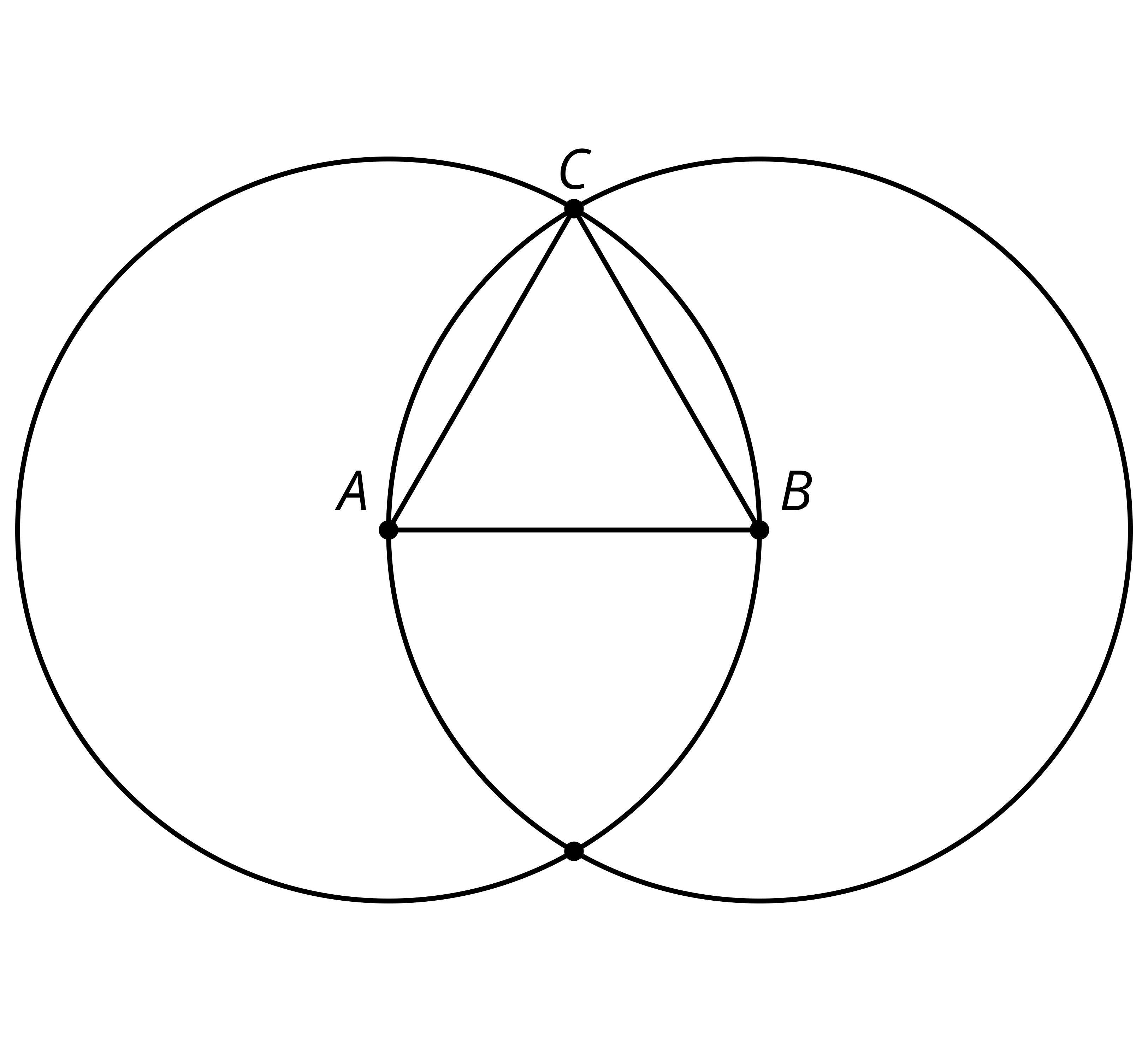
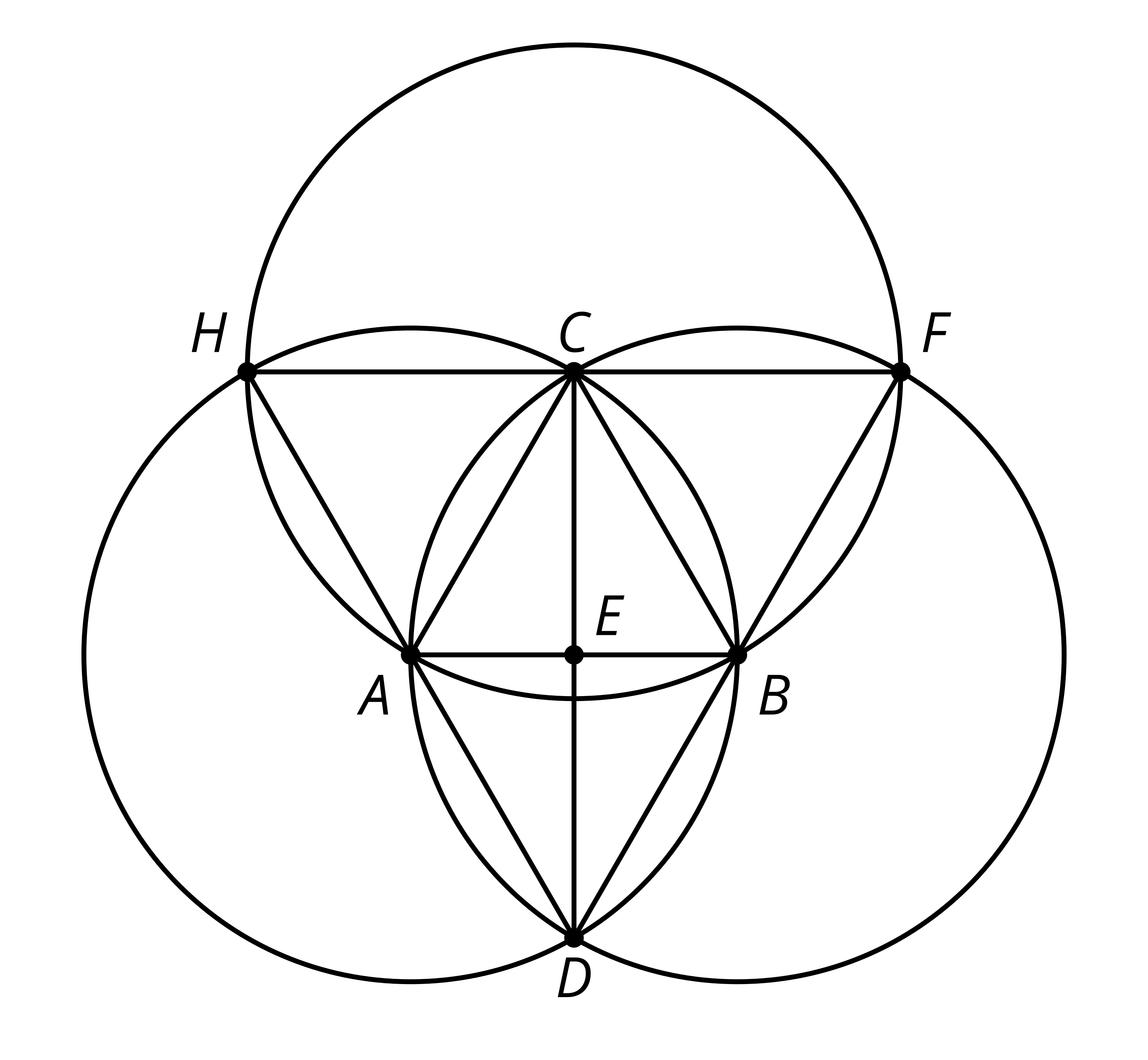
Curated Practice Problem Set

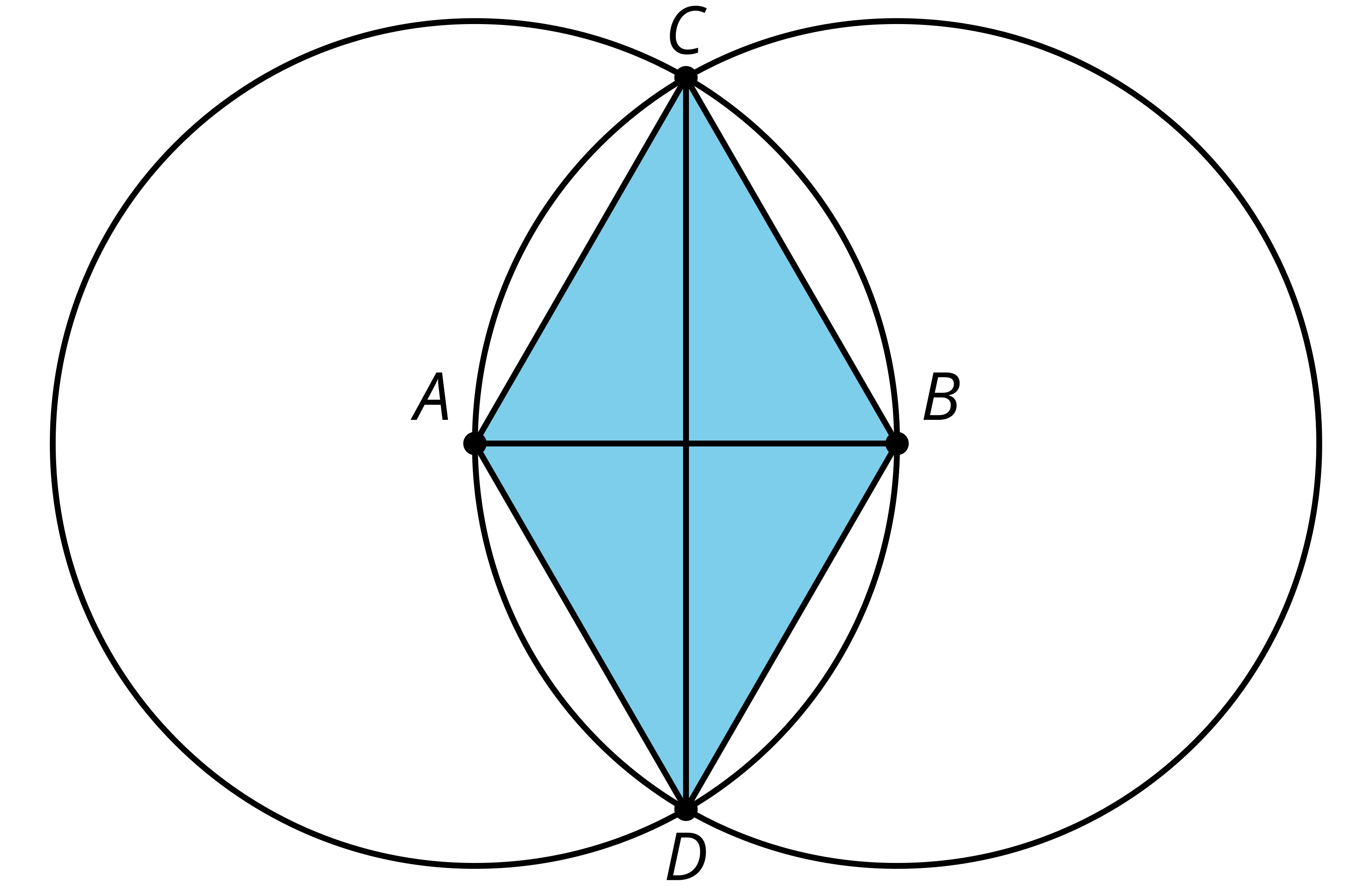
## Unit 1 Lesson 4 Cumulative Practice Problems

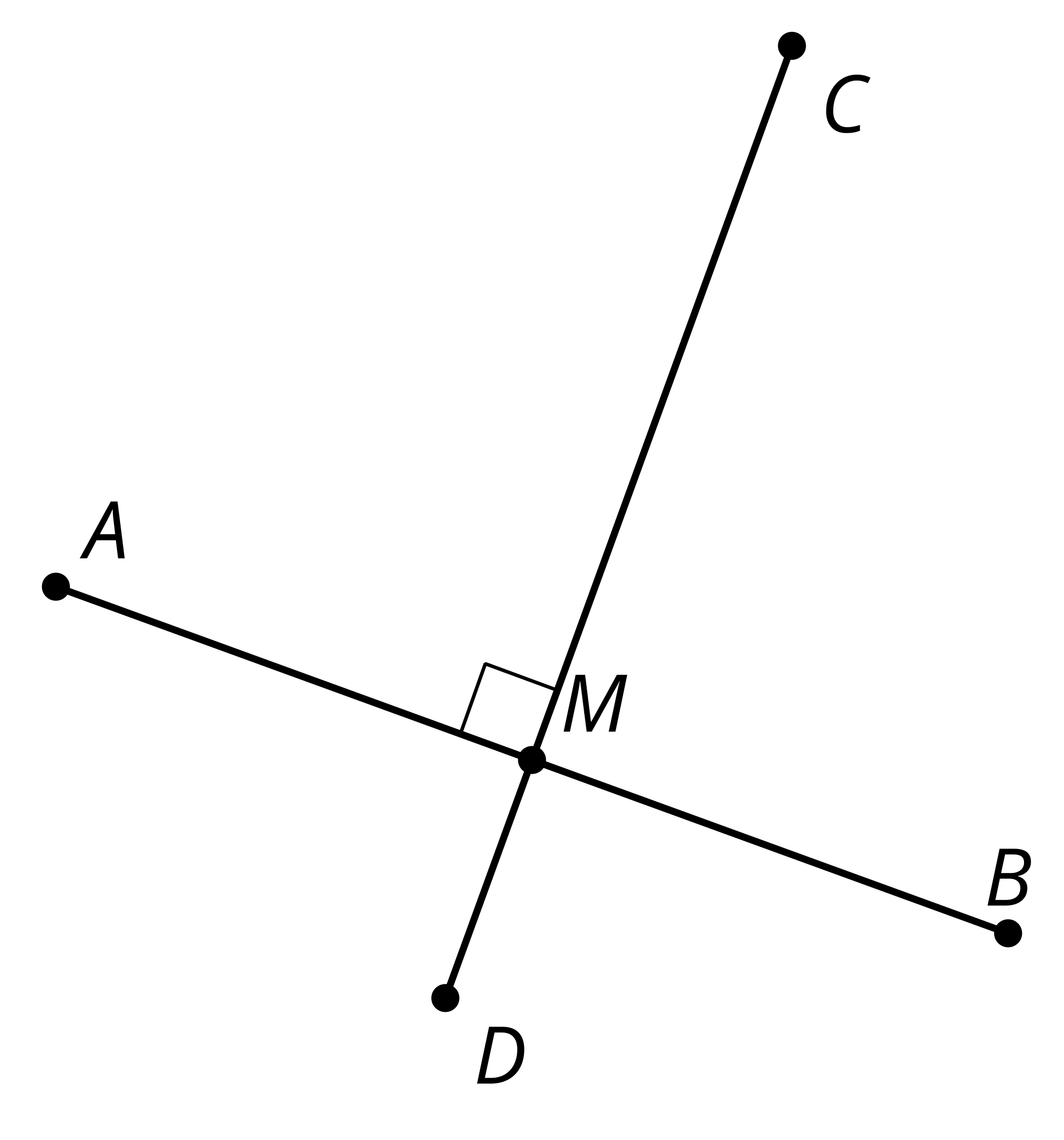
1. This diagram is a straightedge and compass construction. is the center of one circle, and is the center of the other. Explain how we know triangle is equilateral. The triangles have the same distance. It has internal angles, and they are 60 degrees.

* 

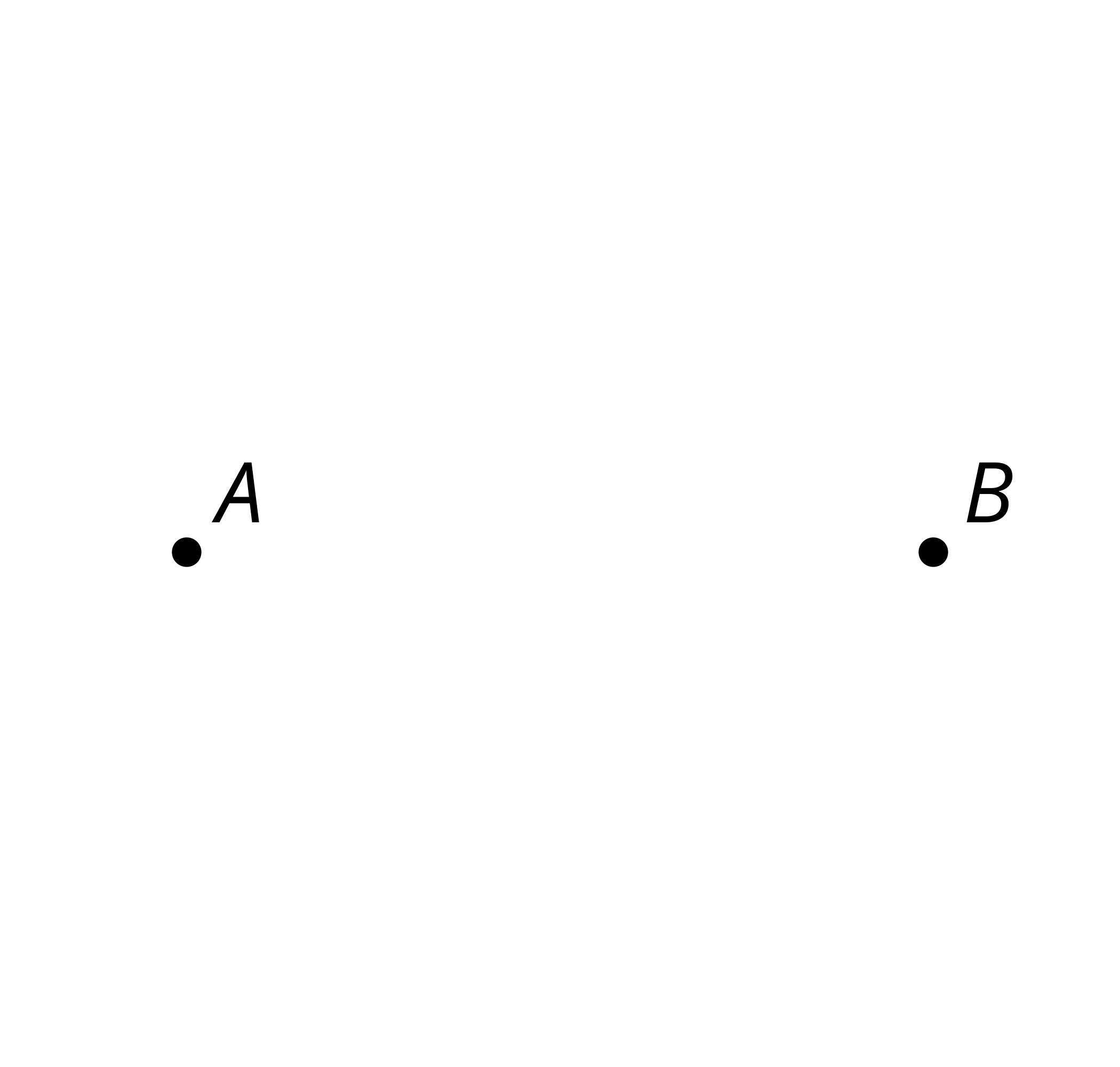
1. , , and are the centers of the 3 circles. How many equilateral triangles are there in this diagram? There are 1 equilateral triangle.

* 

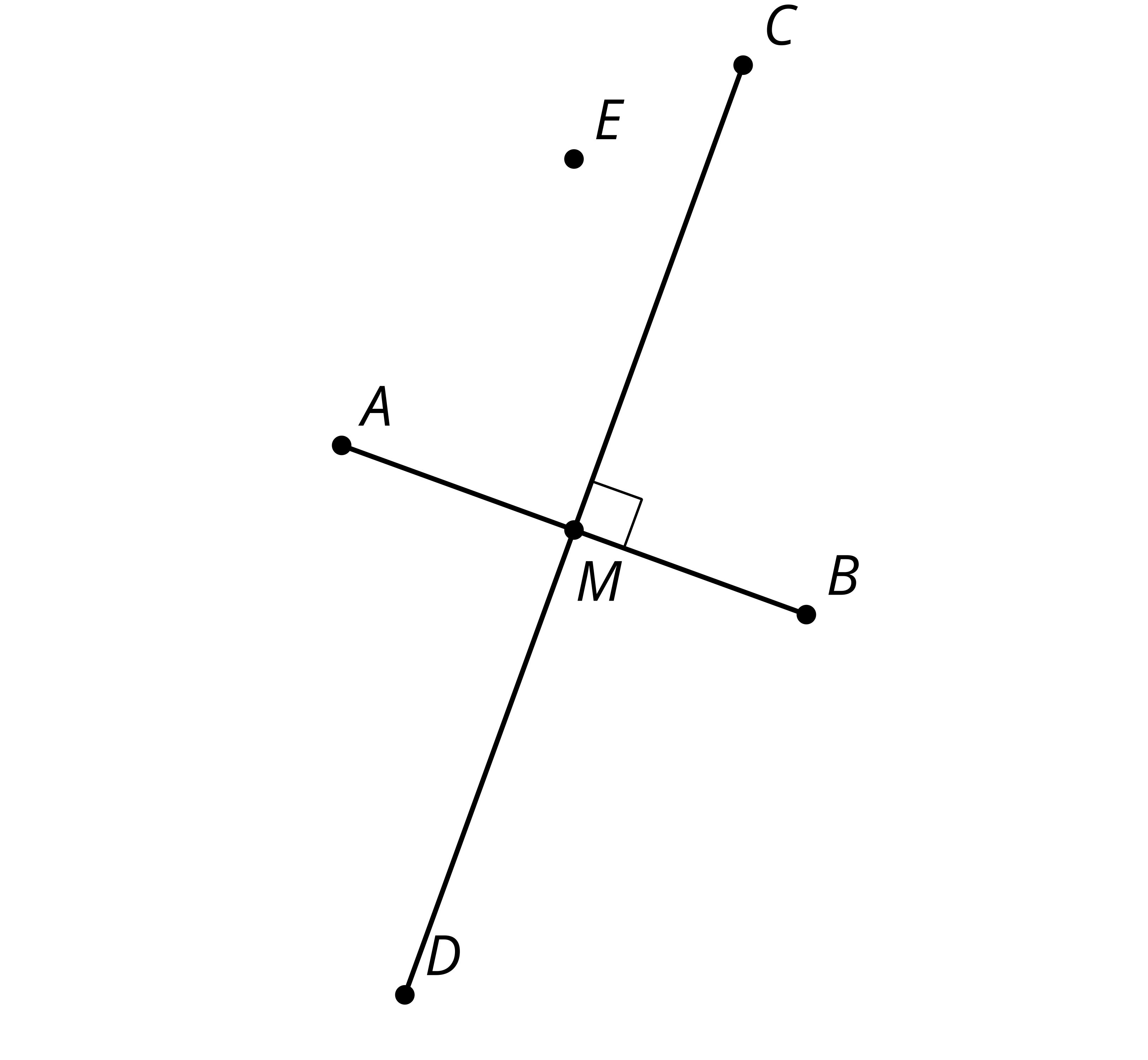
1. This diagram is a straightedge and compass construction. is the center of one circle, and is the center of the other. Select **all** the true statements. 
   1. correct
   2. correct
   3. incorrect
   4. is a square. correct
   5. is an equilateral triangle. incorrect
   6. correct
2. Line segment is the perpendicular bisector of line segment . Is line segment the perpendicular bisector of line segment ? yes

* 
* (From Unit 1, Lesson 3.)

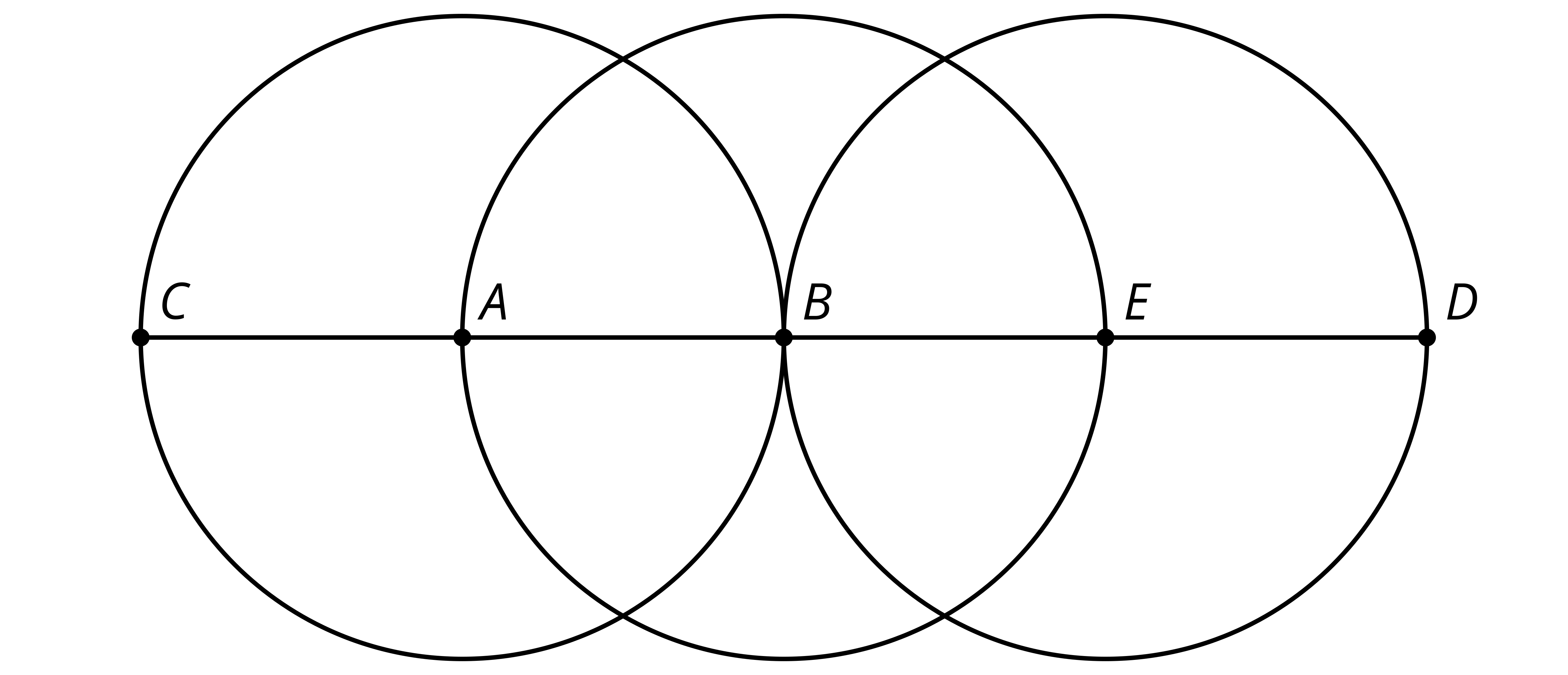
1. Here are 2 points in the plane.

* 
  1. Using only a straightedge, can you find points in the plane that are the same distance from points and ? Explain your reasoning.
  2. Using only a compass, can you find points in the plane that are the same distance from points and ? Explain your reasoning.
* (From Unit 1, Lesson 3.)

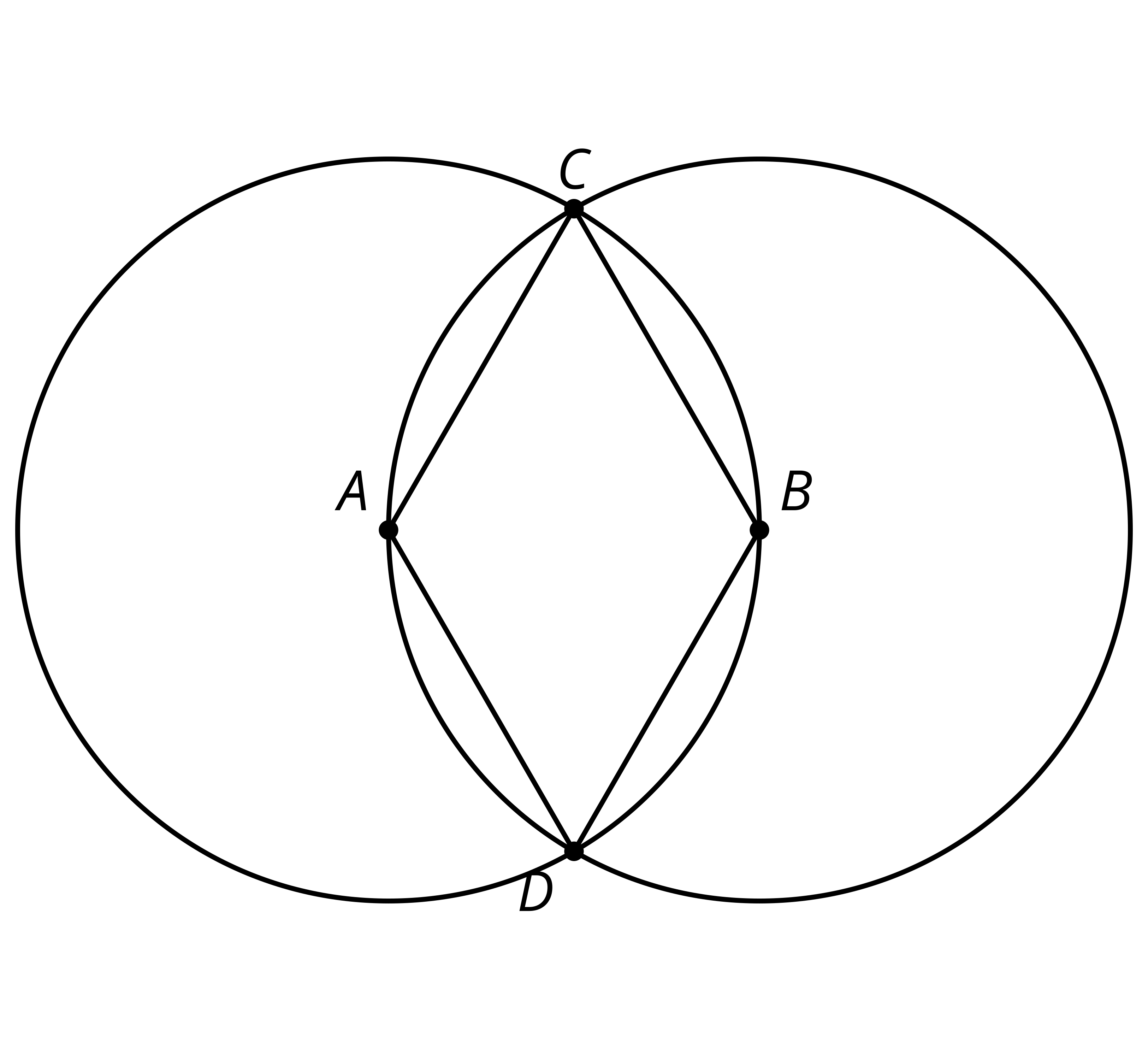
1. In this diagram, line segment is the perpendicular bisector of line segment . Assume the conjecture that the set of points equidistant from and is the perpendicular bisector of is true. Select **all** statements that must be true.

* 
* (From Unit 1, Lesson 3.)

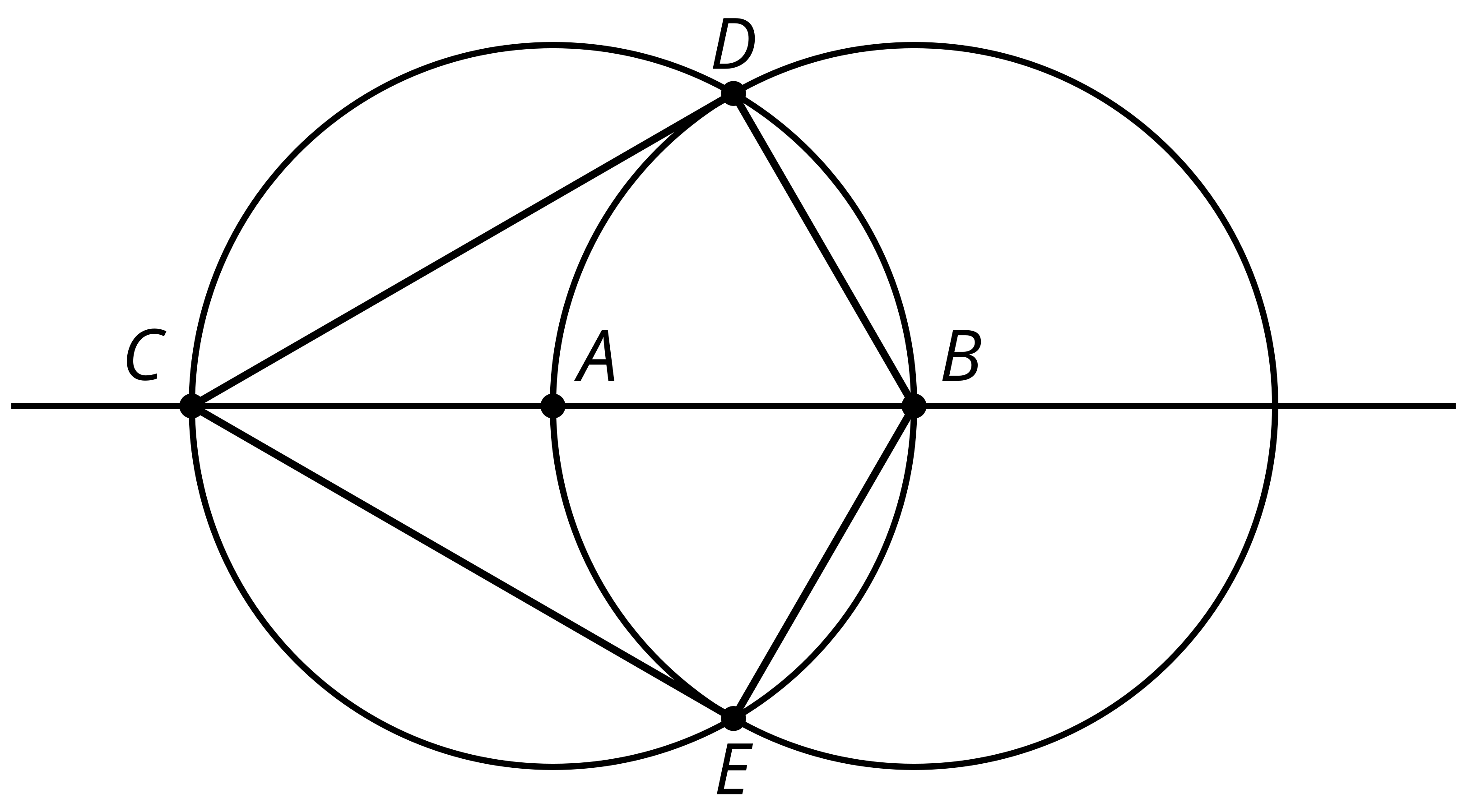
1. The diagram was constructed with straightedge and compass tools. Name **all** segments that have the same length as segment .

* 
* (From Unit 1, Lesson 1.)

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

* 
* (From Unit 1, Lesson 2.)

1. In the construction,  is the center of one circle and  is the center of the other. Which segment has the same length as ?

* 
* (From Unit 1, Lesson 2.)



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