### Lesson 1 Practice Problems

1. Here is a diagram of a straightedge and compass construction. $C$ is the center of one circle, and $B$ is the center of the other. Explain why the length of segment $BD$ is the same as the length of segment $AB$.
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1. Clare used a compass to make a circle with radius the same length as segment $AB$. She labeled the center $C$. Which statement is true?
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	1. $AB>CD$
	2. $AB=CD$
	3. $AB>CE$
	4. $AB=CE$
1. The diagram was constructed with straightedge and compass tools. Points $A$, $B$, $C$, $D$, and $E$ are all on line segment $CD$. Name a line segment that is half the length of $CD$. Explain how you know.
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1. This diagram was constructed with straightedge and compass tools. $A$ is the center of one circle, and $C$ is the center of the other.
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	1. The 2 circles intersect at point $B$.  Label the other intersection point $E$.
	2. How does the length of segment $CE$ compare to the length of segment $AD$?



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