
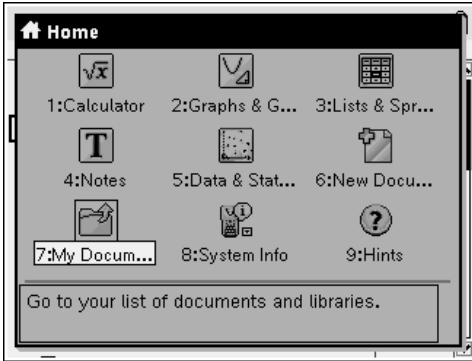



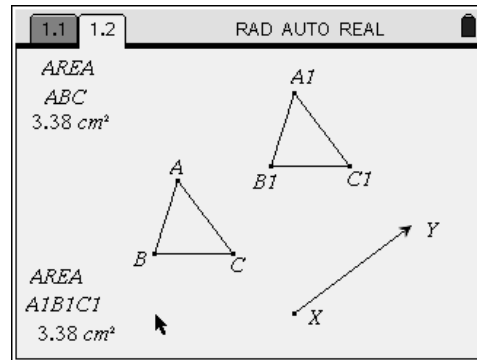
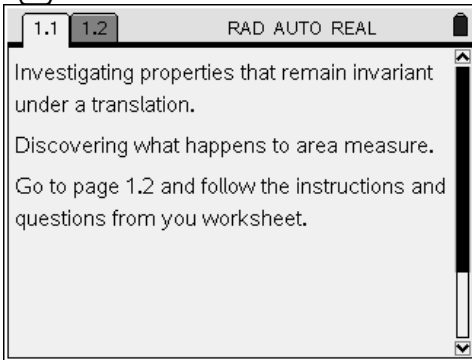
Student Worksheet for G.G.55 Investigate, justify, and apply the properties that remain invariant under translations. AREA

After turning on your handheld press 



Select My documents 
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*TRNSLA2	
Name	Size
<input type="checkbox"/> ROTATE2	4K
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<input type="checkbox"/> trapezoidsG.G.40	8K
<input type="checkbox"/> triangleinequalityG.G.33	4K
<input type="checkbox"/> TRNSLA1	3K
* <input type="checkbox"/> TRNSLA2	4K
<input type="checkbox"/> TRNSLA3	3K
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<input type="checkbox"/> Nov 7	33K
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$\Delta A_1B_1C_1$ is the image of ΔABC under a translation.

The areas of the triangles have been indicated.

You will move the vertices of ΔABC and points X and Y to draw conclusions about the image $\Delta A_1B_1C_1$.

1.) Select grab and drag point A, B or C.

What is changing? _____

What is remaining the same? _____

2.) Select grab and drag point X and Y.

What is changing? _____

What is remaining the same? _____

3) Select, grab and drag point A, B, C, X or Y. As you move the point, 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 a translation is area preserved? _____

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