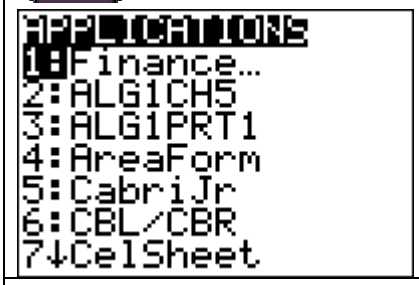
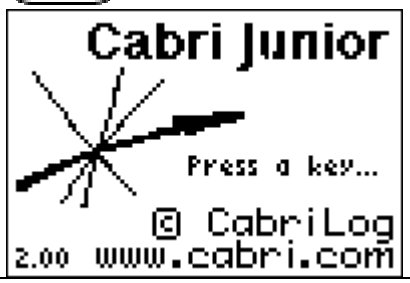
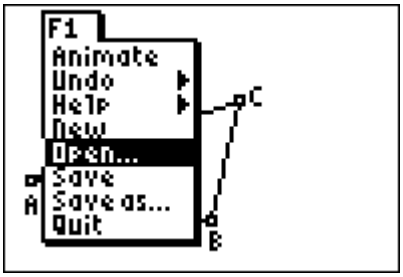
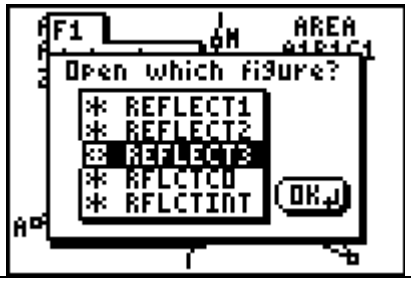
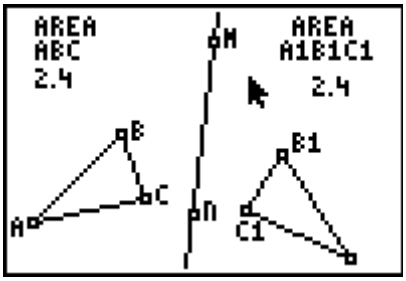
Student Worksheet for G.G.55 Investigate, justify, and apply the properties that remain invariant under line reflections AREA

After turning on your handheld press APPS 	Select CabriJr. 5 
Y= scroll down to Open 	ENTER scroll to REFLECT3 
ENTER 	ΔA1B1C1 is the image of ΔABC under a reflection through $\overline{MN}$. The areas of the sides 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 areas in the table below.

Trial Number	Area of ΔABC	Area of ΔA1B1C1
1		
2		
3		
4		
5		

4) What seems to be true about the areas of ΔABC andΔA1B1C1?

_____

5) Under the transformation glide reflection is area preserved? _____

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

_____