

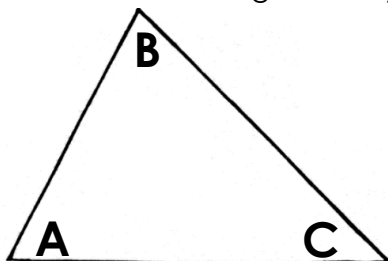
Name: _____ Date: _____

Triangles – Inequalities

Triangle Proof!!!

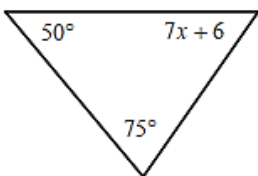
Angle Sum Theorem

The sum of the angles in any triangle is _____.

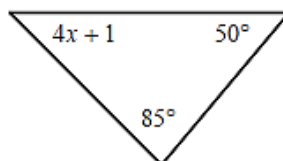


Solve for x.

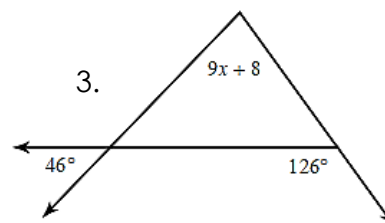
1.



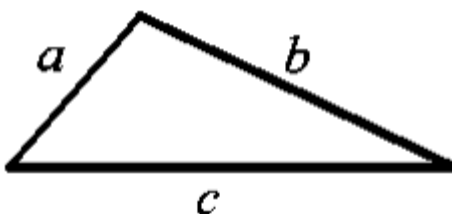
2.



3.



The sum of the lengths of any two sides of a triangle is greater than the length of the third side.



Are these possible side lengths of a triangle?

4. 10, 10, 6

5. 1, 7, 8

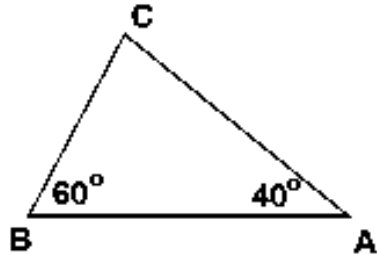
6. 6, 18, 9

What is the range of possible side lengths for the third side?

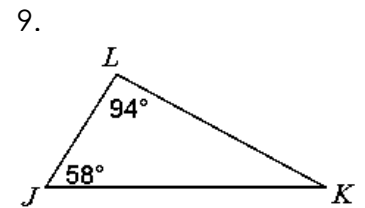
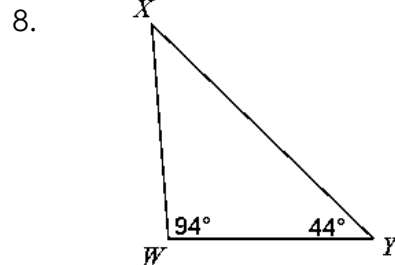
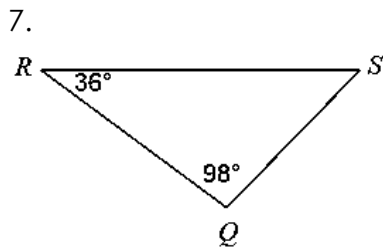
7. 10, 11

8. 6, 8

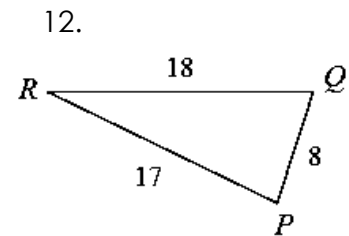
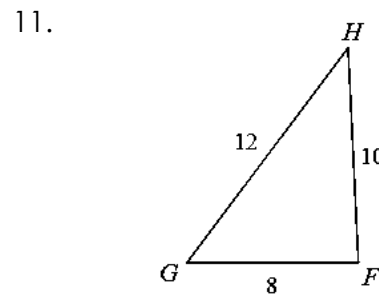
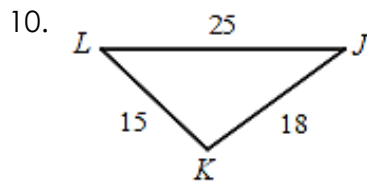
9. 12, 7

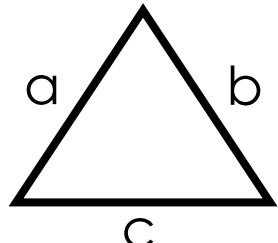
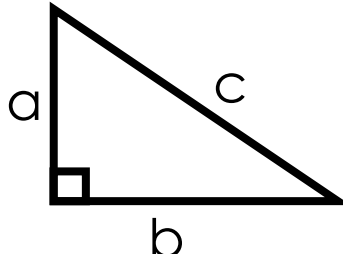
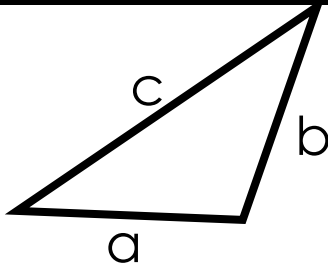
<p>The shortest side of a triangle is opposite the smallest angle.</p> <p>The longest side of a triangle is opposite the largest angle.</p>		<p>List the sides from shortest to longest!</p>
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List the sides in order from least to greatest:



List the angles in order from least to greatest:



Acute Triangles	Right Triangles	Obtuse Triangles
		

Classify each triangle as acute, right or obtuse.

13. 5ft, 12ft, 13ft

14. 9km, 12km, 16km

15. 8ft, 8ft, 10ft