### Lesson 3 Practice Problems

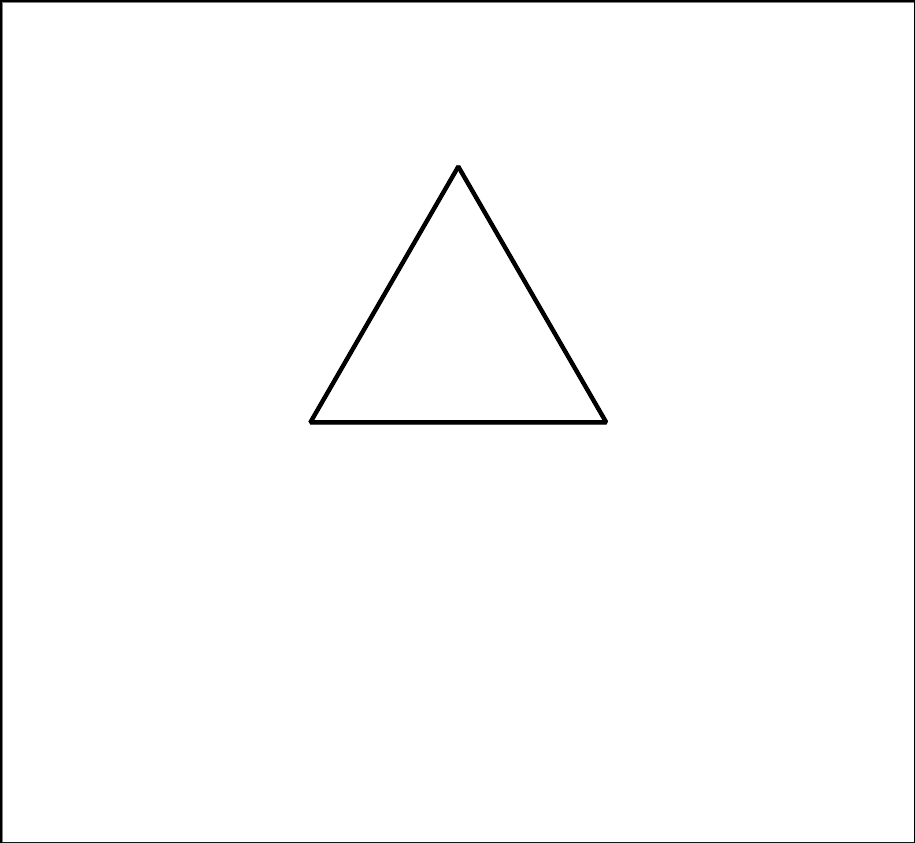
1. This diagram is a straightedge and compass construction. is the center of one circle, and is the center of the other. Select **all** the true statements.

* 
  1. Line is perpendicular to segment
  2. Point is the midpoint of segment
  3. The length is the equal to the length .
  4. Segment is perpendicular to segment

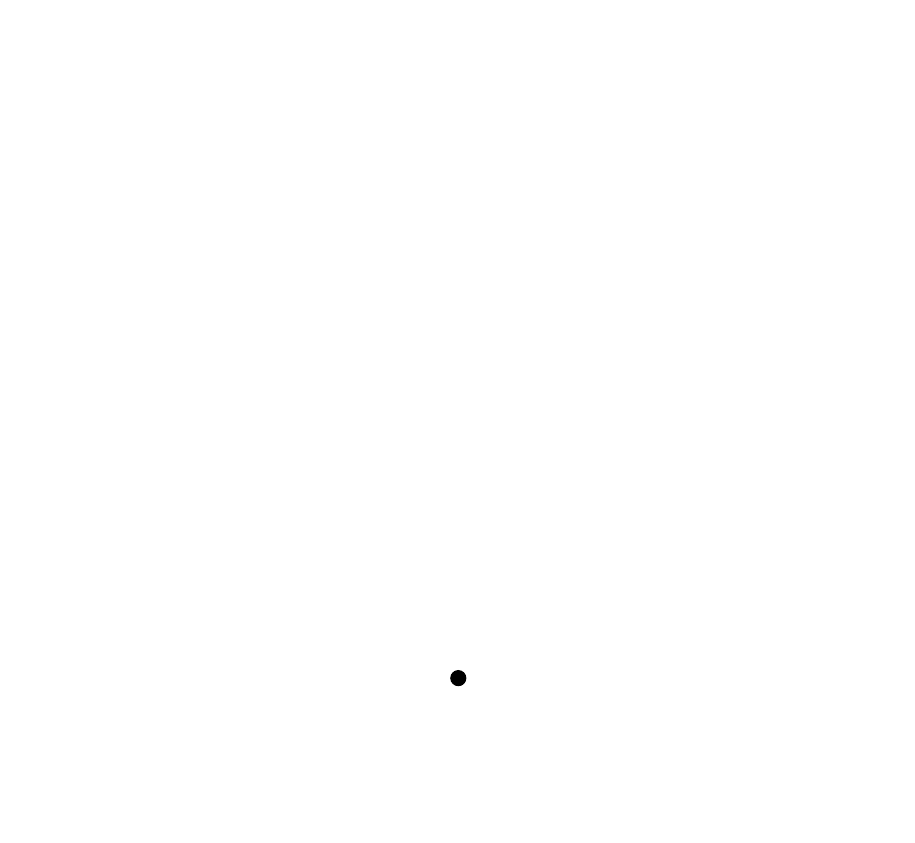
1. In this diagram, line segment is the perpendicular bisector of line segment . Assume the conjecture that the set of points equidistant from and is the perpendicular bisector of is true. Is point closer to point , closer to point , or the same distance between the points? Explain how you know.

* 

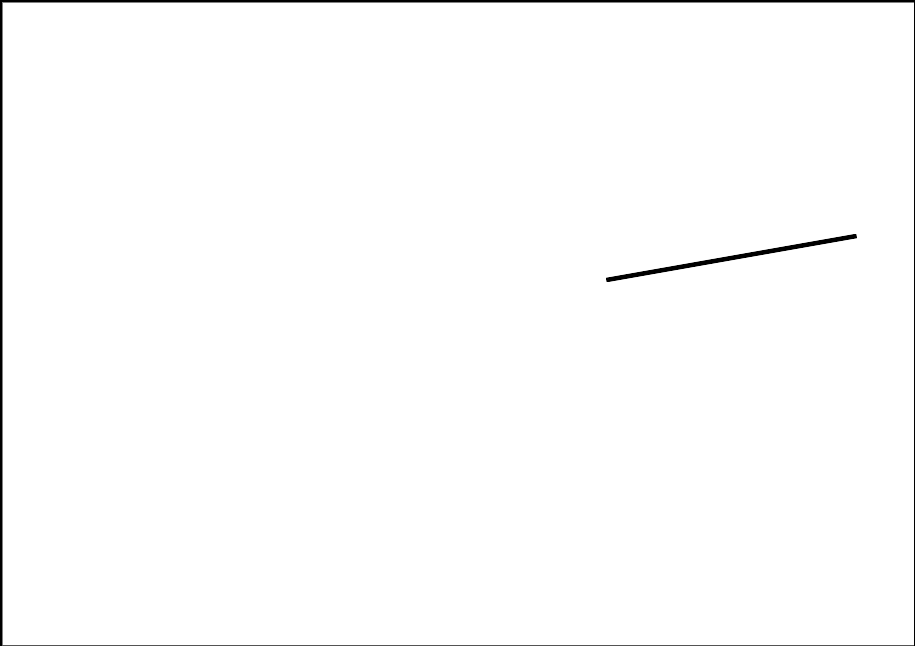
1. Starting with 2 marked points, and , precisely describe the straightedge and compass moves required to construct the triangle in this diagram.

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* (From Unit 1, Lesson 2.)

1. This diagram was created by starting with points and and using only straightedge and compass to construct the rest. All steps of the construction are visible. Select **all** the steps needed to produce this diagram.

* 
  1. Construct a circle centered at .
  2. Construct a circle centered at .
  3. Construct a circle centered at .
  4. Label the intersection points of the circles and .
  5. Draw the line through points and .
  6. Draw the line through points and .
* (From Unit 1, Lesson 2.)

1. This diagram was constructed with straightedge and compass tools. is the center of one circle, and is the center of the other. Select **all** true statements.

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* (From Unit 1, Lesson 1.)



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