

CSS: Use formal arguments to establish facts about the angle sum and exterior angle of triangles, about angles created when parallel lines are cut by a transversal, and the angle-angle criterion for similarity of triangles.

Name: \_\_\_\_\_ Date: \_\_\_\_\_ Per.: \_\_\_\_\_

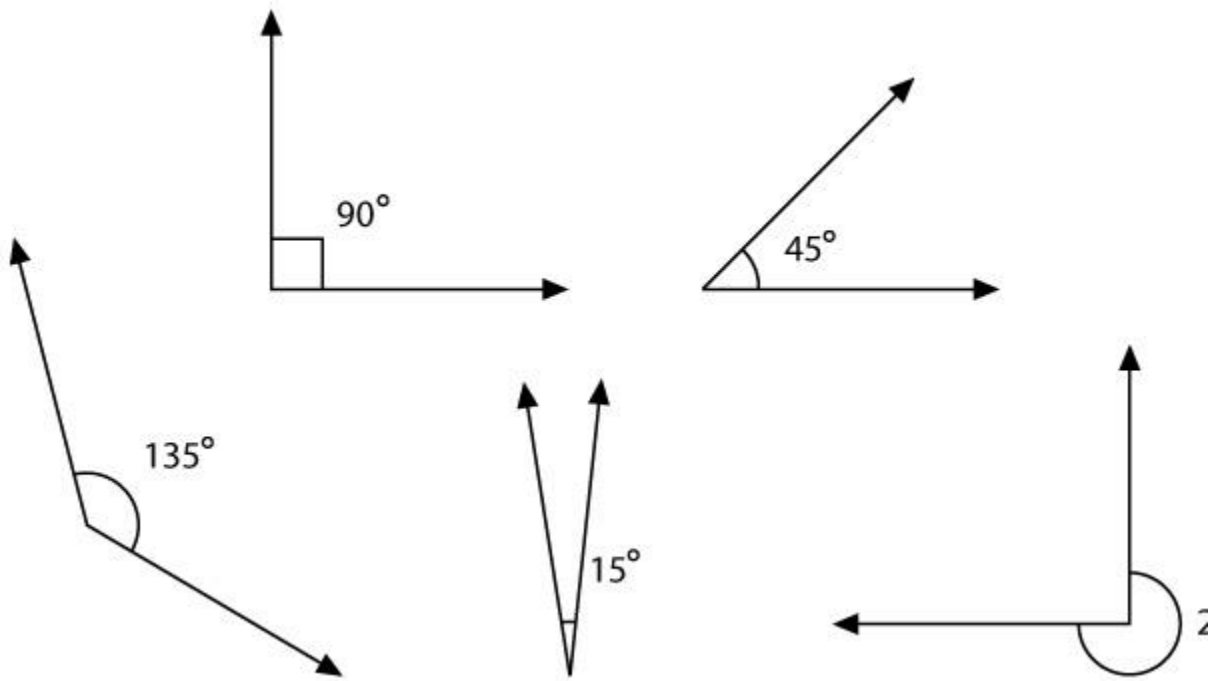
**LT Pre Test**

**Directions:** Show what you know about the following topic by completing the problems below. Make sure to show all work.

1. Define “formal argument”.	2. Define transversal.
3. Explain similar triangles.	4. What is the angle-angle criterion?
5. Draw the following: lines, line segments, rays, parallel lines, and perpendicular lines.	
<p style="text-align: right;">(4.G.1a)</p>	
6. Explain the concept of an angle using the following vocabulary: ray, endpoint and fraction of a circle.	
<p style="text-align: right;">(4.MD.5)</p>	
7. Draw an angle with a protractor that has the measurement 135 degrees.	
<p style="text-align: right;">(4.MD.6)</p>	

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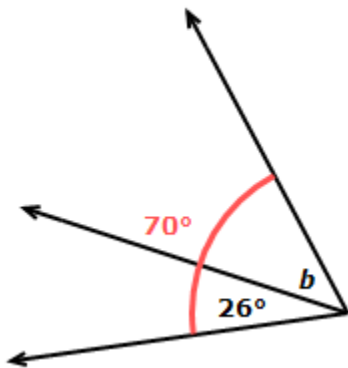
8. Classify the following angles as right, acute or obtuse.



(4.G.1b)

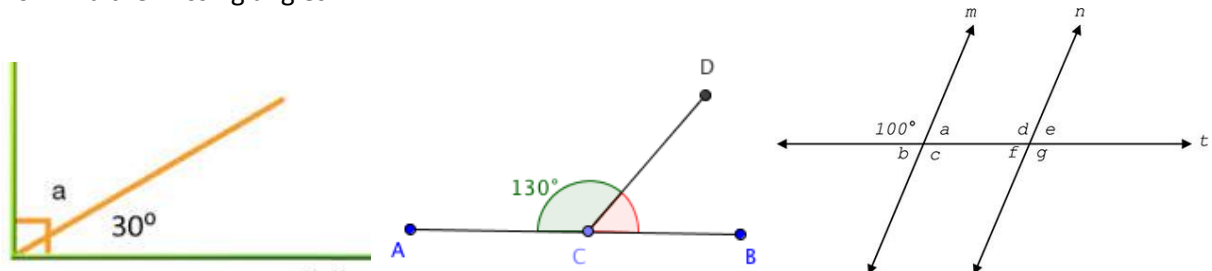
9. Find the missing angle by using addition or subtraction.

What is the value of  $b$ ?



(4.MD.7)

10. Find the missing angles.



(7.G.5)

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11. Formally prove the Geometric facts below.

a) Angle sum and exterior angles of a triangle.

b) Angles created when parallel lines are cut by a transversal.

c) Angle-angle criterion of similarity.

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