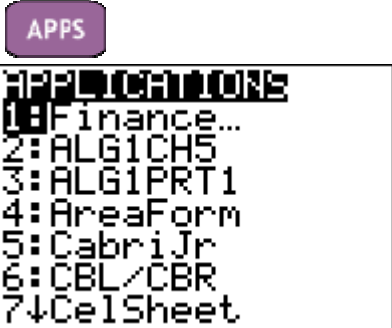
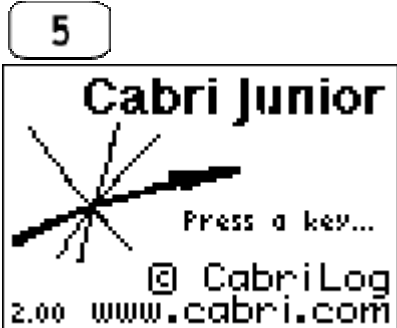

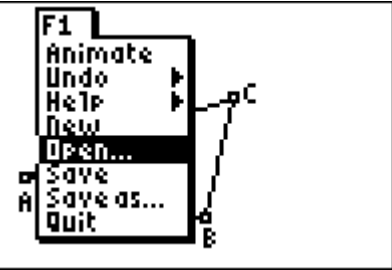
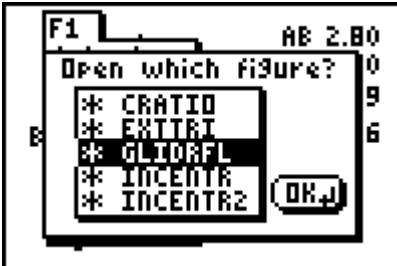
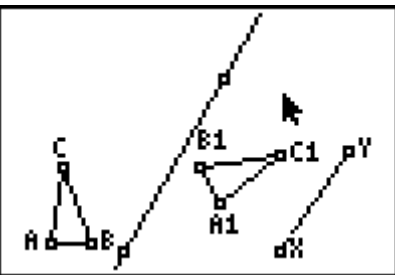
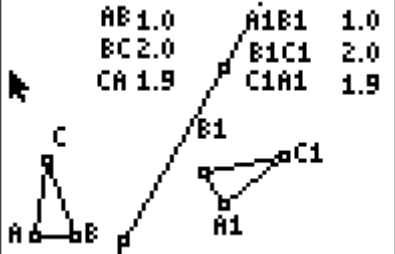


Student Worksheet for G.G.55 Investigate, justify, and apply the properties that remain invariant under glide reflections DISTANCE

<p>After turning on your handheld press</p> 	<p>Select CabriJr.</p> 
<p>Y=  scroll down to Open</p> 	<p>ENTER scroll to GLIDRFL</p> 
<p>ENTER</p> 	<p>$\Delta A_1B_1C_1$ is the image of ΔABC under a glide reflection. In the diagram below the lengths of the sides of the triangles have been indicated.</p> <p>You will move the vertices of ΔABC and drawn conclusions about the image $\Delta A_1B_1C_1$</p>
	<p>As you move the vertices of ΔABC take note of the measurements of the sides of the two triangles.</p>

1.) Select grab and drag point A.

What is changing? _____

What is remaining the same? _____

2.) Select grab and drag point B.

What is changing? _____

What is remaining the same? _____

3) Select, grab and drag point C. As you move point C stop and record 5 successive trials by entering the distances in the table below.

Trial #	AB	A1B1	BC	B1C1	CA	C1A1
1						
2						
3						
4						
5						

4) What seems to be true about the distances AB and A1B1? _____

5) Name any other pairs of segments that share this same property. _____

6) Under the transformation glide reflection is distance preserved? _____

7) In your own words explain what it means when a property is preserved.
