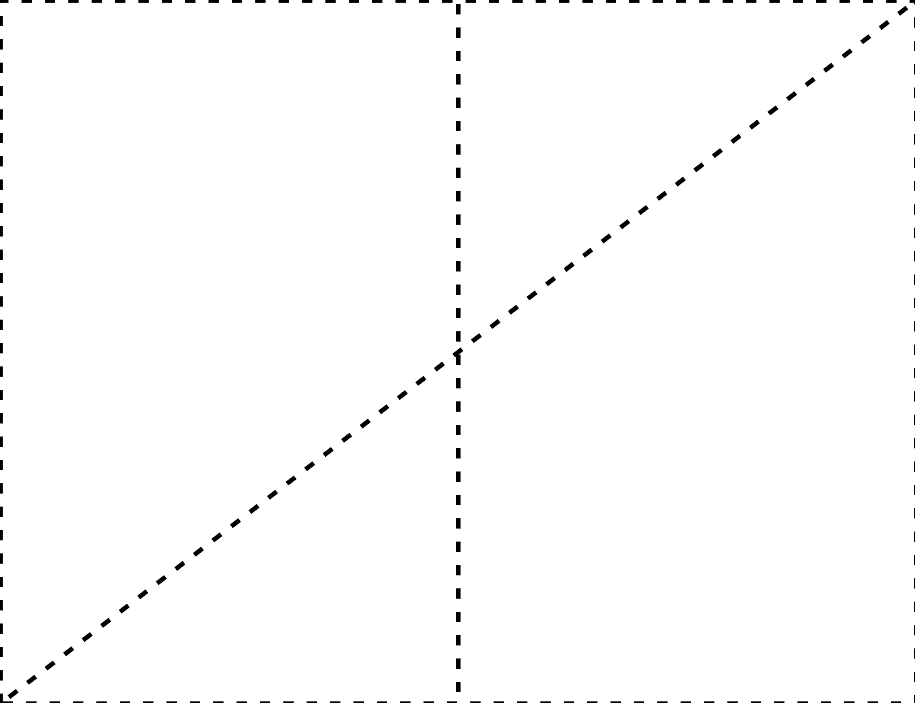
### Lesson 5 Practice Problems

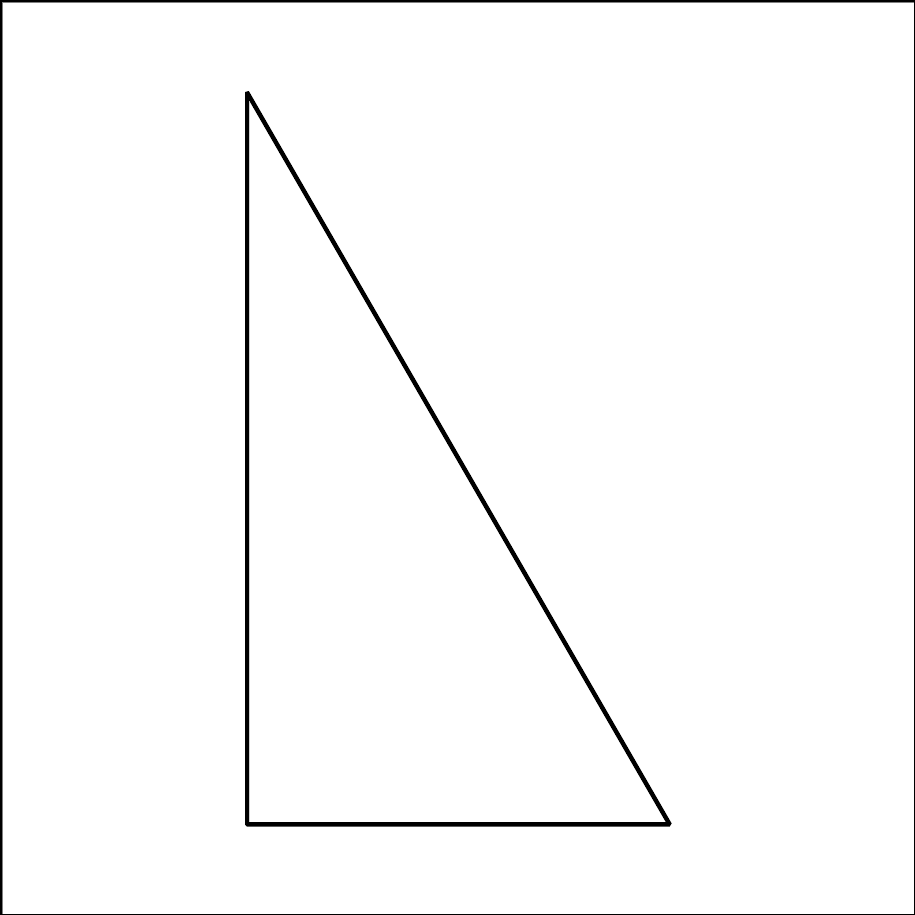
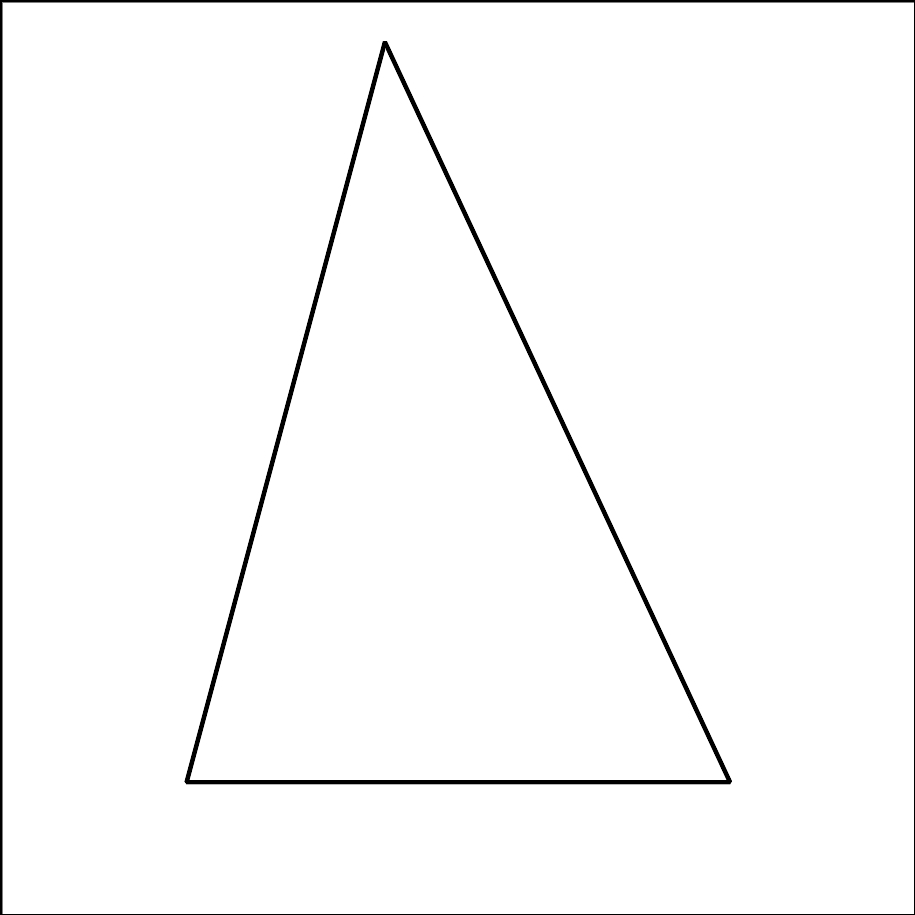
1. Noah says, “I constructed 2 perpendicular bisectors of triangle . That means the point where they intersect is the circumcenter!” Andre responds, “No, we still need to check the third perpendicular bisector to make sure it intersects at the same point.”

* Do you agree with either of them? Explain or show your reasoning.

1. The dotted line is the perpendicular bisector of side . The distance between points and is 7 units. What is the distance between points and ? Explain or show your reasoning.

* 

1. Construct the circumcenter of each triangle. Then, based on the locations of the circumcenters, classify each triangle as acute, right, or obtuse.

* triangle A
* 
* triangle B
* 

1. Select **all** quadrilaterals that **cannot** be cyclic.
   1. a square with side length units
   2. a 2 inch by 4 inch rectangle
   3. a rhombus with side length 5 centimeters and angle measures 20 degrees and 160 degrees
   4. quadrilateral in which angle is 62 degrees, angle is 97 degrees, angle is 118 degrees, and angle is 83 degrees
   5. quadrilateral in which angle is 45 degrees, angle is 135 degrees, angle is 90 degrees, and angle is 90 degrees

* (From Unit 7, Lesson 4.)

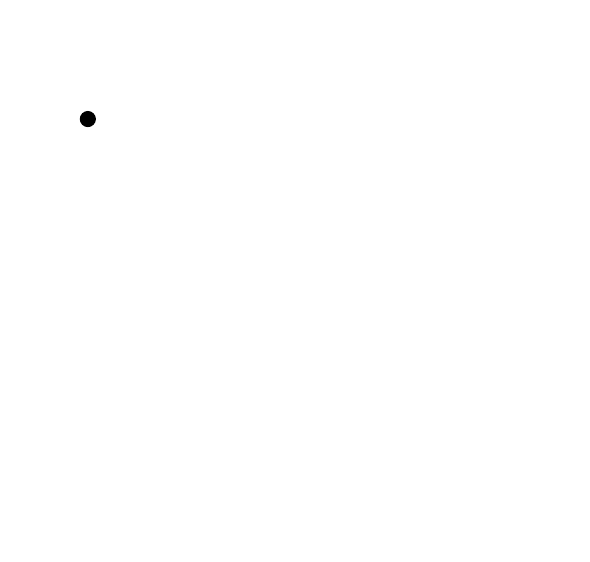
1. A quadrilateral has the given angle measures. Select the set of measurements which could come from a cyclic quadrilateral.
   1. angle is 70, angle is 110, angle is 70, and angle is 110
   2. angle is 60, angle is 50, angle is 120, and angle is 130
   3. angle is 100, angle is 110, angle is 70, and angle is 80
   4. angle is 70, angle is 45, angle is 110, and angle is 45

* (From Unit 7, Lesson 4.)

1. What is the measure of angle ?

* 
* (From Unit 7, Lesson 3.)

1. The measure of angle is 56 degrees.
   1. What is the measure of angle ?
   2. What is the measure of the arc from to not passing through ?

* 
* (From Unit 7, Lesson 2.)

1. A quadrilateral has vertices and . Select the most precise classification for quadrilateral .
   1. quadrilateral
   2. parallelogram
   3. rectangle
   4. square

* (From Unit 6, Lesson 14.)



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