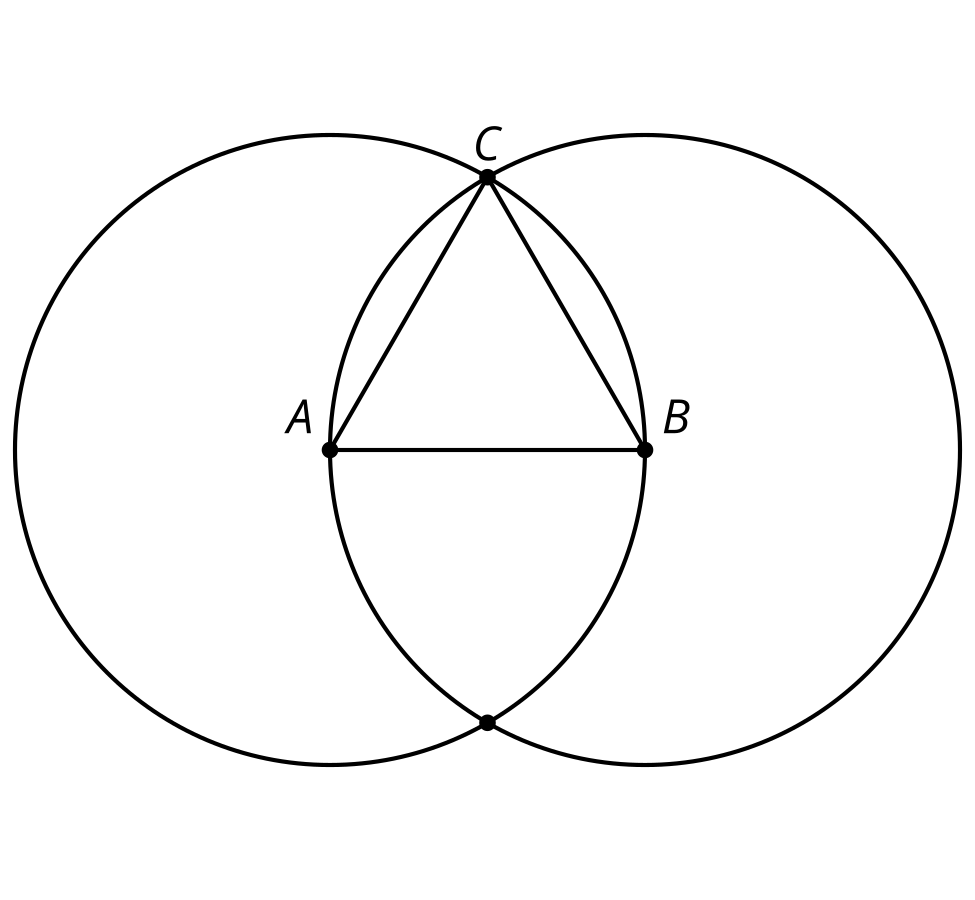
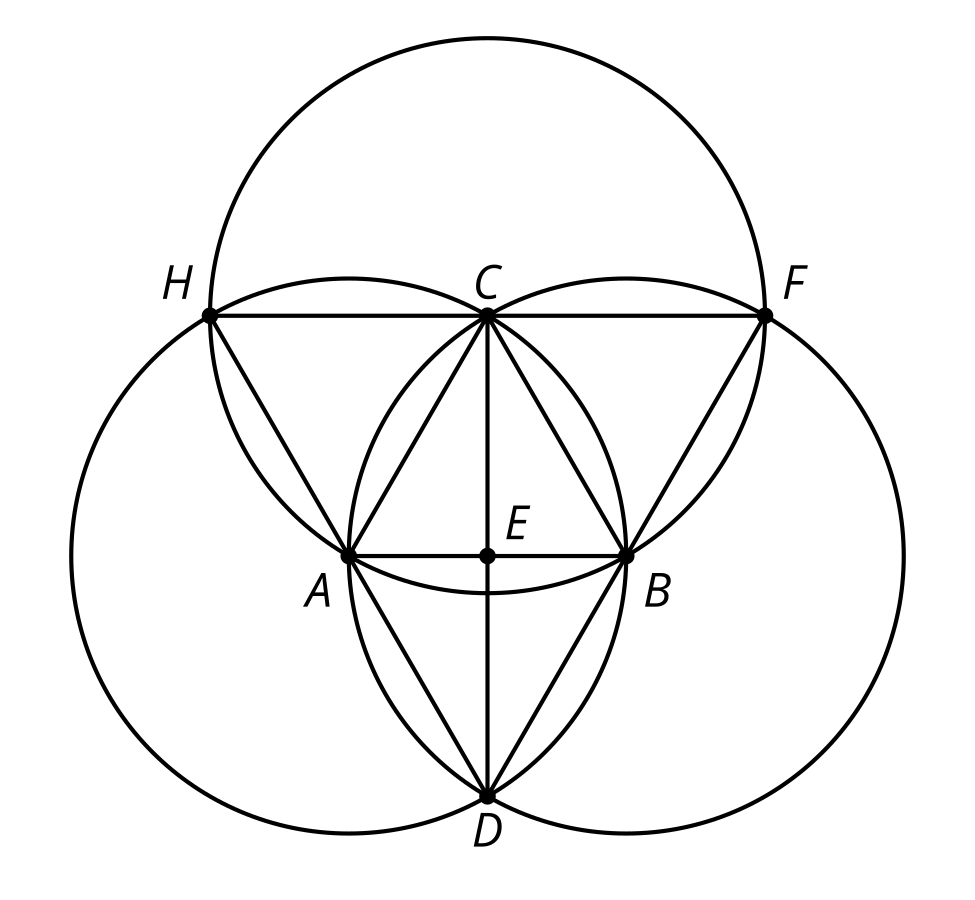
### Lesson 4 Practice Problems

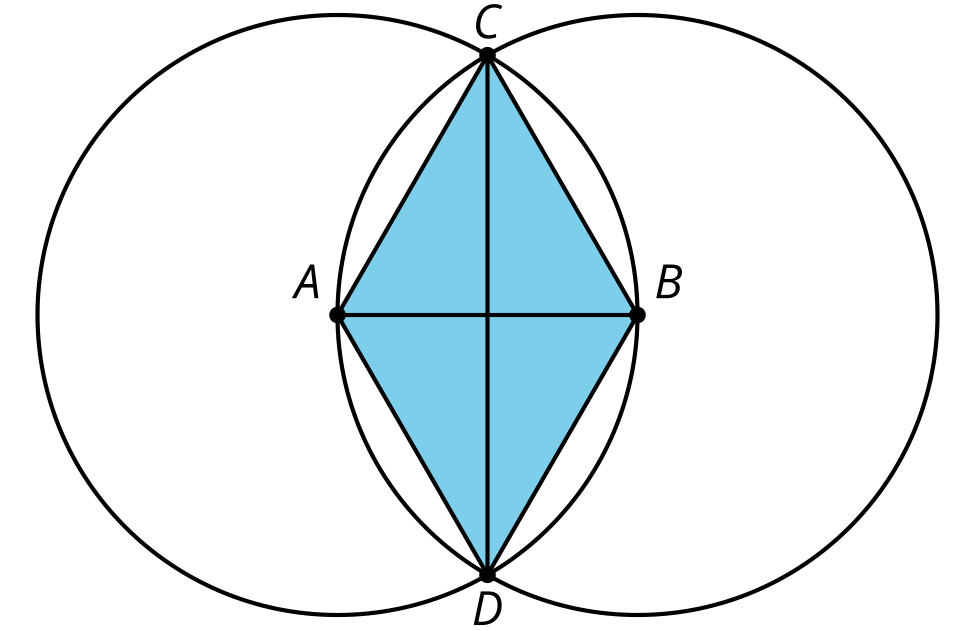
1. This diagram is a straightedge and compass construction. is the center of one circle, and is the center of the other. Explain how we know triangle is equilateral.

* 

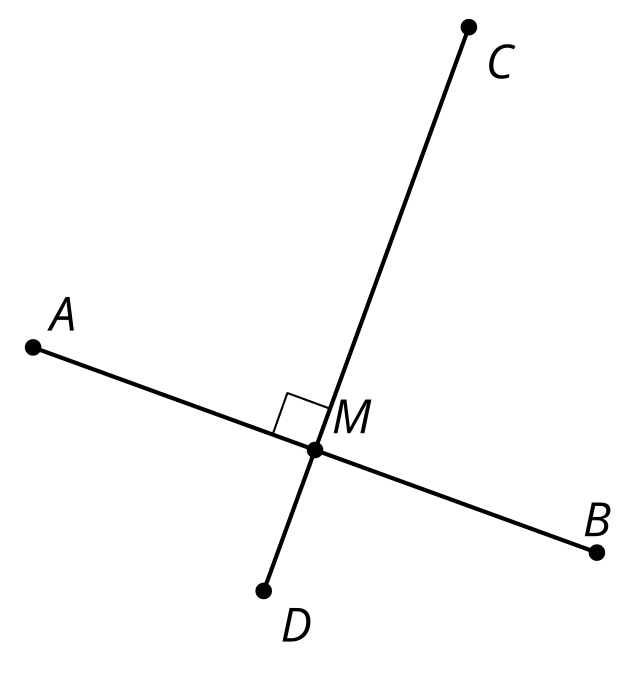
1. , , and are the centers of the 3 circles. How many equilateral triangles are there in this diagram?

* 

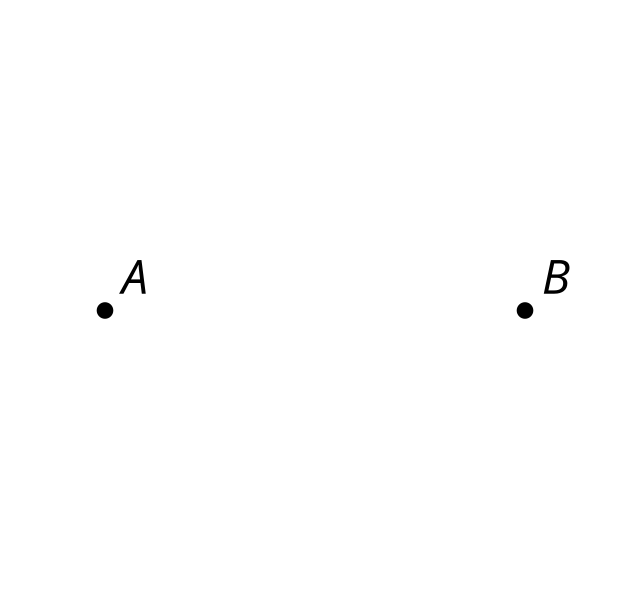
1. This diagram is a straightedge and compass construction. is the center of one circle, and is the center of the other. Select **all** the true statements.

* 
  1. is a square.
  2. is an equilateral triangle.

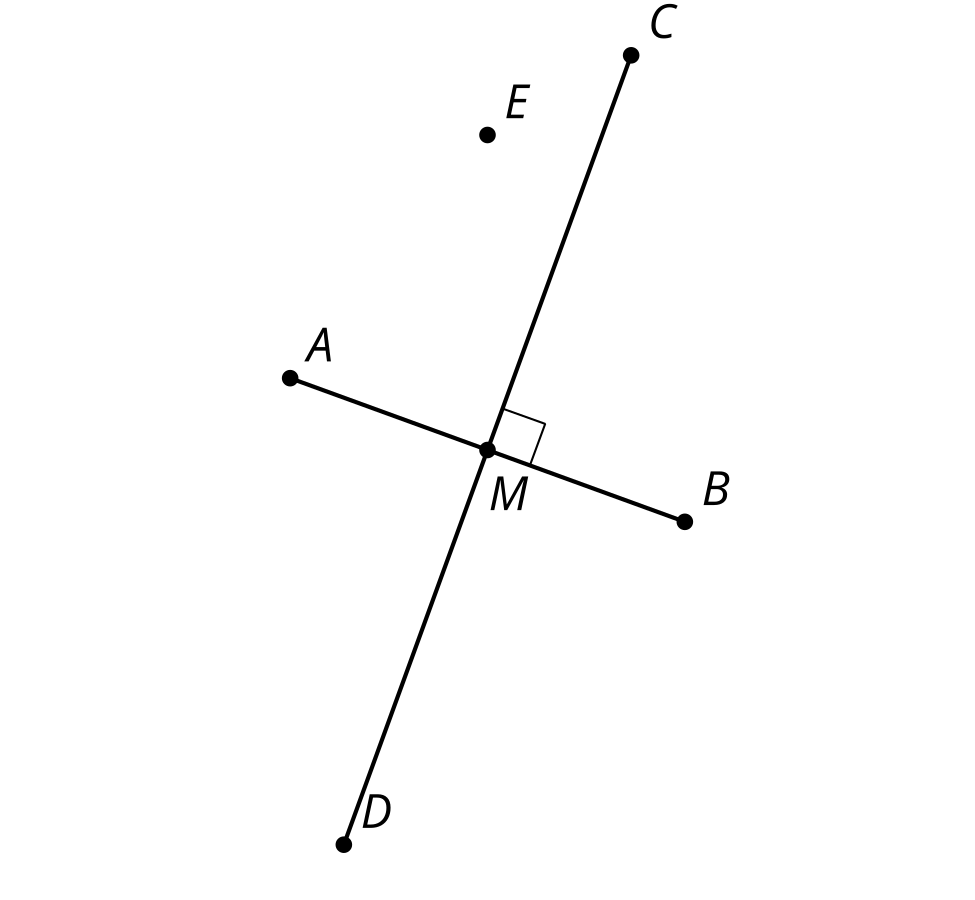
1. Line segment is the perpendicular bisector of line segment . Is line segment the perpendicular bisector of line segment ?

* 
* (From Unit 1, Lesson 3.)

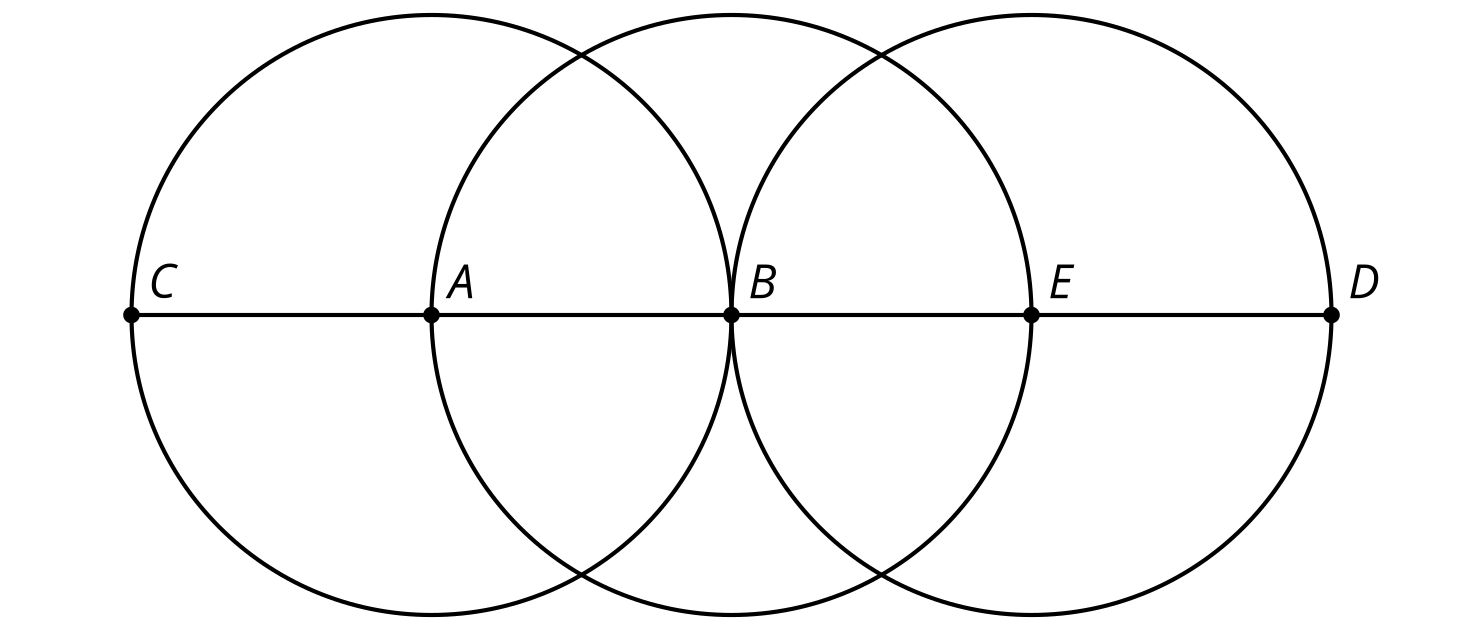
1. Here are 2 points in the plane.

* 
  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.)

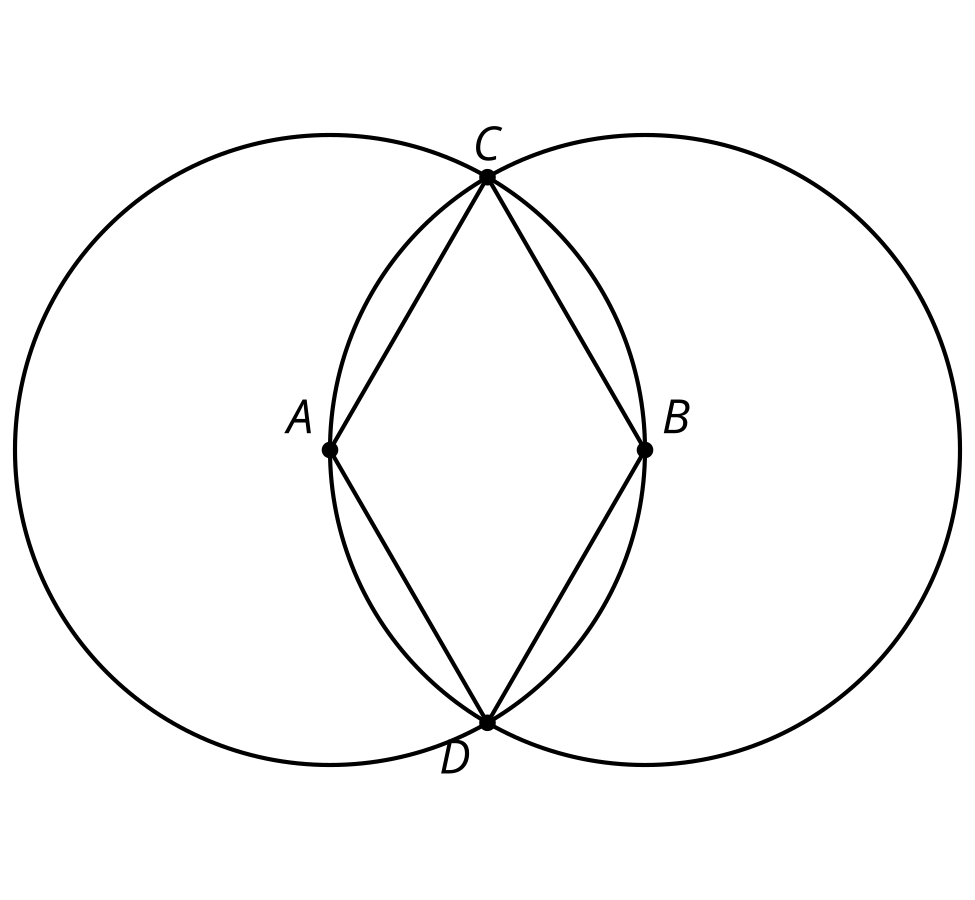
1. In this diagram, line segment is the perpendicular bisector of line segment . Assume the conjecture that the set of points equidistant from and is the perpendicular bisector of is true. Select **all** statements that must be true.

* 
* (From Unit 1, Lesson 3.)

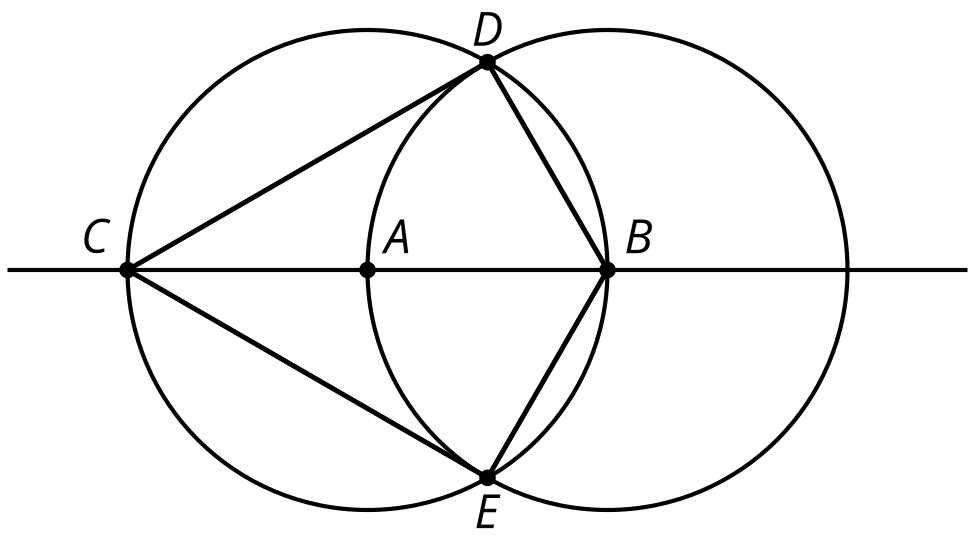
1. The diagram was constructed with straightedge and compass tools. Name **all** segments that have the same length as segment .

* 
* (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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