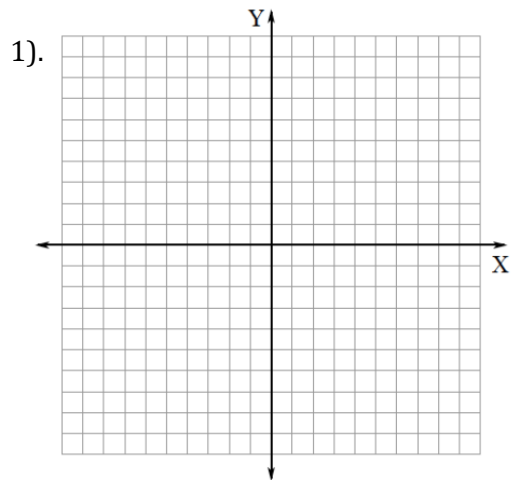
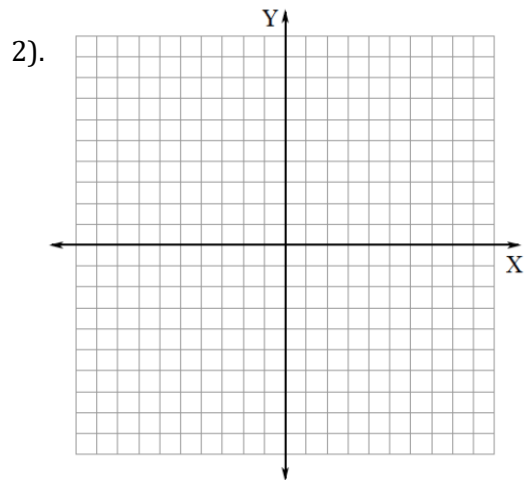


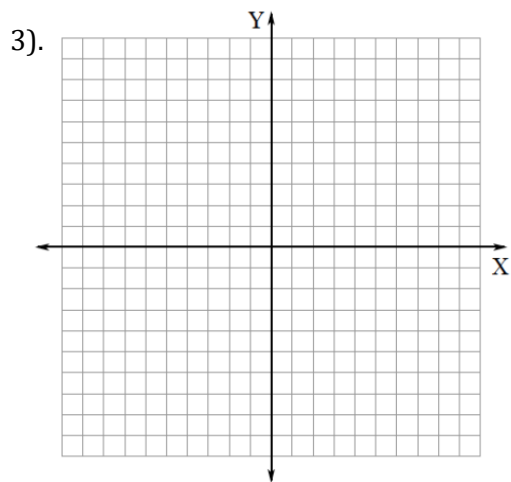
For the following 1-8 sketch the composition of transformations.



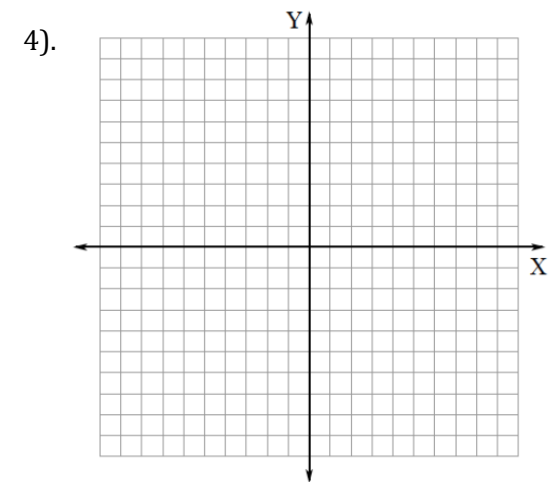
Given: $\triangle ABC$ where $A(0,6)$, $B(6,3)$, $C(3,1)$
Transformation: right 2, down 1



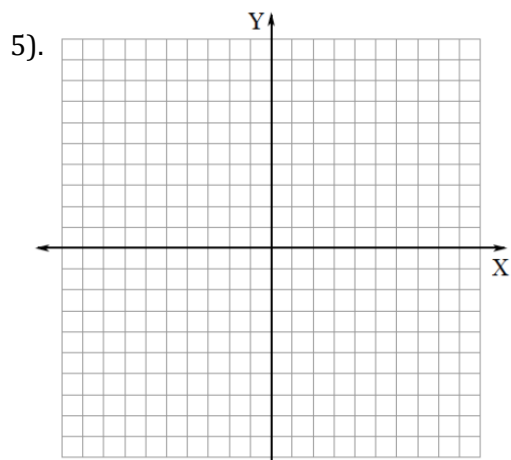
Given: $\triangle ABC$ where $A(0,6)$, $B(6,3)$, $C(3,1)$
Transformation: left 3, up 4



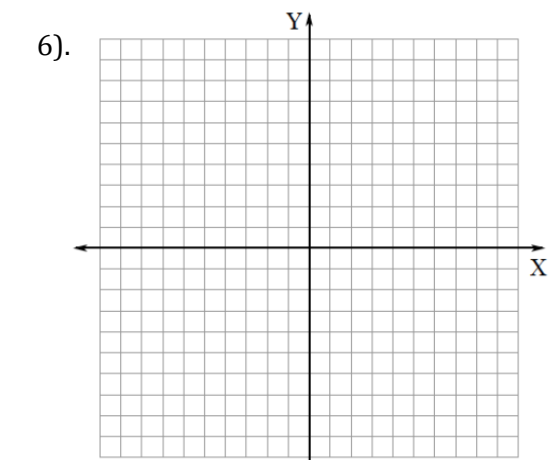
Given: $\triangle ABC$ where $A(2,5)$, $B(4,1)$, $C(7,7)$
Transformation: reflect over y-axis = $R_{y\text{-axis}}$



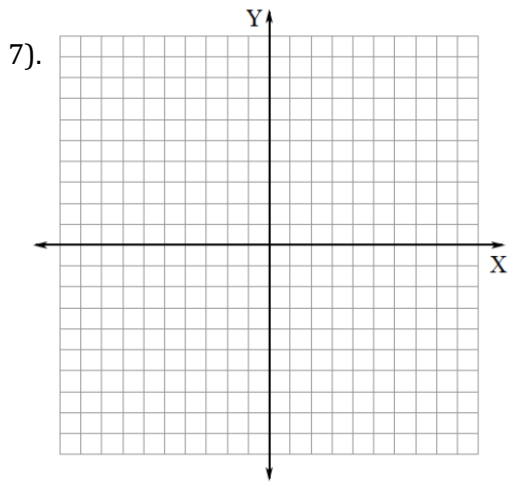
Given: $\triangle ABC$ where $A(2,5)$, $B(4,1)$, $C(7,7)$
Transformation: $R_{x\text{-axis}}$, right 1, down 1



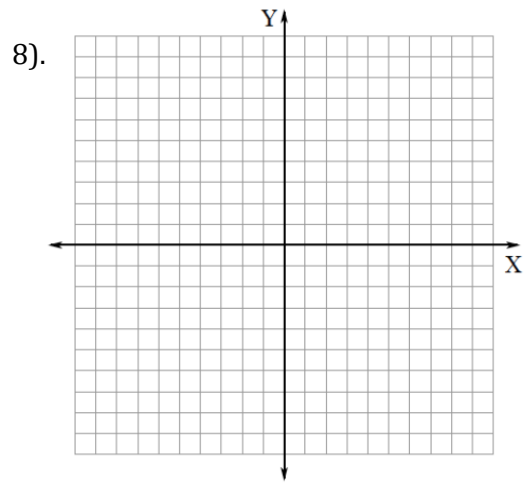
Given: $\triangle ABC$ where $A(1,-5)$, $B(7,0)$, $C(6,-6)$
Transformation: rotation of 180° about origin = $r_{(180^\circ, 0)}$
 $D_{\frac{1}{2}}(\triangle ABC)$



Given: $\triangle ABC$ where $A(1,-5)$, $B(7,0)$, $C(6,-6)$
Transformation: $r_{(90^\circ, 0)}$

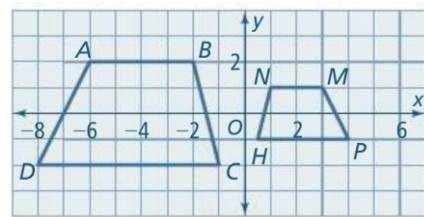


Given: $\triangle ABC$ where $A(-1,-5)$, $B(2,-1)$, $C(0,2)$
 Transformation: right 2, $D_2(\triangle ABC)$

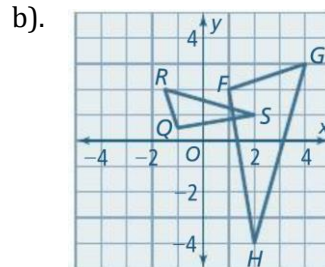
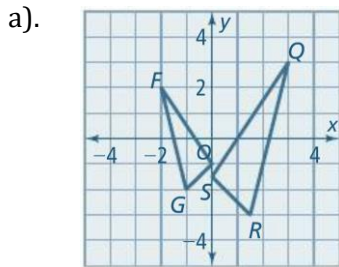


Given: $\triangle ABC$ where $A(-1,-4)$, $B(2,-1)$, $C(0,2)$
 Transformation: $R_{y\text{-axis}}$, $D_3(\triangle ABC)$

9). What is the composition of transformations/rigid motions that maps trapezoid ABCD to trapezoid MNHP?



10). Describe the composition of transformations that maps $\triangle FGH$ to $\triangle QRS$



Compositions of rigid motions and dilations map pre-images to similar images. For this reason, they are called similarity transformations. Similarity transformations give you another way to think about similarity.

Take note

Key Concept Similar Figures

Two figures are **similar** if and only if there is a similarity transformation that maps one figure onto the other.

11). For each pair of figures, determine if there is a similarity transformation that maps one figure onto the other. If so, identify the similarity transformation.

