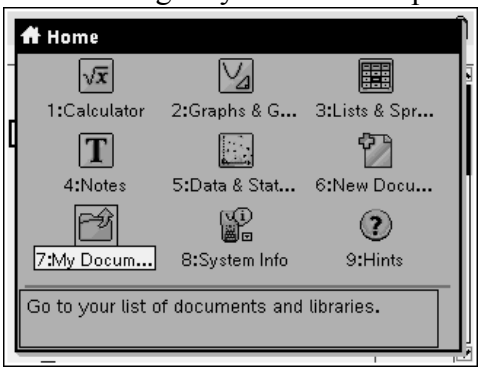
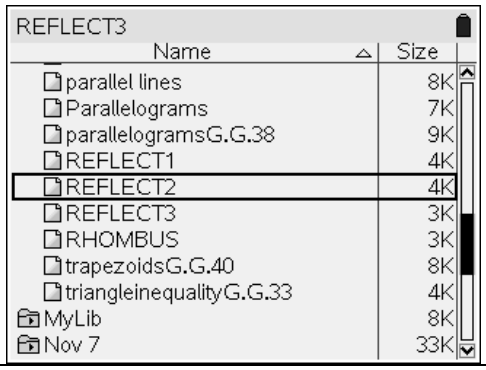
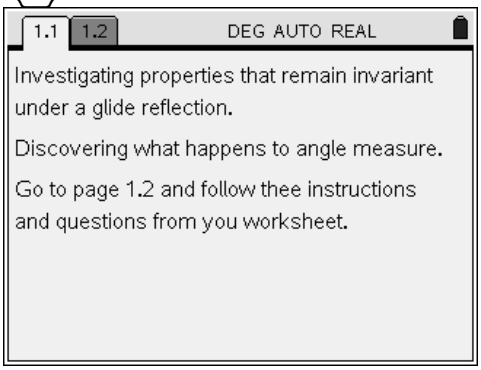
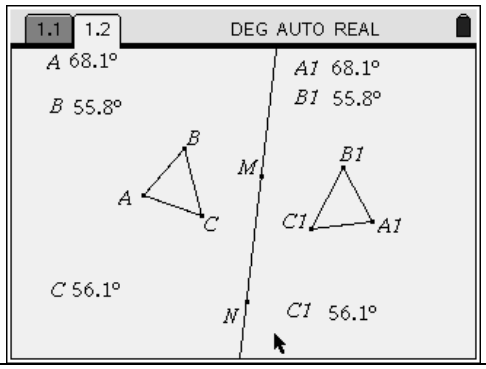
TI- Nspire Student Worksheet for G.G.55 Investigate, justify, and apply the properties that remain invariant under reflections Angle Measure

After turning on your handheld press  	Select My documents  Open Folder Geometry NY Select REFLECT2 
 	 
ΔA1B1C1 is the image of ΔABC under a reflection through $\overleftrightarrow{MN}$. The measures of the angles of the triangles have been indicated.	You will move the vertices of ΔABC and drawn conclusions about the image ΔA1B1C1

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 measures of the angles in the table below.

Trial #	$\angle ABC$	$\angle A1B1C1$	$\angle BCA$	$\angle B1C1A1$	$\angle CAB$	$\angle C1A1B1$
1						
2						
3						
4						
5						

4) What seems to be true about the measures of $\angle ABC$ and $\angle A1B1C1$?

_____

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.

_____