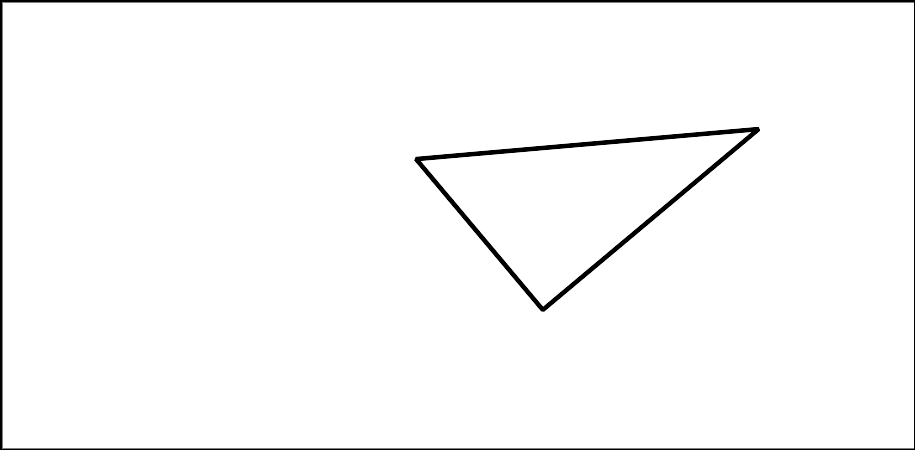
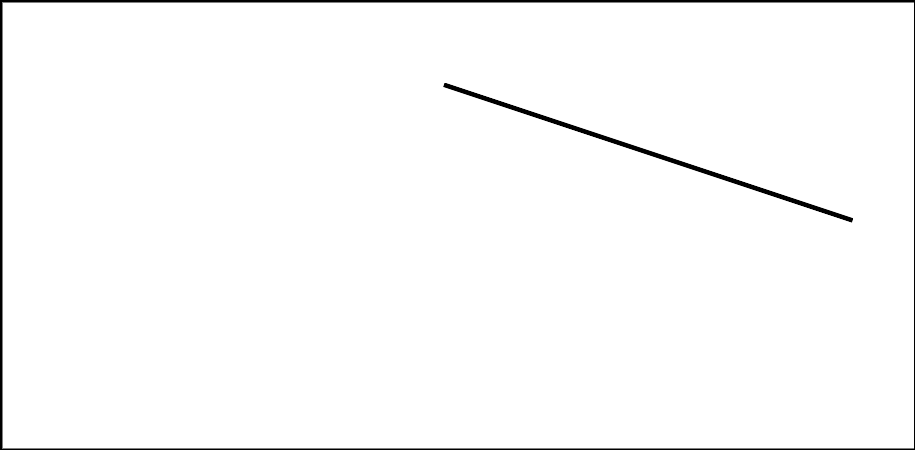
### Lesson 3 Practice Problems

1. Triangle is congruent to triangle . So, Kiran knows that there is a sequence of rigid motions that takes to .

* 
* Select **all** true statements after the transformations:
  1. Angle coincides with angle .
  2. Angle coincides with angle .
  3. Segment coincides with segment .
  4. Segment coincides with segment .
  5. Segment coincides with segment .

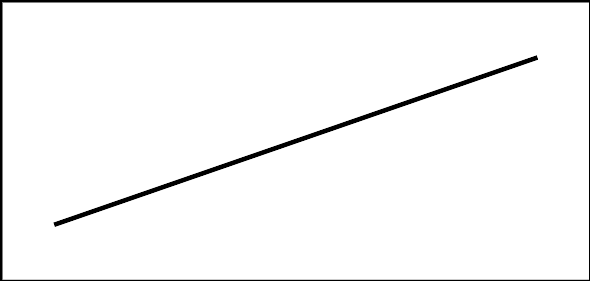
1. A rotation by angle using point as the center takes triangle onto triangle .

* 
  1. Explain why the image of ray  lines up with ray .
  2. Explain why the image of  coincides with .
  3. Is triangle congruent to triangle ? Explain your reasoning.

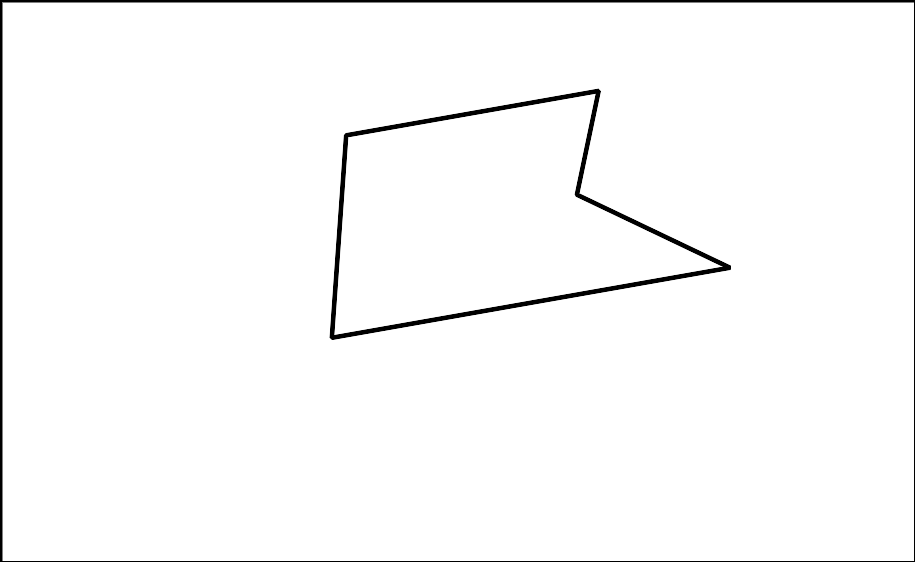
1. The triangles are congruent. Which sequence of rigid motions will take triangle onto triangle ?

* 
  1. Translate  using directed line segment . Rotate using as the center so that coincides with . Reflect across line .
  2. Translate using directed line segment . Rotate using as the center so that coincides with . Reflect across line .
  3. Translate using directed line segment . Rotate using as the center so that coincides with . Reflect across line .
  4. Translate using directed line segment . Rotate using as the center so that coincides with . Reflect across line .

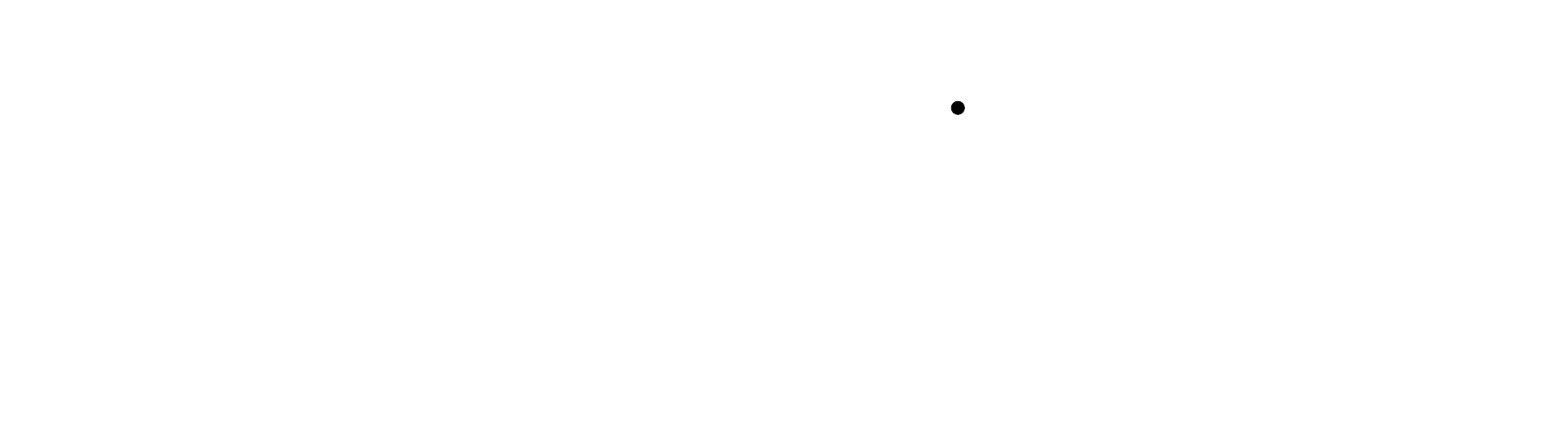
1. Triangle is the image of triangle after a 180 degree rotation around point . Select **all** statements that must be true.

* 
  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 .
  7. Segment  is congruent to segment .
* (From Unit 2, Lesson 2.)

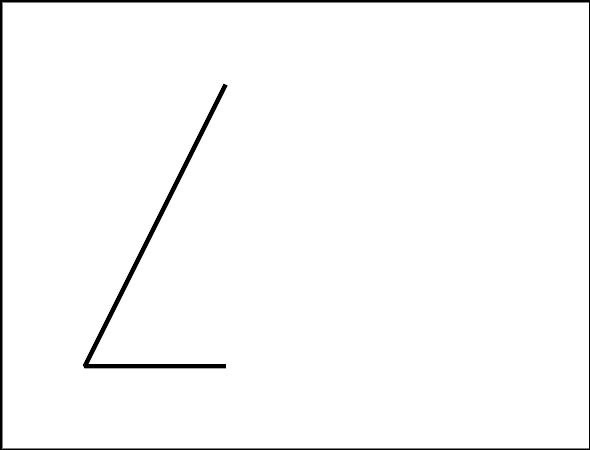
1. Line is a line of symmetry for figure . Tyler says that is congruent to because sides and are corresponding.

* 
  1. Why is Tyler's congruence statement incorrect?
  2. Write a correct congruence statement for the pentagons.
* (From Unit 2, Lesson 2.)

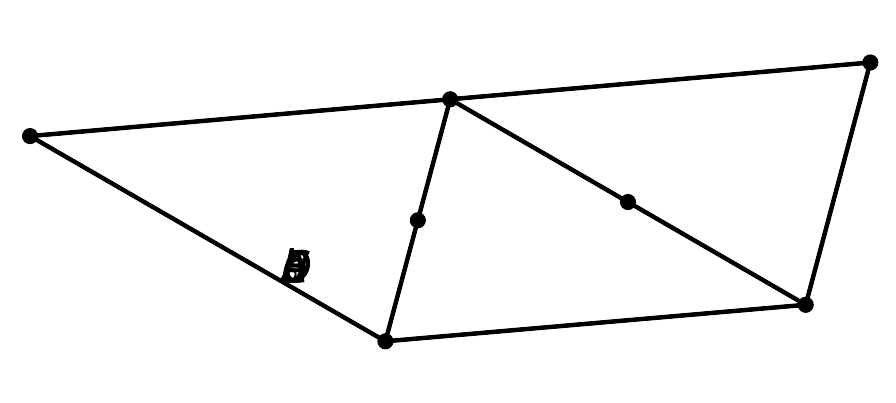
1. Triangle is congruent to triangle .  Select **all** the statements that are a result of corresponding parts of congruent triangles being congruent.

* 
  1. Segment  is congruent to segment .
  2. Segment  is congruent to segment .
  3. Angle  is congruent to angle .
  4. Angle  is congruent to angle .
  5. Angle  is congruent to angle .
* (From Unit 2, Lesson 1.)

1. When triangle  is reflected across line , the image is triangle . Why is angle  congruent to angle ?

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

1. Line is parallel to line .
   1. What is the measure of angle ?
   2. What is the measure of angle ?

* 
* (From Unit 1, Lesson 21.)



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