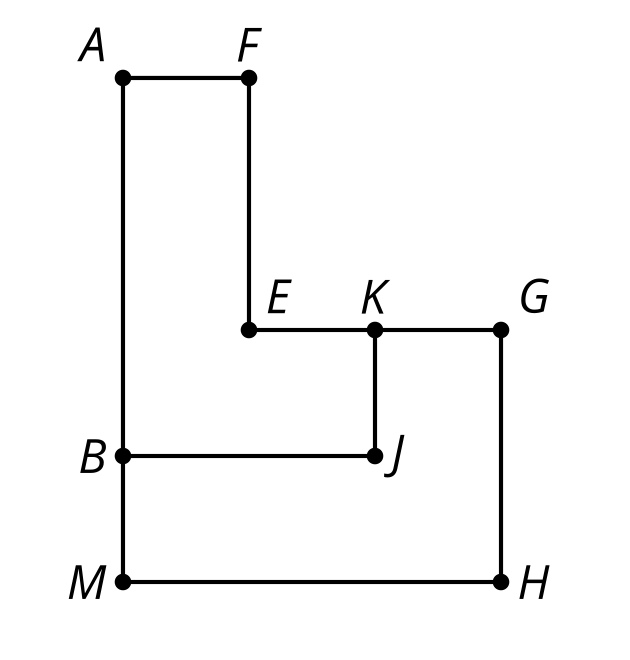
### Lesson 2 Practice Problems

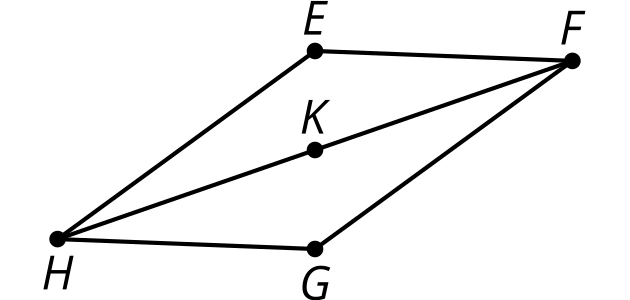
1. Line is a line of symmetry for figure . Noah says that is congruent to because sides and are corresponding.
   1. Why is Noah’s congruence statement incorrect?
   2. Write a correct congruence statement for the pentagons.

* 

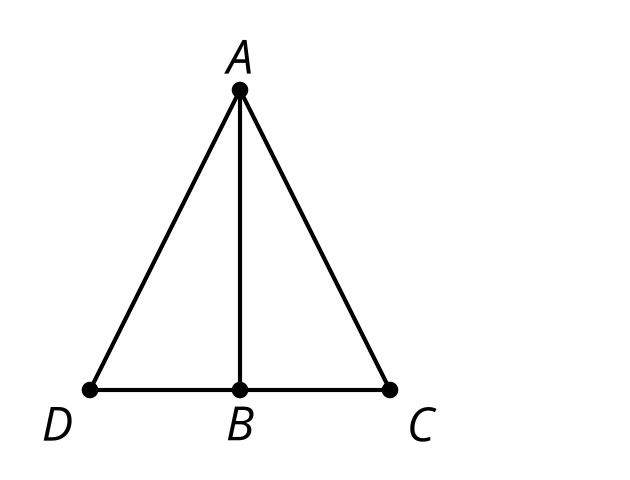
1. FIgure  is the image of figure  after being rotated 90 degrees counterclockwise about point . Draw a segment in figure  to create a quadrilateral. Draw the image of the segment when rotated 90 degrees counterclockwise about point .

* Write a congruence statement for the quadrilateral you created in figure  and the image of the quadrilateral in figure .
* 

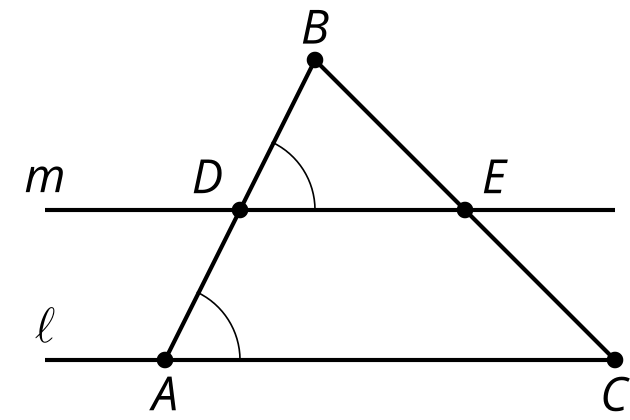
1. Triangle is the image of triangle after a 180 degree rotation about point . Select **all** statements that must be true.

* 
  1. Triangle  is congruent to triangle .
  2. Triangle  is congruent to triangle .
  3. Angle  is congruent to angle .
  4. Angle  is congruent to angle .
  5. Segment  is congruent to segment .
  6. Segment  is congruent to segment .

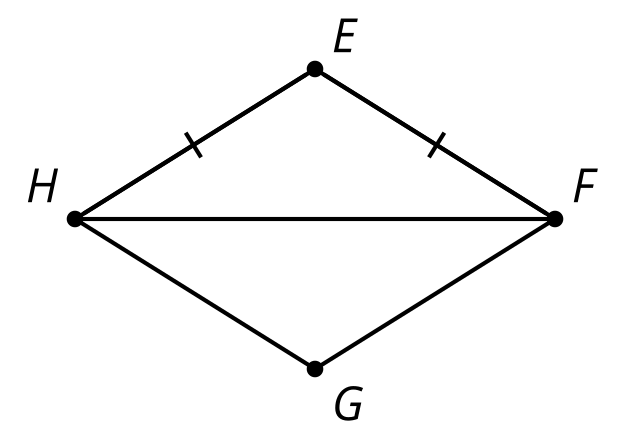
1. When triangle  is reflected across line , the image is triangle . Why are segment and segment congruent?

* 
  1. Congruent parts of congruent figures are corresponding.
  2. Corresponding parts of congruent figures are congruent.
  3. An isosceles triangle has a pair of congruent sides.
  4. Segment  is a perpendicular bisector of segment .
* (From Unit 2, Lesson 1.)

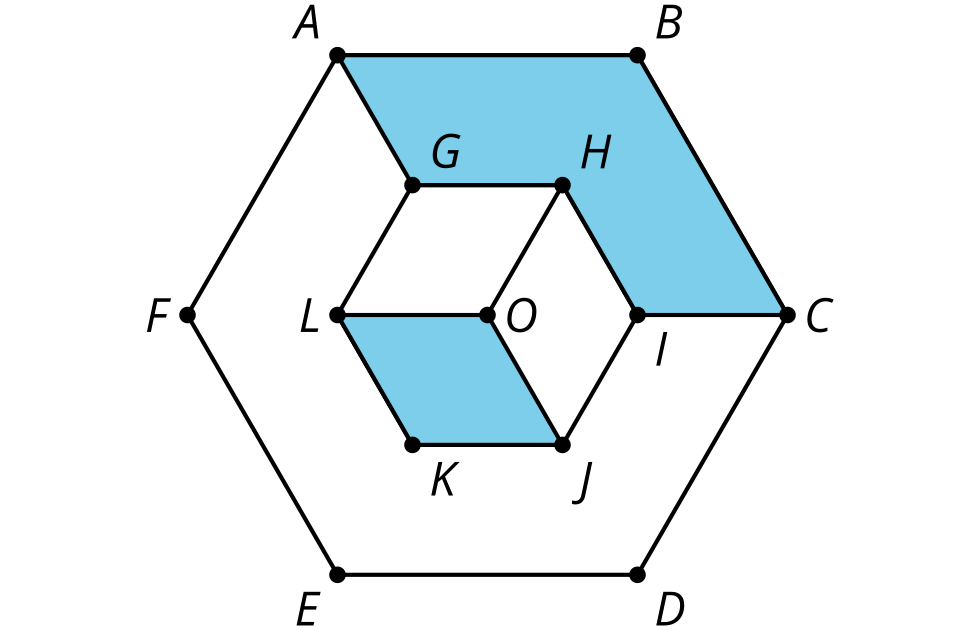
1. Elena needs to prove angles  and  are congruent. Provide reasons to support each of her statements.
   1. Line  is parallel to line .
   2. Angles and are congruent.

* 
* (From Unit 1, Lesson 20.)

1. Triangle is the image of isosceles triangle after a reflection across line . Select **all** the statements that are a result of corresponding parts of congruent triangles being congruent.

* 
  1. is a rectangle.
  2. is a rhombus.
  3. Diagonal bisects angles and .
  4. Diagonal is perpendicular to side .
  5. Angle is congruent to angle .
  6. Angle is congruent to angle .
* (From Unit 2, Lesson 1.)

1. This design began from the construction of a regular hexagon.
   1. Draw 1 segment so the diagram has another hexagon that is congruent to hexagon .
   2. Explain why the hexagons are congruent.

* 
* (From Unit 1, Lesson 22.)



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