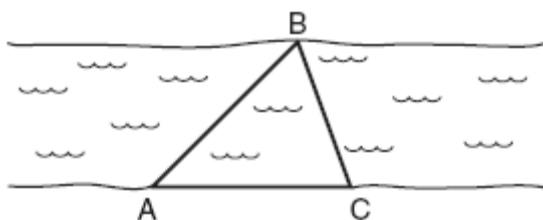


NAME: _____

G.G.34: Determine either the longest side of a triangle given the three angle measures or the largest angle given the lengths of three sides of a triangle

1. 060629a, P.I. G.G.34

On the banks of a river, surveyors marked locations A , B , and C . The measure of $\angle ACB = 70^\circ$ and the measure of $\angle ABC = 65^\circ$.



Which expression shows the relationship between the lengths of the sides of this triangle?

- [A] $BC < AB < AC$ [B] $AB < BC < AC$
[C] $AC < AB < BC$ [D] $BC < AC < AB$

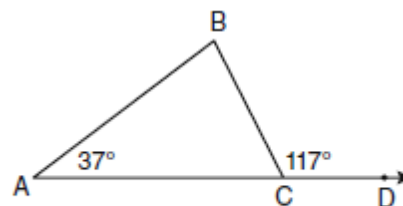
2. 060911ge, P.I. G.G.34

In $\triangle ABC$, $m\angle A = 95$, $m\angle B = 50$, and $m\angle C = 35$. Which expression correctly relates the lengths of the sides of this triangle?

- [A] $AB < AC < BC$ [B] $AB < BC < CA$
[C] $BC < AC < AB$ [D] $AC < BC < AB$

3. 080934ge, P.I. G.G.34

In the diagram below of $\triangle ABC$ with side \overline{AC} extended through D , $m\angle A = 37$ and $m\angle BCD = 117$. Which side of $\triangle ABC$ is the longest side? Justify your answer.



(Not drawn to scale)

G.G.34: Determine either the longest side of a triangle given the three angle measures or the largest angle given the lengths of three sides of a triangle

[1] D _____

[2] A _____

[2] \overline{AC} , and an appropriate justification is given, and appropriate work is shown, such as a correctly labeled diagram.

[1] Appropriate work is shown, but one computational error is made.

or [1] Appropriate work is shown, but one conceptual error is made.

or [1] All angle measures are identified correctly, but no further correct work is shown.

or [1] \overline{AC} , but no work is shown, and no justification is given.

[0] A zero response is completely incorrect, irrelevant, or incoherent or is a correct response that was obtained by an obviously

[3] _____