

NAME: \_\_\_\_\_

*G.G.59: Investigate, justify, and apply properties that remain invariant under similarities*

1. 080906ge, P.I. G.G.59

Which transformation produces a figure similar but *not* congruent to the original figure?

[A]  $D_{\frac{1}{2}}$  [B]  $r_{y=x}$  [C]  $T_{1,3}$  [D]  $R_{90^\circ}$

2. 080810b, P.I. G.G.59

Under the transformation  $(x, y) \rightarrow (2x, 2y)$ , which property is *not* preserved?

[A] orientation [B] distance  
[C] parallelism [D] angle measure

3. 010302a, P.I. G.G.59

Triangle  $A'B'C'$  is the image of  $\triangle ABC$  under a dilation such that  $A'B' = 3AB$ . Triangles  $ABC$  and  $A'B'C'$  are

[A] congruent but not similar  
[B] neither congruent nor similar  
[C] both congruent and similar  
[D] similar but not congruent

[1] A

[2] B

[3] D