Geometry Notes Section 9-4 May 16

Compositions of Transformations

A **composition of transformations** is one transformation followed by another. A **glide reflection** is the composition of a translation and a reflection.

△*QRS* has vertices *Q*(2, 1), *R*(4, –2), and *S*(1, –3). Translate △*QRS* along the vector ⟨1, 3⟩ and then reflect it across the *y*-axis.

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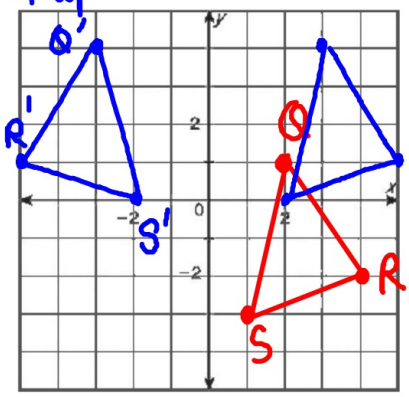
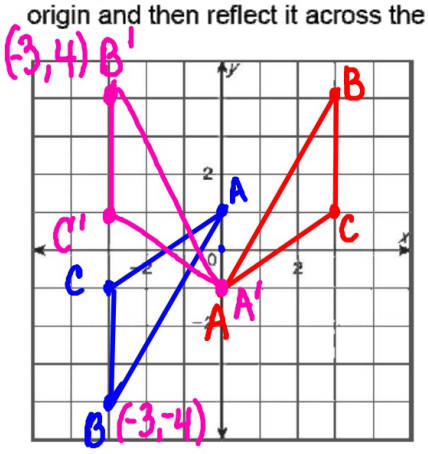
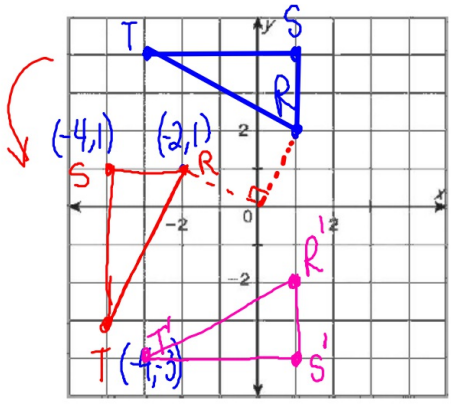


△*ABC* has vertices *A*(0, –1), *B*(3, 4), and *C*(3, 1). Rotate △*ABC* 180° about the origin and then reflect it across the *x*-axis.



△*RST* has vertices *R*(1, 2), *S*(1, 4) and *T*(-3, 4). Rotate △*RST* 90° about the origin and then reflect it across the line *y* = *x*.



R' (1,-2)
S' (1,-4)
T' (-3,-4)