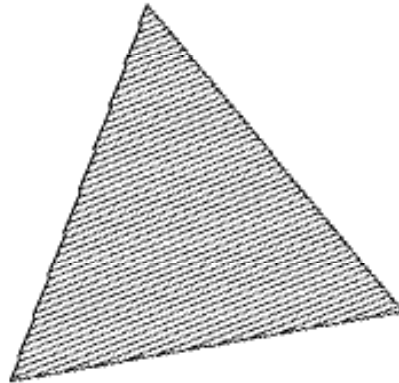
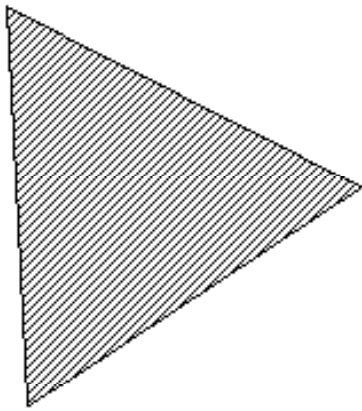
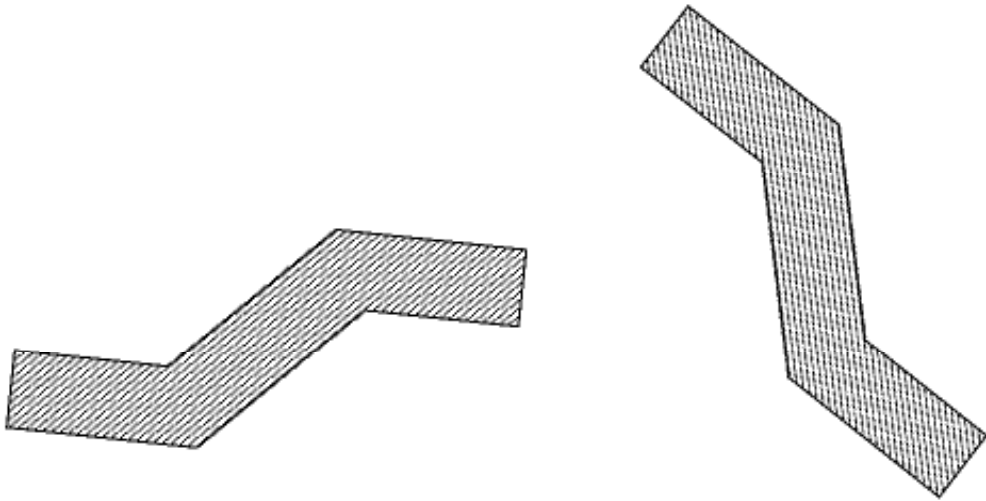


MAT 203 -- Hour Exam #1

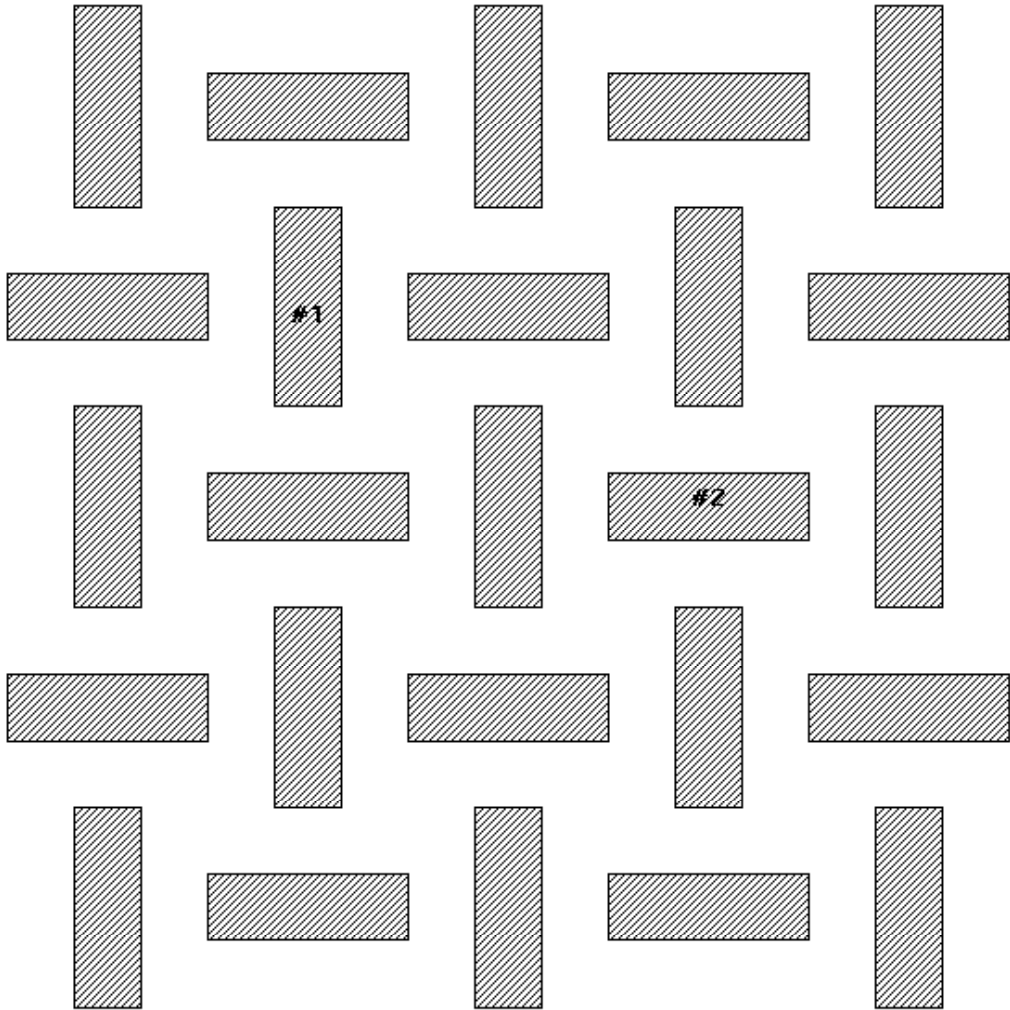
(1) Determine an isometry mapping the set on the right to the set on the left:



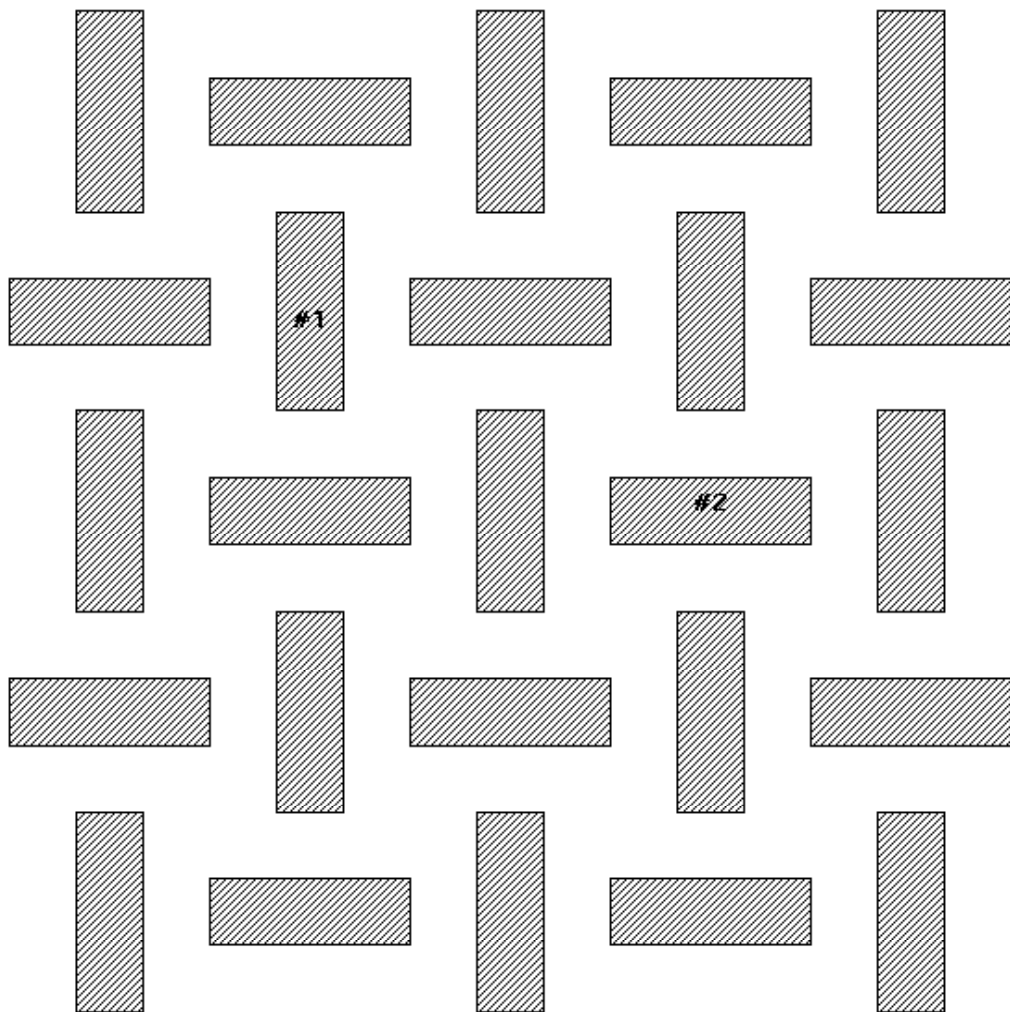
(2) Determine an isometry mapping the set on the left to the set on the right:



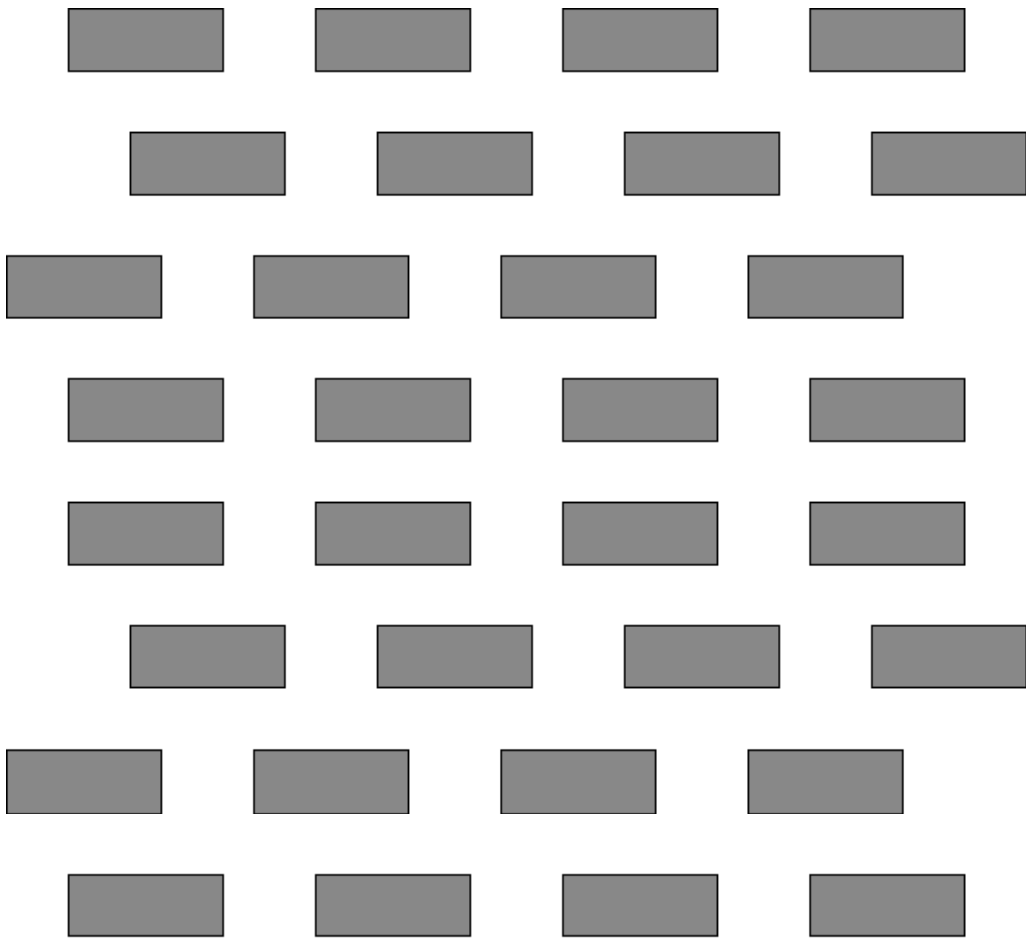
(3) Determine a rotation mapping #1 to #2:



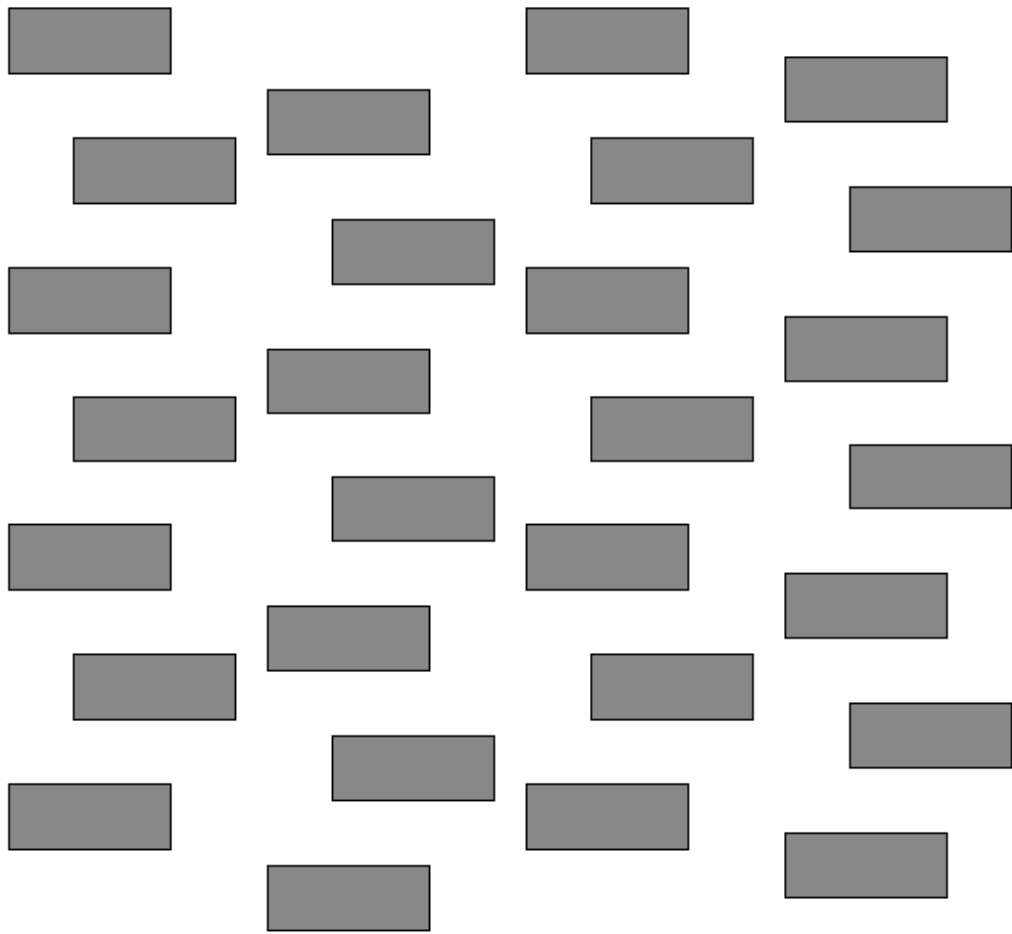
(4) Determine a glide reflection mapping #1 to #2:



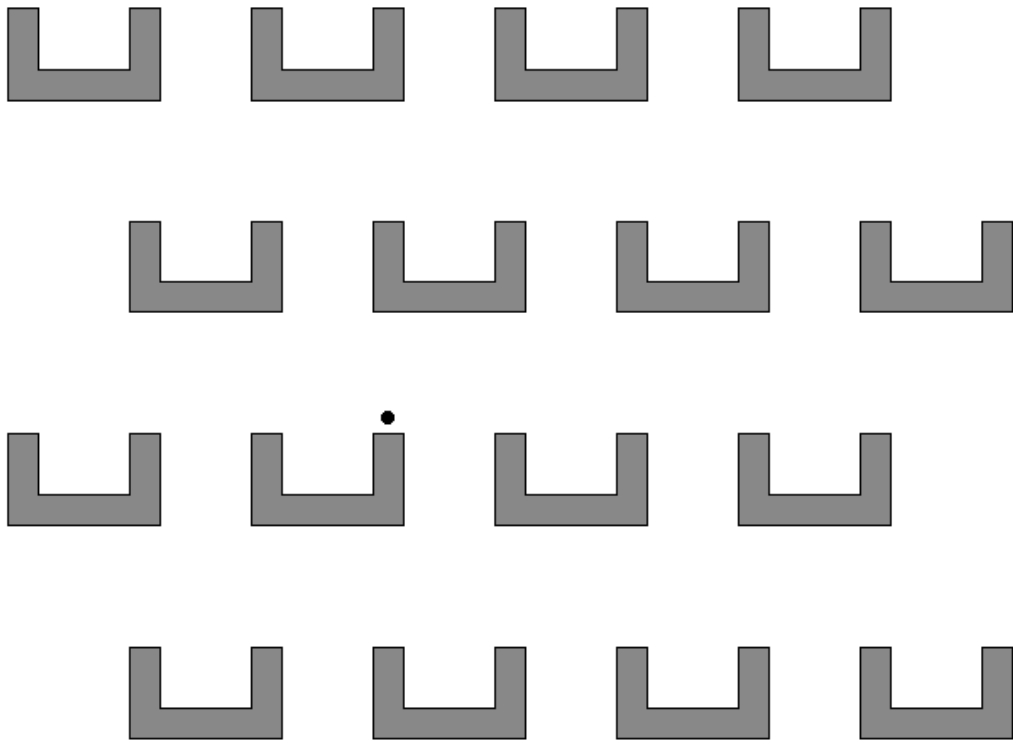
(5) Classify the given wallpaper pattern:



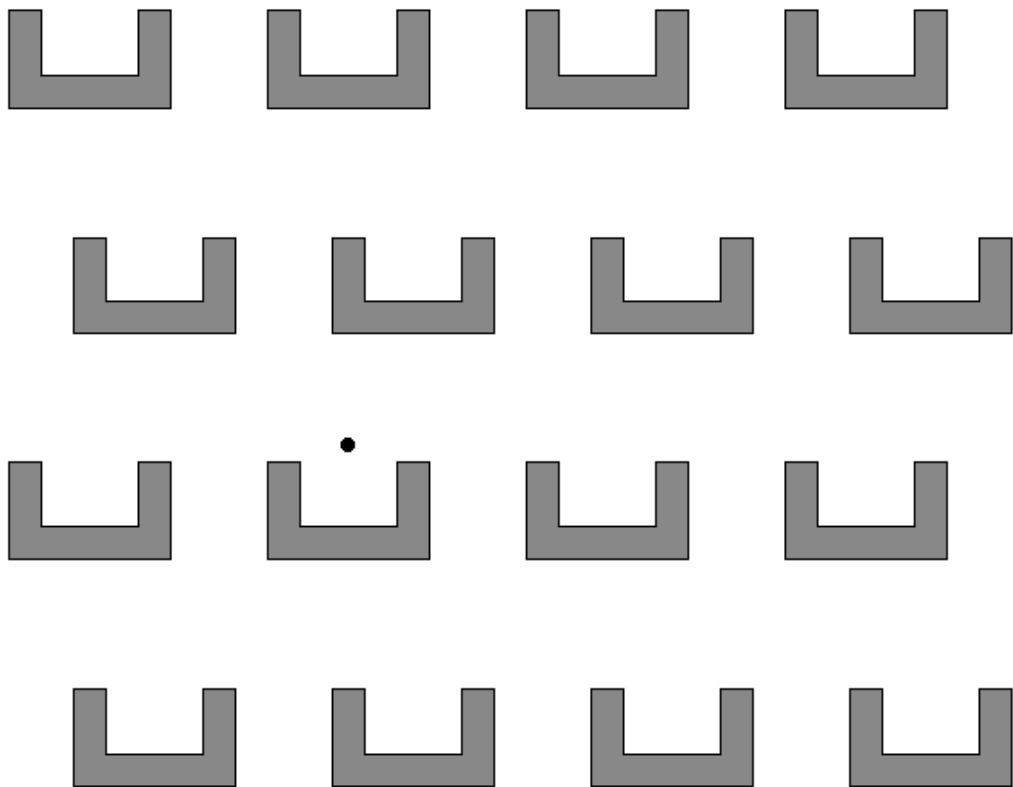
(6) Classify the following wallpaper pattern:



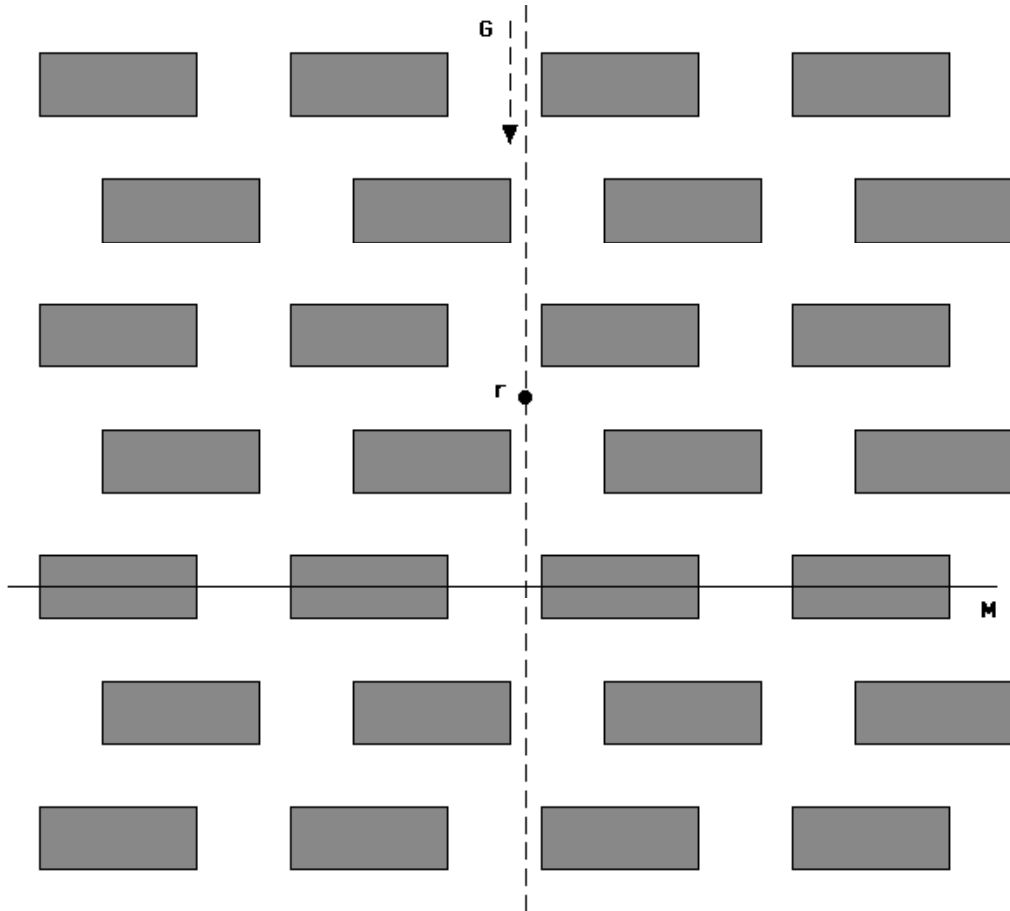
(7) 'Multiply' the given **cm** pattern by the given half turn and classify the resulting pattern:



(8) 'Multiply the given **pg** pattern by the given half turn and classify the resulting pattern:

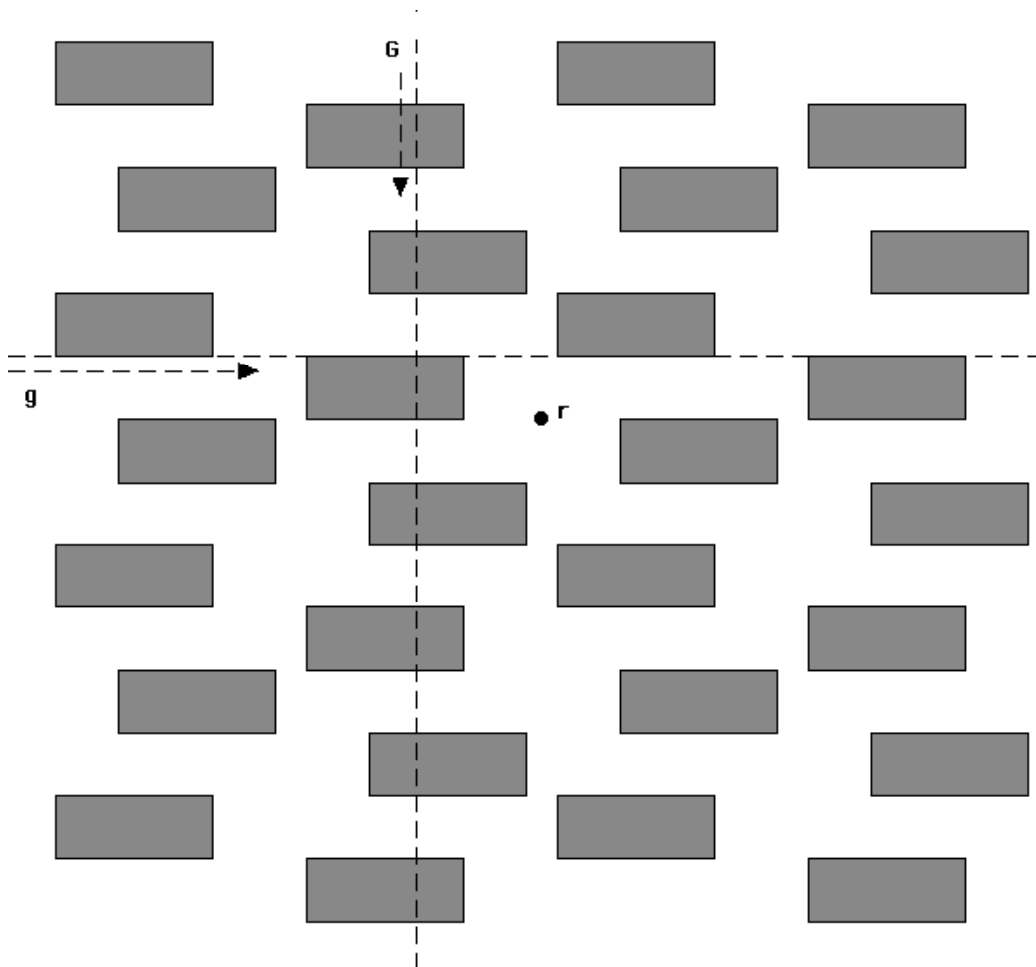


(9) Determine the following isometry composition:



$\mathbf{M} * \mathbf{G}$ (glide reflection \mathbf{G} followed by reflection \mathbf{M}) =

(10) Determine the following isometry composition:



$\mathbf{G} * \mathbf{r}$ (half turn \mathbf{r} followed by glide reflection \mathbf{G}) =