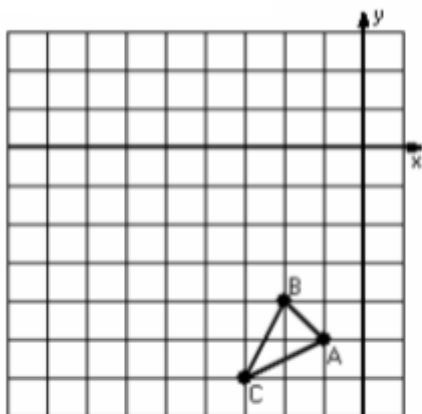
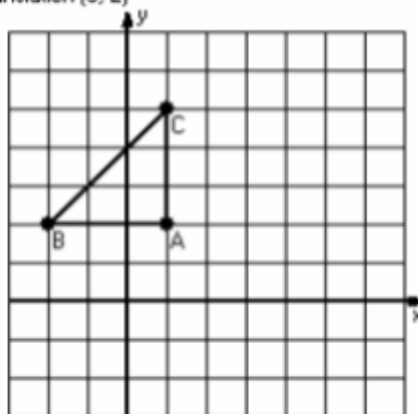


# Combining Transformations of Different Kinds

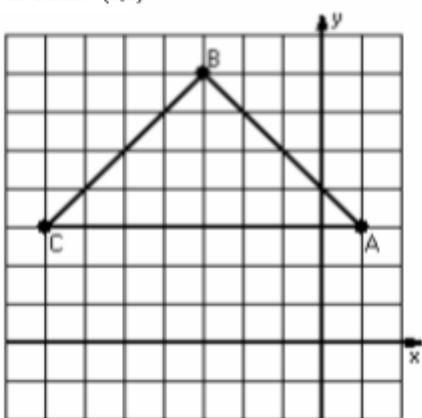
- 1) Translation  $(1,4)$   
Reflection  $y = -3$



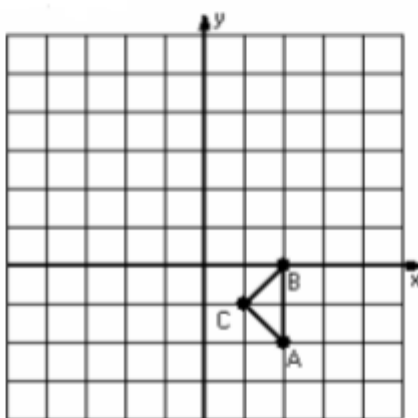
- 2) Reflection  $x = 1$   
Translation  $(3, -2)$



- 3) Reflection  $y = 3$   
Translation  $(0, 2)$



- 4) Translation  $(-2, 3)$   
Rotation  $90^\circ$  counterclockwise, center  $R(0, 0)$



Describe which transformations would move the white shape on top of the grey shape:

