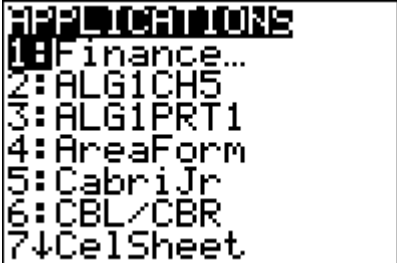
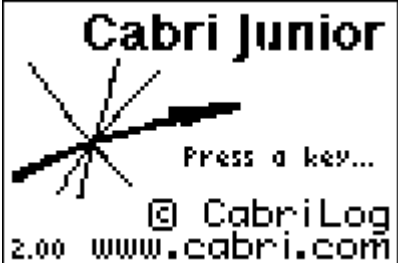

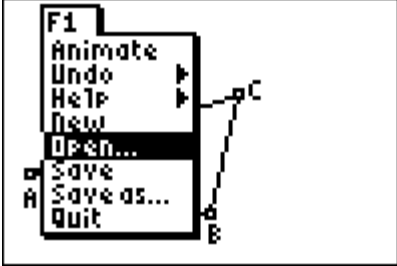
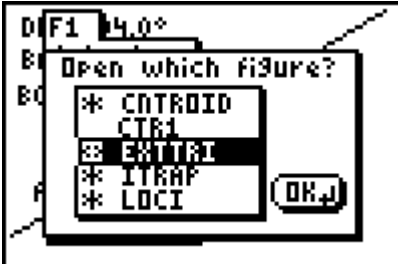
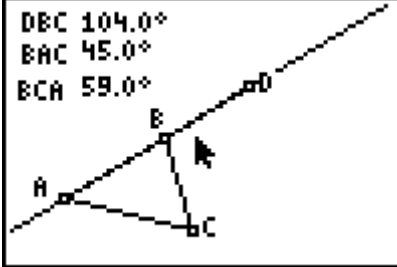
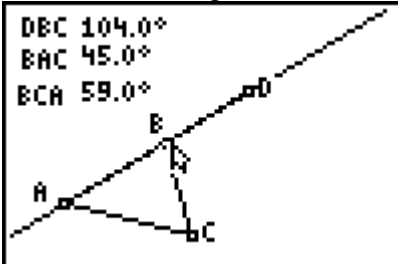
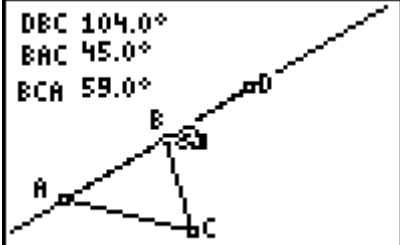


Student Worksheet for G.G. 32

<p>After turning on your handheld press</p> <p>APPS</p> 	<p>Select CabriJr.</p> <p>5</p> 
<p>Y=  scroll down to Open</p> 	<p>ENTER scroll to EXTTRI</p> 
<p>ENTER</p> 	<p>Now position the cursor over any point. The vertex will become "active" and the cursor will change to a hollow arrow.</p> 

<div style="border: 1px solid black; padding: 5px;"> <div style="background-color: #90EE90; border: 1px solid black; border-radius: 5px; padding: 2px; display: inline-block; margin-bottom: 5px;">ALPHA</div> <div style="margin-top: 5px;"> <p>DBC 104.0°</p> <p>BAC 45.0°</p> <p>BCA 59.0°</p> </div>  </div>	<p>You have now selected a point, grabbed the point now use your cursor to drag the point and observe what happens on your calculator.</p> <p>Answer the questions below.</p>
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- 1) Is $\angle DBC$ in the interior or exterior of $\triangle ABC$? _____
- 2) Is $\angle BAC$ in the interior or exterior of $\triangle ABC$? _____
- 3) Is $\angle BCA$ in the interior or exterior of $\triangle ABC$? _____
- 4) After exploring many triangles by dragging different points was there a relationship between the measures of $\angle BCA$, $\angle BAC$ and $\angle DBC$? _____
- 5) If you found a relationship write a statement that describes this relationship.

- 6) $\angle BAC$ and $\angle BCA$ are referred to as remote interior angles with respect to $\angle DBC$. What is the name the adjacent interior angle? _____
- 7) What is the sum of $\angle DBC$ and its adjacent interior angle? _____
- 8) Given the symbols, $<$, $>$, $=$ place the correct symbol in each of the following:
 - A) $\angle DBC$ _____ $\angle BCA$
 - B) $\angle DBC$ _____ $\angle BAC$

Remember you can investigate many different situations by dragging a point.

- 9) Using your answers to question 8 write a statement about an exterior angle of a triangle and either remote interior angle.
- 10) Given the symbols, $<$, $>$, $=$ place the correct symbol in each of the following:
 - A) $\angle DBC + \angle CBA$ _____ 180°
 - B) $\angle BCA + \angle BAC$ _____ $\angle DBC$
 - C) $\angle BCA + \angle BAC + \angle CBA$ _____ 180°