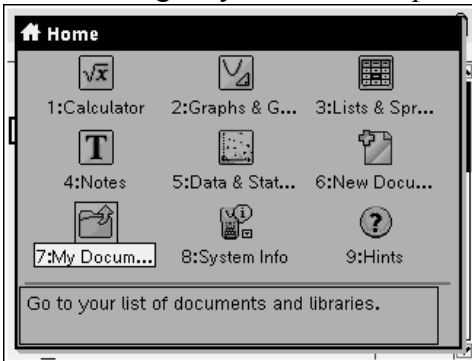


TI- Nspire Student Worksheet for G.G.55 Investigate, justify, and apply the properties that remain invariant under glide reflections AREA

After turning on your handheld press

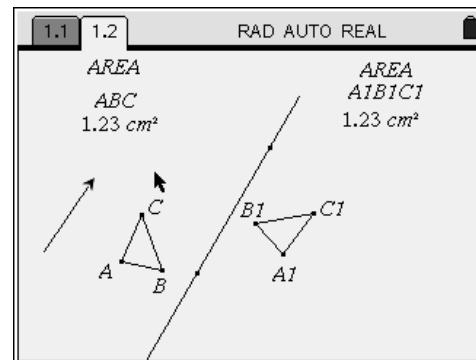
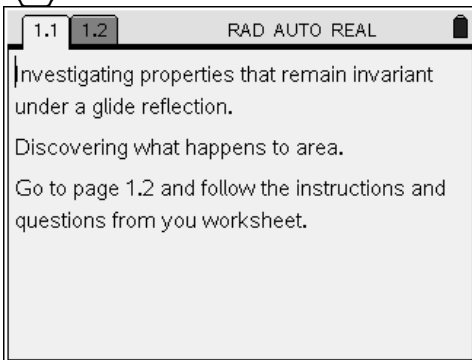


Select My documents 7

Open Folder Geometry NY

Select GLIDRFL2

GLIDRFL1		
	Name	Size
<input type="checkbox"/>	CHORDS2	4K
<input type="checkbox"/>	circumcenter	9K
<input type="checkbox"/>	CORRS	3K
<input type="checkbox"/>	CORRS2	3K
<input type="checkbox"/>	exteriorangleG.G.32	9K
<input type="checkbox"/>	GLIDRFL1	4K
<input checked="" type="checkbox"/>	GLIDRFL2	3K
<input type="checkbox"/>	GLIDRFL3	4K
<input type="checkbox"/>	incenter	8K
<input type="checkbox"/>	isoscelestriangleG.G.31	4K
<input type="checkbox"/>	linetransversalG.G.35	10K



$\triangle A_1B_1C_1$ is the image of $\triangle ABC$ under a glide reflection.

The areas of the sides of the triangles have been indicated.

You will move the vertices of $\triangle ABC$ and drawn conclusions about the image $\triangle A_1B_1C_1$.

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 $\triangle ABC$	Area of $\triangle A_1B_1C_1$
1		
2		
3		
4		
5		

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

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

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