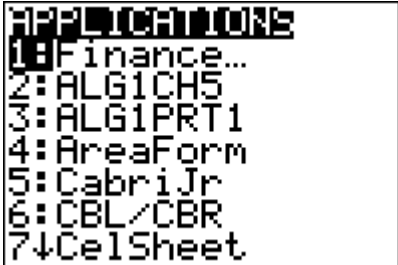
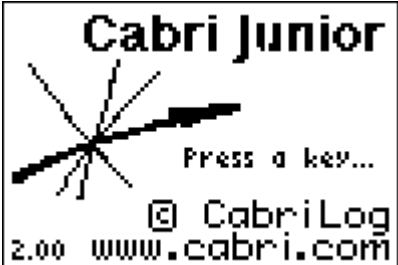

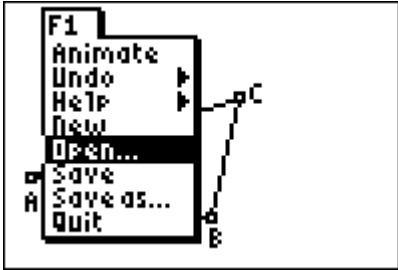
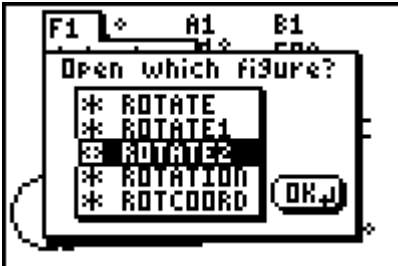
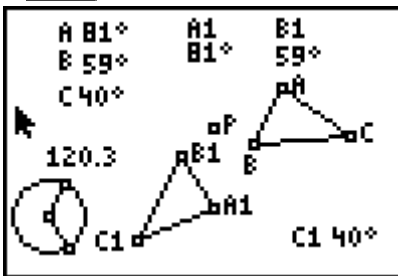


Student Worksheet for G.G.55 Investigate, justify, and apply the properties that remain invariant under rotation about a point. ANGLE MEASURE

<p>After turning on your handheld press</p> <p>APPS</p> 	<p>Select Cabri Jr.</p> <p>5</p> 
<p>Y=  scroll down to Open</p> 	<p>ENTER scroll to ROTATE2</p> 
<p>ENTER</p> 	<p>$\Delta A_1B_1C_1$ is the image of ΔABC under a rotation about point P.</p> <p>The measures of the angles of the triangles have been indicated.</p> <p>You will move the vertices of ΔABC and the radius points on the circle to draw conclusions about the image $\Delta A_1B_1C_1$</p>

1.) Select, grab and drag either radius point on the circle

What is changing? _____

What is remaining the same? _____

2.) Select, grab and drag point A.

What is changing? _____

What is remaining the same? _____

3.) Select, grab and drag point B.

What is changing? _____

What is remaining the same? _____

3) Select, grab and drag point A, B, C or either radius point. As you move your selected point, stop and record 5 successive trials by entering the measures of the angles in the table below.

Trial #	$\angle ABC$	$\angle A_1B_1C_1$	$\angle BCA$	$\angle B_1C_1A_1$	$\angle CAB$	$\angle C_1A_1B_1$
1						
2						
3						
4						
5						

4) What seems to be true about the measures of $\angle ABC$ and $\angle A_1B_1C_1$?

5) Name two other pairs of angles that demonstrate this same property.

6) Under the transformation glide reflection is angle measure preserved?

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