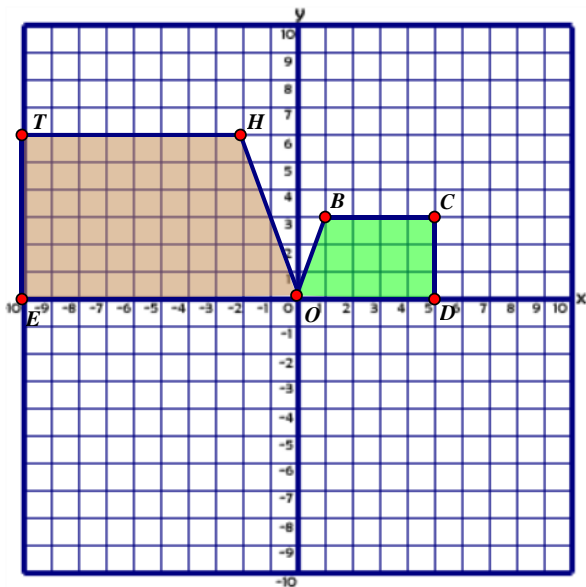


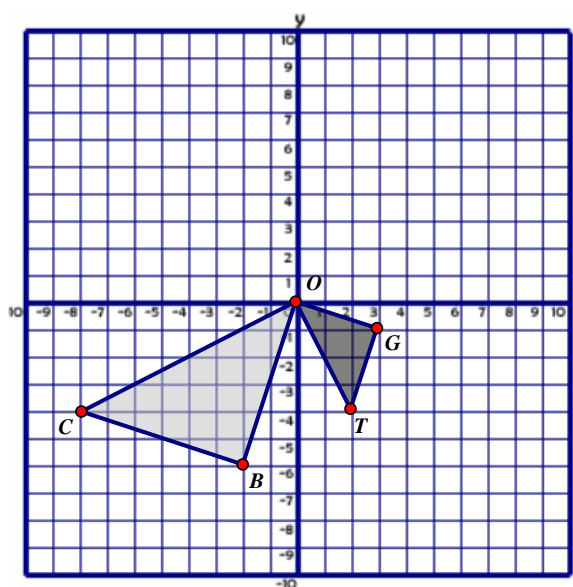
**PROBLEM SET 7-5R / 7-6L**

Be sure to draw all steps and include all the details!

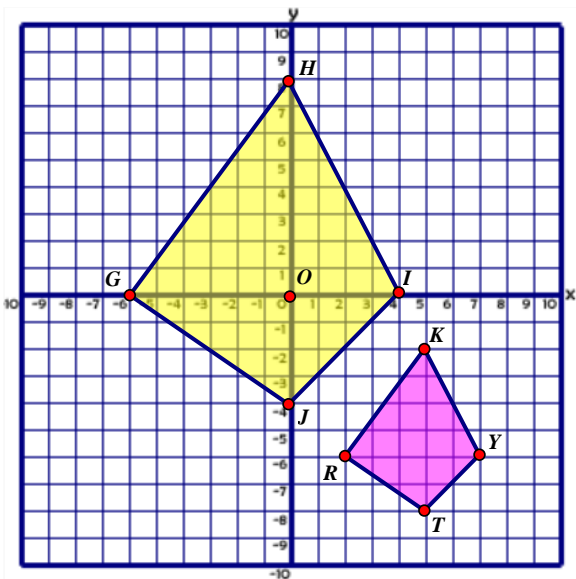
1) Given  $OBCD \sim OHTE$ , identify a precise sequence of transformations that maps  $OBCD$  onto  $OHTE$ .



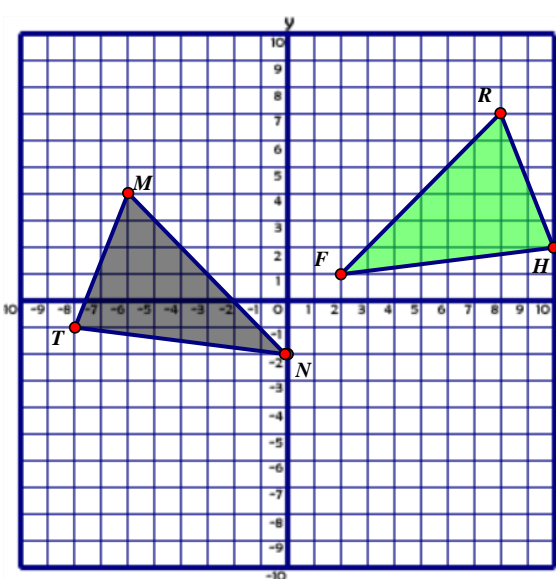
2) Given  $\triangle OBC \sim \triangle OGT$ , identify a precise sequence of transformations that maps  $\triangle OBC$  onto  $\triangle OGT$ .



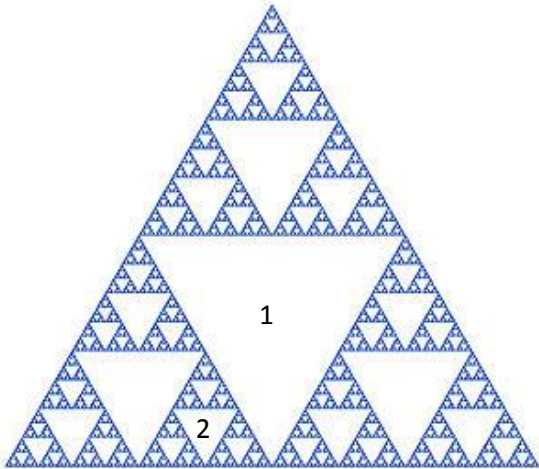
3) Given  $GHIJ \sim RKYT$ , identify a precise sequence of transformations that maps  $GHIJ$  onto  $RKYT$ .



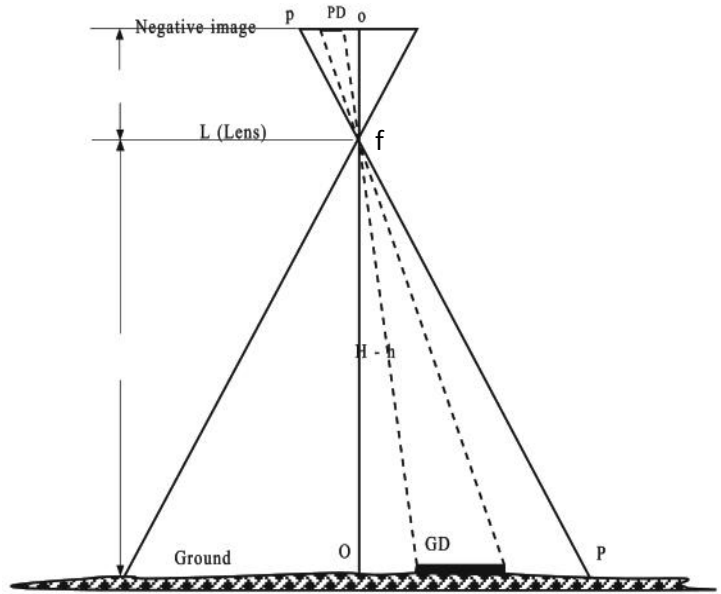
4) Given  $\triangle MNT \sim \triangle RFH$ , identify a precise sequence of transformations that maps  $\triangle MNT$  onto  $\triangle RFH$ .



- 5) Here is a Sierpinski Triangle, which has self-similarity. Identify a precise sequence of transformations that would map triangle 1 onto 2.



- 6) Here is the geometry behind determining the scale of a photograph through a lens focal point  $f$ . Identify the precise sequence of transformations that would map the segment labeled "GD" onto the segment labeled "PD". State the scale factor as a ratio.



- 7) Identify a precise sequence of transformations to map  $\triangle ABC$  onto  $\triangle NPM$ . Note – you can use a construction to determine the scale factor to ensure the triangles are similar by  $SSS \sim$ . Be sure to sketch each step.

